## **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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## Osborn, Carreiro & Associates, Inc.

**ACTUARIES · CONSULTANTS · ANALYSTS** 

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August 22, 2012

Arkansas Fire & Police Pension Review Board 620 West Third Suite 200 Little Rock, AR 72201

#### 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:

	12/31/2008	12/31/2009	12/31/2010	12/31/2011
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	218,943,000	311,036,314	301,432,808	301,641,466
Liability				
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				
<b>Determined Contributions</b>				
Police	44%	33%	33%	34%
Full Paid Fire	46%	31%	30%	31%
Volunteer & Part-Paid Fire	46%	87%	99%	103%

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Arkansas Fire & Police Pension Review Board August 22, 2012 – page 2

#### 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	Number of
	Plans That	Plans That
	<u>Improved</u>	<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.

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Arkansas Fire & Police Pension Review Board August 22, 2012 – page 3

#### **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	Number of
	Plans That	Plans That
	<u>Improved</u>	<b>Declined</b>
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,

Ty Carreiro, ASA, MAAA, FCA, EA

Actuary

EXHIBIT 1

Arkansas Municipal Police and Fire Pension and Relief Funds

### Summary of Valuation Data and Results December 31, 2011

	_	Police	_	Fire*	_	Volunteer Fire*	_	Total
Plans Valued		15		37		125		144
Active Members		4		8		51		63
Active Payroll	\$	180,316	\$	315,157	\$	0	\$	495,473
DROP Members DROP Annual Benefits	\$	9 249,606	\$	43 1,538,363	\$	0	\$	52 1,787,969
Retired Members and Beneficiaries Annual Benefits	\$	711 17,427,312	\$	858 20,368,232	\$	1,430 2,830,777	\$	2,999 40,626,321
Retirant, Beneficiary & DROP Accrued Liability Assets Applied % Funded	\$ \$	267,374,205 132,300,385 49%	\$ \$	322,383,481 163,953,754 51%	\$ \$	37,782,670 29,717,453 79%	\$ \$	627,540,356 325,971,592 52%
Active Member Accrued Liability Assets Applied % Funded	<b>\$</b>	1,485,622 3,062,648 206%	<b>\$</b>	2,369,434 1,229,058 52%	<b>\$</b>	2,519,169 2,009,817 80%	<b>\$</b>	6,374,225 6,301,523 99%
Total Actuarial Accrued Liability Assets Applied Unfunded Actuarial Accrued Liab % Funded		268,859,827 135,363,033 133,496,794 50%	\$ \$	324,752,915 165,182,812 159,570,103 51%	\$ \$	40,301,839 31,727,270 8,574,569 79%		633,914,581 332,273,115 301,641,466 52%
Based on the Market Value of Assa Total Actuarial Accrued Liability Assets Applied Unfunded Actuarial Accrued Liab % Funded	\$	268,859,827 131,682,543 137,177,284 49%	\$	324,752,915 158,708,942 166,043,973 49%	\$ \$	40,301,839 31,637,255 8,664,584 79%		633,914,581 322,028,740 311,885,841 51%
Employer Contributions Computed Reported % Covered	\$ \$	30,784,731 10,497,343 34%		35,848,289 11,266,760 31%	\$ \$	2,122,757 2,195,031 103%		68,755,777 23,959,134 35%

<sup>\* 33</sup> fire plans covering both paid and volunteer are included in the number of plans valued for both paid and volunteer. The summary data in this report was prepared treating each such fund as two separate funds.

#### EXHIBIT 2

## Arkansas Municipal Police and Fire Pension and Relief Funds

## Comparison of Valuation Results

## POLICE FUNDS

	12/31/2008 12/31/2009		12/31/2010	12/31/2011	2011 <u>% Change</u>
Plans Valued	23	18	16	15	-6%
Active Members	9	7	6	4	-33%
Active Payroll	\$ 397,772	\$ 350,353	\$ 275,544	\$ 180,316	-35%
DROP Members Retired Members	33	23	13	9	-31%
and Beneficiaries	817	742	731	711	-3%
Retirant, Beneficiary &	¢ 267 624 256	¢ 297 404 072	¢ 274 510 224	¢ 267 274 205	201
DROP Accrued Liability	\$ 207,024,330	\$ 287,404,972	\$ 274,510,224	\$ 267,374,205	-3%
Assets Applied	\$ 166,106,493	\$ 150,308,162	\$ 142,459,321	\$ 132,300,385	-7%
% Funded	62%	52%	52%	49%	
Active Member Accrued Liability	\$ 2,613,307	\$ 2,770,295	\$ 2,305,472	\$ 1,485,622	-36%
Assets Applied	\$ 3,622,953	\$ 1,856,839	\$ 2,368,041	\$ 3,062,648	29%
Assets Applied	\$ 3,022,933	\$ 1,030,039	\$ 2,300,041	\$ 3,002,046	2970
% Funded	139%	67%	103%	206%	
Total Actuarial					
Accrued Liability	\$ 270,237,663	\$ 290,175,267	\$ 276,815,696	\$ 268,859,827	-3%
Assets Applied	\$ 169,729,446	\$ 152,165,001	\$ 144,827,362	\$ 135,363,033	-7%
% Funded	63%	52%	52%	50%	
Unfunded Actuarial					
Accrued Liability	\$ 100,508,217	\$ 138,010,266	\$ 131,988,334	\$ 133,496,794	1%
Employer Contributions					
Computed	\$ 22,839,571	\$ 31,558,303			2%
Reported	\$ 10,141,614	\$ 10,505,777	\$ 9,900,691	\$ 10,497,343	6%
% Covered	44%	33%	33%	34%	

