

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

Summary of  
Actuarial Valuation Data and Results  
As of December 31, 2022

**Osborn, Carreiro & Associates, Inc.**  
ACTUARIES • CONSULTANTS • ANALYSTS  
124 West Capitol Avenue, Suite 1690  
Little Rock, AR 72201 (501)376-8043

# 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

June 5, 2023

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 41 Fire and Police Pension Funds as of December 31, 2022. This report contains summary information from those valuations, as well as comparable information from the December 31, 2019, 2020 and 2021 valuations.

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

	<u>12/31/2019</u>	<u>12/31/2020</u>	<u>12/31/2021</u>	<u>12/31/2021</u>
Plans Valued	65	60	51	41
Number of Active Members	12	10	4	3
Number on DROP	1	0	0	0
Number of Recipients cover	1,054	867	767	665
Assets	116,136,560	106,327,323	104,946,588	99,791,943
Unfunded Actuarial Accrued Liability	47,368,430	36,463,669	35,363,920	39,133,205
Market Value of Assets	124,919,966	116,783,006	118,860,273	95,260,282
Unfunded AL on Market Value	38,585,023	26,007,986	21,450,235	43,664,866
Percent of Liability Funded:				
Police	80%	81%	84%	82%
Full Paid Fire	59%	62%	61%	58%
Volunteer & Part-Paid Fire	96%	101%	102%	99%
Reported Employer Contribution as a Percent of Actuarially Determined Contributions				
Police	58%	56%	61%	67%
Full Paid Fire	51%	54%	54%	51%
Volunteer & Part-Paid Fire	128%	148%	148%	151%

## **FORMAT OF REPORT**

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

- EXHIBIT 1 – Summarizes various information as of December 31, 2022, broken out by Police, Full Paid Fire, and Volunteer Fire.
- EXHIBIT 2 – Compares the December 31, 2022 valuation results with those of December 31, 2021, 2020 and 2019.
- 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 the Rates of Return.
- EXHIBIT 6 – Lists certain financial information and risk indicators for the plans valued December 31, 2022.

## **VALUATION REPORT CHANGES**

There were no major changes in methodology or presentation in the valuation reports this year. We continue to present the required GASB disclosures for all plans as appendices to the valuation report. We accommodated several requests for expedited valuations and additional audit information for locations which file GASB-compliant audits. All valuation reports were completed and submitted to the PRB by the end of May.

## **INVESTMENT RETURNS**

The PRB decided to return to a single valuation discount rate beginning with the 2013 valuations. That single discount rate is 5%. Due to the market in 2022, none of the 41 plans exceeded the valuation rate of 5% in 2022 on a market value basis. However, as usual, there was significant variance between plans: the returns ranged from about 2% (only two plans had positive returns) and -20%. The market value weighted average return for 2022 was -13.1%

Exhibit 5 shows the 2022 (market value) investment returns as well as the five year and ten year average returns. In general, the smallest plans had the worst history of investment earnings and some did not have professional investment advice. If plans do not achieve a long term average investment return of 5% or more, the ultimate cost of the plan will be greater than the value of the liabilities shown in the valuation report. We noted this information in the valuation reports at the end of the Exhibit 3 financial reports as well as included it as one of the plan's risk indicators.

## **OUTLOOK FOR INSOLVENT PLANS**

Exhibit 6 lists some financial and actuarial information for each plan. We have disclosed both the Valuation Assets and the Market Value of Assets. One can see in detail the large number of plans in Status D and below, as well as the amount of unfunded liability associated with those plans. This is an area we have discussed with the Board in detail. This deserves continued attention as over 75% of the total liability is associated with plans with a status of D or lower. Beginning with the 2014 Summary Report, we aligned the projected years before assets are depleted (crossover point) with the status definitions discussed above. Therefore, all status E plans will show “10-20 years,” that is, indicated for At Risk designation. There are five (up from one last year) plans with Status E. Status F plans will show “Less than 10 years,” that is, indicated for Projected Insolvent designation. The status D plans all show “20+ years,” although there are varying levels of funding risk within that category.

Rogers Fire met the criteria for inclusion as a Projected Insolvent plans under ACA §24-11-208: The Board should consider their inclusion. Batesville Fire (who recently added a millage) and Fayetteville Fire passed the cash flow test, but with such a low funded percentage they could easily return to Projected Insolvent status. Marion Fire has consolidated this past year. These two plans bear continued monitoring, but we have provided them with good information to help solve their issues.

## **DATA RECEIVED FROM PLANS**

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

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

Sincerely,



Jody Carreiro, ASA, MAAA, FCA, EA  
Actuary  
Contact: JodyC@oca-actuaries.com

## EXHIBIT 1

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

#### Summary of Valuation Data and Results December 31, 2022

	<u>Police</u>	<u>Fire*</u>	<u>Volunteer Fire*</u>	<u>Total</u>
Plans Valued	6	13	35	41
Active Members	0	0	3	3
Active Payroll	\$ 0	\$ 78,340	\$ 0	\$ 78,340
DROP Members	0	0	0	0
DROP Annual Benefits	\$ 0	\$ 0	\$ 0	\$ 0
Retired Members and Beneficiaries	153	212	300	665
Annual Benefits	\$ 5,176,292	\$ 5,680,920	\$ 1,013,392	\$ 11,870,604
Retirant, Beneficiary & DROP Accrued