EXHIBIT 2

## Comparison of Valuation Results

#### FULL PAID FIRE FUNDS

	12/31/2008	12/31/2009	12/31/2009 12/31/2010		2011 % Change
Plans Valued	44	41	39	37	-5%
Active Members	22	20	14	8	-43%
Active Payroll	\$ 941,621	\$ 894,261	\$ 611,526	\$ 315,157	-48%
DROP Members Retired Members	84	62	51	43	-16%
and Beneficiaries	922	902	876	858	-2%
Retirant, Beneficiary & DROP Accrued Liability	\$ 299,291,265	\$ 341,012,020	\$ 332,594,234	\$ 322,383,481	-3%
Assets Applied	\$ 202,848,784	\$ 187,227,773	\$ 176,503,948	\$ 163,953,754	-7%
% Funded	68%	55%	53%	51%	
Active Member Accrued Liability	\$ 7,479,430	\$ 8,384,859	\$ 5,312,294	\$ 2,369,434	-55%
Assets Applied	\$ 1,064,631	\$ 1,519,475	\$ 1,722,719	\$ 1,229,058	-29%
% Funded	14%	18%	32%	52%	
Total Actuarial Accrued Liability	\$ 306,770,695	\$ 349,396,879	\$ 337,906,528	\$ 324,752,915	-4%
Assets Applied	\$ 203,913,415	\$ 188,747,248	\$ 178,226,667	\$ 165,182,812	-7%
% Funded	66%	54%	53%	51%	
Unfunded Actuarial Accrued Liability	\$ 102,857,280	\$ 160,649,631	\$ 159,679,861	\$ 159,570,103	-0%
Employer Contributions Computed Reported	\$ 22,843,211 \$ 10,456,882	\$ 36,186,285 \$ 11,288,988	\$ 35,921,050 \$ 10,833,506	\$ 35,848,289 \$ 11,266,760	-0% 4%
% Covered	46%	31%	30%	31%	

EXHIBIT 2

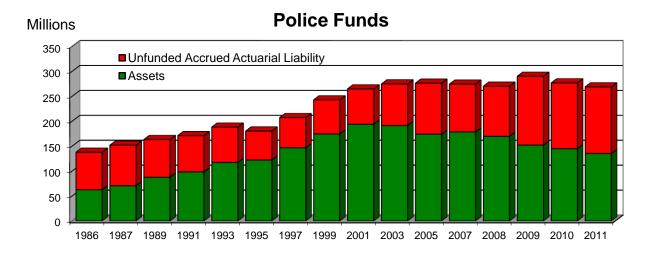
Arkansas Municipal Police and Fire Pension and Relief Funds

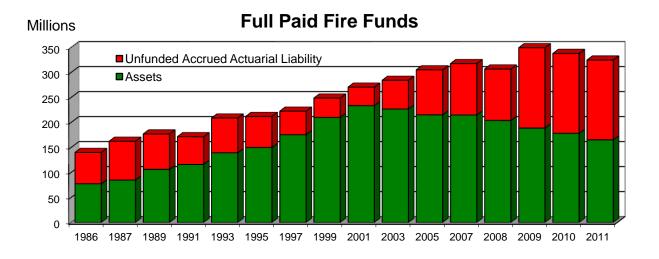
## Comparison of Valuation Results

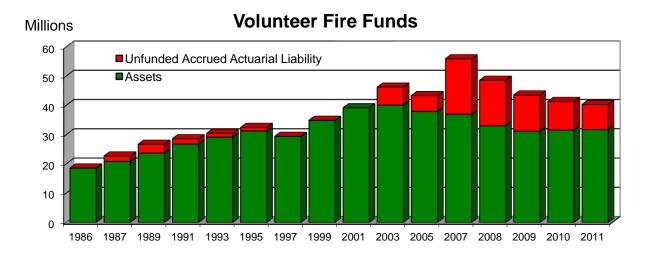
## **VOLUNTEER FIRE FUNDS**

		12/31/2008		12/31/2009	12/31/2010		12/31/2011		2011 % Change
Plans Valued		150		135		130		125	-4%
Active Members		75		62		59		51	-14%
Active Payroll	\$	0	\$	0	\$	0	\$	0	
DROP Members Retired Members		0		0		0		0	0%
and Beneficiaries		1744		1577		1495		1430	-4%
Retirant & Beneficiary Accrued Liability	\$	44,755,458	\$	40,413,683	\$	38,288,645	\$	37,782,670	-1%
Assets Applied	\$	31,408,694				29,168,410			2%
	Ф	, ,	Ф		Ф		Ф		290
% Funded		70%		73%		76%		79%	
Active Member Accrued Liability	\$	3,848,082	\$	3,147,837	\$	3,060,722	\$	2,519,169	-18%
Assets Applied	\$	1,617,343	\$	1,701,665	\$	2,416,344	\$	2,009,817	-17%
% Funded		42%		54%		79%		80%	
Total Actuarial Accrued Liability	\$	48,603,540	\$	43,561,520	\$	41,349,367	\$	40,301,839	-3%
Assets Applied	\$	33,026,037	\$	31,185,103	\$	31,584,754	\$	31,727,270	0%
% Funded		68%		72%		76%		79%	
Unfunded Actuarial Accrued Liability	\$	15,577,503	\$	12,376,417	\$	9,764,613	\$	8,574,569	-12%
Employer Contributions Computed	\$	3,530,677						2,122,757	-14%
Reported	\$	1,626,563	\$	2,513,942	\$	2,434,698	\$	2,195,031	-10%
% Covered		46%		87%		99%		103%	

#### Exhibit 2 (Continued)







#### **EXHIBIT 3**

#### Arkansas Municipal Police and Fire Pension and Relief Funds

#### Summary by Funding Status

This exhibit gives a summary of certain plan information classified by a funding status which is based on standards of actuarial soundness.

The Board has adopted a definition of actuarial soundness, which is based on the following two tests:

- 1. <u>Contribution Test:</u> The actual contributions for the previous year exceeded the calculated contribution.
- 2. <u>Ratio Tests:</u> The assets allocated to cover accrued actuarial liabilities for active participants (i.e. the "short condition test" for category (3)) must be greater than 100% OR the "funded percentage" (total assets divided by total Actuarial Accrued Liabilities) must be at least 97%.

In order to further evaluate potential funding problems, we assigned a "Funding Status" to each plan. The "Funding Status" for each plan was determined as follows:

- A. The calculated contribution amount is \$0. A plan in this classification should remain adequately funded even with no further contributions.
- B. A plan in this classification meets both the contribution test and the ratio test of the definition of actuarial soundness. These plans meet the Boards' definition of actuarial soundness.
- C. The plans in this classification pass the contribution test, but do <u>NOT</u> pass the ratio tests, which are defined above. A plan in this classification should <u>eventually</u> meet both standards of actuarial soundness.
- D. The plans in this category did <u>NOT</u> pass the contribution test. (They may or may not have passed the ratio tests.) These plans <u>will likely require more contributions in order to pay promised benefits.</u>
- E. These plans have assets less than the benefit payments expected for the next three years. In other words, their assets are less than three years worth of benefits. (A plan should have assets to cover 7 to 10 years worth of benefits.)
- F. These plans lacked the assets to cover their benefit payments due in 2012. (Note that benefits may have been fully covered by the assets plus the contributions made during the year.)

The Board Rule which defines actuarial soundness has an alternative definition for some plans. We have shown plans who have shown actuarial soundness through a cash flow study with a "Funding Status" of B\*. There are no plans in this category this year.

## **Summary of Funding Status**

#### POLICE FUNDS

Funding Status	Number of Plans	Total Actives & Retirees	Actuarial Accrued Liability	Assets	Unfunded Actuarial Accrued Liability	Contribution Shortfall
A	1	23	12,433,819	15,369,158	(2,935,339)	0
B or B*	0	0	0	0	0	0
C	2	35	10,698,252	8,766,187	1,932,065	0
D	12	666	245,727,756	111,227,688	134,500,068	20,982,801
E	0	0	0	0	0	0
F	0	0	0	0	0	0
Total	15	724	268,859,827	135,363,033	133,496,794	20,982,801

#### **FULL PAID FIRE FUNDS**

Funding Status	Number of Plans	Total Actives & Retirees	Actuarial Accrued Liability	Assets	Unfunded Actuarial Accrued Liability	Contribution Shortfall
A	3	17	2,694,947	2,905,135	(210,188)	0
B or B*	0	0	0	0	0	0
C	6	46	16,249,389	13,159,663	3,089,726	0
D	28	846	305,808,579	149,118,014	156,690,565	25,111,269
Е	0	0	0	0	0	0
F	0	0	0	0	0	0
Total	37	909	324,752,915	165,182,812	159,570,103	25,111,269

## **Summary of Funding Status**

#### **VOLUNTEER FIRE FUNDS**

Funding Status	Number of Plans	Total Actives & Retirees	Actuarial Accrued Liability	Assets	Unfunded Actuarial Accrued Liability	Contribution Shortfall
A	19	205	4,921,084	5,904,609	(983,525)	0
В	3	50	2,045,855	1,988,743	57,112	0
C	42	537	14,698,650	11,901,059	2,797,592	0
D	61	689	18,636,250	11,932,859	6,703,391	662,601
E	0	0	0	0	0	0
F	0	0	0	0	0	0
Total	125	1,481	40,301,839	31,727,270	8,574,570	662,601

#### ALL FUNDS

FundingStatus	Number of Plans	Total Actives & Retirees	Actuarial Accrued Liability	Assets	Unfunded Actuarial Accrued Liability	Contribution Shortfall
A	23	245	20,049,850	24,178,902	(4,129,052)	0
В	3	50	2,045,855	1,988,743	57,112	0
C	50	618	41,646,291	33,826,909	7,819,383	0
D	101	2,201	570,172,585	272,278,561	297,894,024	46,756,671
Е	0	0	0	0	0	0
F	0	0	0	0	0	0
Total	177	3,114	633,914,581	332,273,115	301,641,467	46,756,671

# Arkansas Municipal Police and Fire Pension Funds Summary of Funded Status December 31, 2011 Valuations

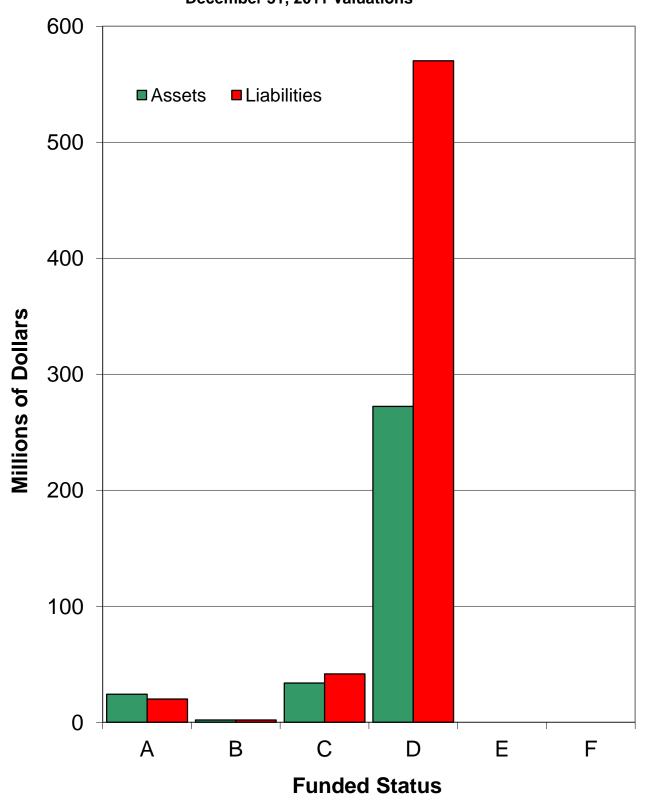


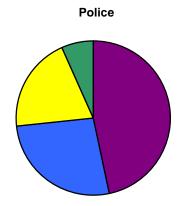
Exhibit 4

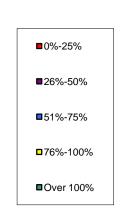
Percentage of Actuarial Accrued Liabilities Covered by Reported Allocated Assets (Funded Percentage)

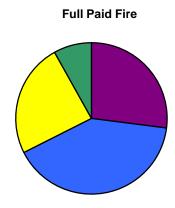
#### **Number of Plans**

Type of Plan
Police
Fire (Paid)
Fire (Volunteer)

<u>0%-25%</u>	<u>26%-50%</u>	<u>51%-75%</u>	<u>76%-100%</u>	Over 100%
0	7	4	3	1
0	10	15	9	3
0	15	47	44	19







#### Volunteers

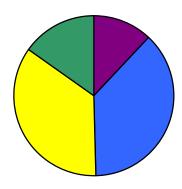


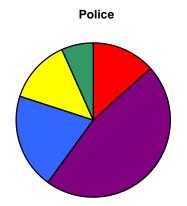
Exhibit 4

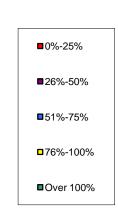
2011 Reported Contributions as Percentages of Computed Contributions

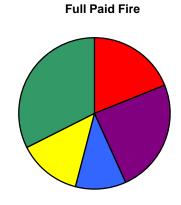
#### **Number of Plans**

Type of Plan
Police
Fire (Paid)
Fire (Volunteer)

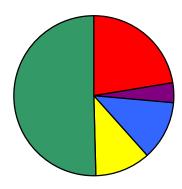
<u>0%-25%</u>	<u>26%-50%</u>	<u>51%-75%</u>	<u>76%-100%</u>	Over 100%
2	7	3	2	1
7	9	4	5	12
28	5	15	14	63







#### Volunteers



#### EXHIBIT 4 (continued)

## Comparison of Percents of Accrued Liabilities Covered by Assets and 2011 Reported Contributions as Percent of Computed Contributions

#### Total of All Plans

#### Number of Plans

#### Funded Percentage

Contribution Ratio	<u>0%-25%</u>	<u>26%-50%</u>	<u>51%-75%</u>	<u>76%-100%</u>	Over 100%
0%-25%	0	11	2	2	0
26%-50%	0	16	8	3	0
51%-75%	0	3	16	13	0
76%-100%	0	1	23	3	0
Over 100%	0	1	16	37	22

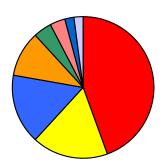
#### Exhibit 5

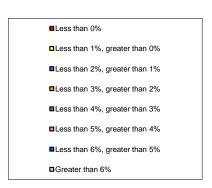
#### **Arkansas Municipal Police and Fire Funds**

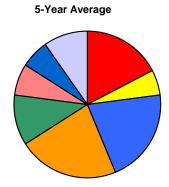
Average Market Rates of Returns 2007-2011 Based on Summary Results of the December 31, 2011 Actuarial Valuations

	2011 Rate 5-year		Assumed Valuation Rate		
	of Return	<u>Average</u>	<u>3%</u>	<u>5%</u>	<u>7%</u>
Less than 0%	64	25	17	7	1
Less than 1%, greater than 0%	25	8	4	4	-
Less than 2%, greater than 1%	23	30	16	14	-
Less than 3%, greater than 2%	15	32	24	8	-
Less than 4%, greater than 3%	6	16	12	4	-
Less than 5%, greater than 4%	5	10	4	6	-
Less than 6%, greater than 5%	3	9	3	4	2
Greater than 6%	3	14	1	4	9

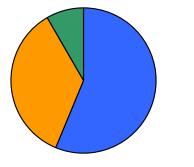
#### 2011 Investment Returns

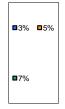






#### **Rates Used for Valuations**





#### **EXHIBIT 6**

#### Arkansas Municipal Police and Fire Pension and Relief Funds December 31, 2011

#### Selected Financial Information by Plan

This exhibit contains selected financial and actuarial information for each plan that reported for December 31, 2011.

The information shown in this exhibit is:

- (1) City or fire protection district.
- (2) Type of plan i.e., police officers, full-paid firefighters, or volunteer/part paid firefighters.
- (3) Valuation Interest Rate. Since this can vary by plan we added the most recent valuation interest rate to this table.
- (4) Assets. We have shown both the Valuation Assets and the Market Value of Assets.
- (5) Unfunded Actuarial Accrued Liability, which is based on the Valuation Assets.
- (6) Number of individuals included. This number includes active members as well as retirees, beneficiaries, and people on DROP.
- (7) Funded Status. See Exhibit 3 for a description of the five "grades".
- (8) Actuarially Computed Contribution. This is the calculated contribution amount from each valuation report.
- (9) Actual 2011 Contribution. These are the actual amounts contributed by the city from its sources, generally, millage, premium tax, employer match, and percentage of fines for police plans.

The projection of the early indicator, number of years remaining before assets are exhausted, will be reported to the board in a separate report. We no longer are including the Guarantee Fund category since Act 979 of 2011 has superseded the old definitions of Guarantee Fund.

	Type of Plan	Valuation Rate	Market Value Assets as of 12/31/2011	Valuation Assets as of 12/31/2011	Unfunded Actuarial Liability	Number of Individuals Covered	Funded Status	Actuarially Computed Contribution	Actual 2011 Contribution
Alma	Volunteer Fire	7%	700,808	707,204	47,159	18	С	11,125	31,590
Altus	Volunteer Fire	3%	72,060	72,060	65,255	5	D	14,041	11,072
Amity	Volunteer Fire	3%	221,610	192,934	88,228	11	D	18,984	14,534
Arkadelphia	Paid Fire	5%	445,746	432,821	663,133	9	D	157,002	32,660
Arkadelphia	Volunteer Fire	5%	119,966	114,568	180,391	18	D	41,205	8,572
Ashdown	Volunteer Fire	7%	510,825	534,734	(140,354)	15	Α	0	12
Augusta	Volunteer Fire	5%	205,822	219,868	6,618	14	В	1,492	8,134
Batesville	Paid Fire	5%	1,633,488	1,678,087	2,334,646	15	D	526,405	180,466
Batesville	Volunteer Fire	5%	21,470	22,056	30,686	5	D	6,919	2,372
Beebe	Paid Fire	5%	254,647	226,094	73,910	1	D	23,980	13,215
Beebe	Volunteer Fire	5%	173,344	204,220	0	9	D	0	0
Benton	Paid Fire	5%	1,749,010	2,206,062	5,152,113	32	D	1,161,675	264,007
Benton	Volunteer Fire	5%	2,331	2,941	6,867	1	D	1,548	352
Bentonville	Paid Fire	5%	6,914,682	6,946,894	874,756	12	С	197,236	538,723
Bentonville	Volunteer Fire	5%	127,278	127,870	16,102	6	С	3,631	9,918
Berryville	Volunteer Fire	3%	425,370	425,370	41,105	18	D	10,363	6,922
Blytheville	Paid Fire	5%	2,863,590	2,860,001	3,184,916	27	D	718,120	249,889
Blytheville	Volunteer Fire	5%	31,026	30,987	34,507	4	D	7,780	2,707
Booneville	Volunteer Fire	3%	358,998	361,826	154,517	12	С	33,248	39,135
Bradford	Volunteer Fire	5%	150,108	130,766	155,286	15	D	35,160	26,113
Bradley	Volunteer Fire	3%	145,886	145,886	80,402	7	D	17,300	14,832
Brinkley	Paid Fire	3%	310,461	316,930	163,341	1	D	35,147	27,015
Brinkley	Volunteer Fire	3%	359,969	367,470	189,387	13	D	40,751	31,323
Bryant	Volunteer Fire	3%	114,556	112,940	127,672	11	D	27,472	5,660

	Type of Plan	Valuation Rate	Market Value Assets as of 12/31/2011	Valuation Assets as of 12/31/2011	Unfunded Actuarial Liability	Number of Individuals Covered	Funded Status	Actuarially Computed Contribution	Actual 2011 Contribution
	,,				•				
<b>Bull Shoals</b>	Volunteer Fire	3%	122,503	125,967	106,543	9	D	22,925	12,476
Cabot	Paid Fire	3%	1,871,418	1,886,363	846,925	2	С	182,237	228,435
Cabot	Volunteer Fire	3%	248,754	250,740	112,576	10	С	24,223	30,364
Camden	Paid Fire	5%	2,485,573	2,466,029	3,057,707	28	D	689,438	121,274
Camden	Paid Police	5%	3,555,768	3,480,396	2,554,733	21	D	602,023	327,883
Camden	Volunteer Fire	5%	119,399	92,665	172,677	16	D	39,660	6,976
Carlisle	Volunteer Fire	3%	288,708	287,879	101,849	18	С	21,915	30,147
Centerton	Paid Fire	7%	353,785	308,035	50,401	1	С	11,035	26,393
Centerton	Volunteer Fire	7%	313,128	272,636	44,609	11	С	10,524	25,170
Charleston	Volunteer Fire	3%	312,949	279,902	29,817	17	С	6,416	21,128
Clarendon	Volunteer Fire	7%	327,971	340,639	(67,132)	9	Α	0	3,350
Clarksville	Volunteer Fire	3%	1,251,014	1,251,014	32,593	20	В	15,841	76,772
Corning	Volunteer Fire	3%	272,689	272,689	53,901	16	С	11,598	12,090
Crawfordsville	Volunteer Fire	5%	203,647	207,572	(10,600)	10	Α	0	5,501
Crossett	Paid Fire	3%	2,920,381	3,108,967	1,616,857	14	D	347,907	131,437
Crossett	Paid Police	5%	1,352,259	1,437,909	504,933	6	D	113,850	28,571
Crossett	Volunteer Fire	3%	161,941	172,398	89,658	12	D	19,292	7,288
Dardanelle	Volunteer Fire	3%	468,600	452,653	99,909	14	С	21,498	31,564
De Queen	Volunteer Fire	3%	372,380	364,865	188,380	13	D	40,535	22,115
Decatur	Volunteer Fire	3%	169,021	176,282	64,512	5	D	13,881	5,983
Dermott	Volunteer Fire	3%	299,184	315,559	73,926	19	D	17,587	7,516
Des Arc	Volunteer Fire	3%	288,060	271,033	87,281	15	С	18,781	24,191
DeWitt	Paid Fire	3%	28,337	28,135	22,757	1	D	4,897	4,058
DeWitt	Volunteer Fire	3%	309,705	307,497	248,728	13	D	53,520	44,349

	Type of Plan	Valuation Rate	Market Value Assets as of 12/31/2011	Valuation Assets as of 12/31/2011	Unfunded Actuarial Liability	Number of Individuals Covered	Funded Status	Actuarially Computed Contribution	Actual 2011 Contribution
Dumas	Volunteer Fire	5%	516,464	582,611	193,079	15	D	46,101	28,099
Earle	Volunteer Fire	3%	355,867	355,943	27,209	13	С	7,460	10,314
Elaine	Volunteer Fire	5%	266,947	277,179	(33,117)	12	Α	0	3,010
Elkins	Volunteer Fire	7%	355,506	358,663	(32,056)	16	Α	0	30,465
Emmet	Volunteer Fire	3%	103,189	103,189	31,342	5	С	6,744	9,028
England	Volunteer Fire	3%	304,540	306,244	140,309	20	С	30,191	30,380
Eudora	Volunteer Fire	3%	164,935	164,935	46,517	12	D	10,009	3,893
Eureka Springs	Paid Fire	7%	176,956	175,125	45,591	1	D	9,982	7,159
Eureka Springs	Volunteer Fire	7%	587,300	581,221	151,313	24	D	35,697	25,603
Fayetteville	Paid Fire	5%	4,990,999	5,218,804	14,842,664	50	D	3,346,655	626,851
Fayetteville	Paid Police	5%	8,225,285	7,815,210	13,467,508	48	D	3,036,591	835,147
Fayetteville	Volunteer Fire	5%	24,420	25,534	72,621	9	D	16,374	3,067
Flippin	Volunteer Fire	3%	251,099	251,099	60,937	15	С	13,112	15,675
Fordyce	Volunteer Fire	3%	515,495	546,708	61,536	16	С	14,288	31,565
Foreman	Volunteer Fire	3%	174,488	184,224	70,628	9	D	15,704	11,035
Gassville	Volunteer Fire	5%	162,110	167,609	127,614	8	D	28,774	18,394
Gentry	Paid Fire	7%	279,830	382,045	(160,448)	1	Α	0	10,367
Gentry	Volunteer Fire	7%	425,293	336,788	0	12	Α	0	15,755
Gillett	Volunteer Fire	3%	295,832	295,832	88,493	15	С	21,610	23,041
Glenwood	Volunteer Fire	7%	229,905	243,090	(46,112)	11	Α	0	5,898
Grady	Volunteer Fire	3%	124,602	128,009	63,376	8	D	13,637	11,994
Gravette	Volunteer Fire	3%	132,075	136,767	143,223	10	D	30,818	0
Green Forest	Volunteer Fire	3%	146,381	146,381	85,105	11	С	18,312	20,511
Greenwood	Volunteer Fire	3%	206,797	210,998	134,951	14	D	29,038	14,590

	Type of Plan	Valuation Rate	Market Value Assets as of 12/31/2011	Valuation Assets as of 12/31/2011	Unfunded Actuarial Liability	Number of Individuals Covered	Funded Status	Actuarially Computed Contribution	Actual 2011 Contribution
Greers Ferry	Volunteer Fire	5%	186,766	186,766	(7,538)	9	Α	0	0
Gurdon	Volunteer Fire	5%	269,062	283,942	(15,707)	10	Α	0	5,616
Hamburg	Volunteer Fire	3%	268,326	262,718	81,171	16	С	17,466	21,520
Harrison	Paid Fire	5%	2,356,880	2,346,057	2,754,189	20	D	621,002	242,122
Harrison	Paid Police	5%	2,240,567	2,201,332	938,146	11	D	211,529	126,644
Harrison	Volunteer Fire	5%	4,698	4,677	5,490	1	D	1,238	483
Hazen	Volunteer Fire	3%	285,506	285,506	53,653	16	С	11,545	19,697
<b>Heber Springs</b>	Paid Fire	3%	330,629	324,109	175,201	1	D	37,699	29,001
Heber Springs	Volunteer Fire	3%	413,757	405,597	219,250	15	D	47,177	36,293
Hickory Ridge	Volunteer Fire	3%	440,161	434,944	(101,178)	9	Α	0	239,276
Норе	Paid Fire	5%	2,281,853	2,215,690	(25,856)	12	Α	0	102,714
Норе	Volunteer Fire	5%	57,393	55,729	(650)	5	Α	0	2,583
Horatio	Volunteer Fire	5%	172,211	172,211	(20,726)	6	Α	0	0
Hughes	Volunteer Fire	7%	200,951	198,042	8,772	12	D	2,069	0
Huntington	Volunteer Fire	3%	93,799	93,799	62,177	5	D	14,214	13,560
Huntsville	Volunteer Fire	3%	192,934	192,934	(7,930)	7	Α	0	17,792
Huttig	Volunteer Fire	3%	227,869	227,869	79,941	17	С	17,201	25,523
Jacksonville	Paid Fire	5%	7,758,795	7,745,411	4,303,335	37	D	970,296	380,645
Jacksonville	Paid Police	5%	5,646,710	6,054,833	1,496,566	24	С	337,439	334,955
Jacksonville	Volunteer Fire	5%	30,544	30,491	16,941	5	D	3,820	1,499
Jonesboro	Paid Police	3%	10,665,787	11,045,017	3,821,093	42	D	843,525	810,229
Judsonia	Volunteer Fire	3%	228,081	237,707	105,997	14	С	23,555	24,584
Junction City	Volunteer Fire	5%	164,521	170,329	17,709	9	С	3,993	7,799
Keiser	Volunteer Fire	3%	93,160	93,160	101,940	11	D	21,935	19,572

	Type of Plan	Valuation Rate	Market Value Assets as of 12/31/2011	Valuation Assets as of 12/31/2011	Unfunded Actuarial Liability	Number of Individuals Covered	Funded Status	Actuarially Computed Contribution	Actual 2011 Contribution
Kensett	Volunteer Fire	5%	117,548	117,548	28,860	11	С	6,909	8,339
Lake Village	Volunteer Fire	3%	207,400	208,698	91,723	14	D	19,736	14,418
Leachville	Volunteer Fire	3%	138,262	138,262	6,006	9	С	1,292	10,170
Lepanto	Volunteer Fire	3%	223,295	222,626	110,106	18	D	23,692	22,941
Lewisville	Volunteer Fire	3%	119,924	119,924	11,544	5	С	2,484	4,487
Lincoln	Paid Fire	5%	131,901	135,340	34,432	1	D	7,764	4,479
Lincoln	Volunteer Fire	5%	128,064	107,387	57,446	7	D	13,369	7,712
Little Rock	Paid Fire	5%	66,306,657	71,083,868	73,868,859	322	D	16,655,609	4,584,341
Little Rock	Paid Police	5%	44,400,843	48,507,949	70,852,842	324	D	15,975,571	4,543,580
Lonoke	Volunteer Fire	3%	519,330	517,861	17,901	16	В	3,852	26,206
Malvern	Paid Fire	5%	1,929,445	1,894,842	536,034	16	С	120,862	123,365
Malvern	Volunteer Fire	5%	50,396	49,492	14,001	3	С	3,157	3,222
Mammoth Sprii	ng Volunteer Fire	3%	131,590	131,590	65,750	6	С	14,148	15,430
Manila	Volunteer Fire	3%	330,371	344,093	222,607	16	D	48,528	35,586
Mansfield	Volunteer Fire	3%	115,770	115,770	55,646	10	С	11,974	15,100
Marianna	Paid Fire	3%	585,546	562,680	318,546	4	D	82,309	50,991
Marianna	Volunteer Fire	3%	286,221	281,227	149,526	16	D	34,790	21,552
Marion	Volunteer Fire	5%	393,223	415,981	90,147	11	D	20,326	10,442
Marked Tree	Volunteer Fire	3%	318,087	318,087	53,553	16	С	11,523	14,868
Marmaduke	Volunteer Fire	3%	63,625	63,625	142,671	11	D	30,699	18,763
Mc Crory	Volunteer Fire	3%	281,775	281,775	17,658	10	С	3,800	4,535
Mc Gehee	Paid Fire	3%	411,384	353,267	267,066	2	D	80,906	43,716
Mc Gehee	Volunteer Fire	3%	102,634	154,764	0	11	D	0	0
Mena	Paid Fire	3%	532,840	487,021	212,427	4	D	66,970	62,524

		Valuation	Market Value Assets as of	Valuation Assets as of	Unfunded Actuarial	Number of Individuals	Funded	Actuarially Computed	Actual 2011
	Type of Plan	Rate	12/31/2011	12/31/2011	Liability	Covered	Status	Contribution	Contribution
Mena	Volunteer Fire	3%	150,806	197,960	0	9	D	0	0
Mineral Springs	Volunteer Fire	3%	71,405	71,405	14,970	5	С	3,221	11,528
Monticello	Paid Fire	3%	982,706	995,534	373,288	5	С	80,322	82,079
Monticello	Volunteer Fire	3%	219,696	222,564	83,453	14	С	17,957	18,350
Morrilton	Volunteer Fire	3%	1,277,239	1,323,930	278,268	24	С	64,677	116,406
Mount Ida	Volunteer Fire	5%	505,817	492,559	(279,809)	12	Α	0	11,765
Mountainburg	Volunteer Fire	3%	189,862	189,862	29,266	10	С	6,297	8,232
Mulberry	Volunteer Fire	3%	228,691	228,691	160,221	9	D	34,475	4,460
Nashville	Volunteer Fire	7%	529,027	573,389	(130,890)	18	Α	0	2,231
Newark	Volunteer Fire	5%	133,496	133,496	6,127	8	С	1,381	5,281
Newport	Paid Fire	5%	1,320,924	1,127,995	408,322	10	С	92,067	96,964
Newport	Paid Police	7%	927,852	856,094	951,399	9	D	208,297	148,641
Newport	Volunteer Fire	5%	130,242	111,219	40,260	9	С	9,078	9,561
Norman	Volunteer Fire	3%	91,831	91,831	78,242	6	D	16,836	9,710
Ola	Volunteer Fire	3%	263,465	251,213	61,802	17	С	13,298	25,243
Oppelo	Volunteer Fire	3%	126,352	126,352	41,905	8	С	9,017	10,092
Osceola	Paid Fire	3%	2,173,035	2,185,530	563,606	9	D	121,274	74,240
Osceola	Paid Police	5%	3,017,878	2,711,354	435,499	11	С	98,194	116,160
Osceola	Volunteer Fire	3%	122,636	123,342	31,807	10	D	6,844	4,190
Ozark	Volunteer Fire	5%	786,239	768,242	149,243	17	С	34,558	45,360
Pangburn	Volunteer Fire	3%	221,224	220,276	100,128	13	D	21,545	12,581
Paris	Volunteer Fire	3%	268,929	276,372	187,926	16	D	42,274	33,949
Piggott	Volunteer Fire	3%	453,156	453,156	42,150	21	С	9,070	20,225
Pine Bluff	Paid Fire	3%	9,782,166	9,394,833	21,625,805	74	D	4,653,324	510,125

			Market Value	Valuation	Unfunded	Number of		Actuarially	Actual
		Valuation	Assets as of	Assets as of	Actuarial	Individuals	Funded	Computed	2011
	Type of Plan	Rate	12/31/2011	12/31/2011	Liability	Covered	Status	Contribution	Contribution
Pine Bluff	Paid Police	5%	15,614,352	14,304,587	15,229,825	80	D	3,433,951	586,202
Prairie Grove	Volunteer Fire	5%	355,504	319,902	(25,790)	8	Α	0	0
Pulaski F P Dist 5	5 Volunteer Fire	3%	137,971	124,410	196,777	15	D	42,341	10,716
Rector	Volunteer Fire	3%	207,972	209,115	110,933	16	D	23,870	22,905
Rogers	Paid Fire	5%	7,959,892	8,475,653	4,387,157	32	D	989,196	789,651
Rogers	Paid Police	5%	14,968,786	15,369,158	(2,935,339)	23	Α	0	679,931
Rogers	Volunteer Fire	5%	101,380	107,949	55,877	10	D	12,599	10,057
Russellville	Paid Fire	5%	2,081,243	1,912,980	2,915,216	16	D	657,309	179,919
Russellville	Paid Police	5%	3,408,870	3,695,253	1,106,285	9	D	249,440	112,017
Russellville	Volunteer Fire	5%	386,549	355,297	541,442	15	D	122,082	33,416
Salem	Volunteer Fire	3%	195,314	195,314	114,548	8	D	24,648	19,963
Sheridan	Volunteer Fire	3%	180,512	180,512	90,387	11	D	19,449	13,906
Siloam Springs	Paid Fire	5%	4,011,898	4,160,452	1,350,950	18	D	304,606	156,146
Siloam Springs	Volunteer Fire	5%	54,952	56,987	18,504	5	D	4,172	2,139
Smackover	Volunteer Fire	3%	447,292	447,292	49,180	13	D	13,302	36
Springdale	Paid Fire	5%	8,608,550	9,382,119	8,655,319	41	D	1,951,561	538,437
Springdale	Paid Police	5%	8,075,992	8,679,799	8,944,553	35	D	2,016,776	684,805
Springdale	Volunteer Fire	5%	61,781	67,333	62,117	6	D	14,006	3,864
Stamps	Paid Fire	3%	35,248	35,496	21,937	1	D	4,720	4,576
Stamps	Volunteer Fire	3%	319,397	321,639	198,783	20	D	42,773	41,472
Star City	Volunteer Fire	3%	313,149	302,832	115,637	16	С	24,882	36,489
Stephens	Volunteer Fire	3%	168,056	166,193	(6,099)	6	Α	0	4,530
Taylor	Volunteer Fire	3%	102,688	94,964	247,851	15	D	53,331	19,481
Texarkana	Paid Fire	5%	5,676,304	5,985,264	2,231,511	37	D	503,150	400,675

#### Exhibit 6 (Continued)

## **Arkansas Municipal Police and Fire Pension and Relief Funds**

			Market Value	Valuation	Unfunded	Number of		Actuarially	Actual
		Valuation	Assets as of	Assets as of	Actuarial	Individuals	Funded	Computed	2011
	Type of Plan	Rate	12/31/2011	12/31/2011	Liability	Covered	Status	Contribution	Contribution
Texarkana	Paid Police	5%	5,072,237	5,438,061	12,156,550	47	D	2,741,003	756,048
Waldron	Volunteer Fire	3%	200,383	200,383	100,371	14	С	21,597	22,916
Warren	Paid Fire	7%	289,623	307,400	(23,884)	4	Α	0	4,460
Warren	Volunteer Fire	7%	198,344	210,518	(16,357)	17	Α	0	3,055
Weiner	Volunteer Fire	5%	305,690	284,157	102,060	12	D	23,012	3,385
West Memphis	Paid Fire	5%	5,882,519	5,830,879	1,847,374	48	D	435,627	343,641
West Memphis	Paid Police	5%	4,509,356	3,766,081	3,972,201	34	D	916,542	406,530
White Hall	Volunteer Fire	3%	164,362	165,912	130,280	14	D	28,589	23,328
Yellville	Volunteer Fire	3%	494,269	516,857	(41,480)	13	Α	0	12,096
			322,028,740	332,273,115	301,641,467	3,114		68,755,777	23,959,134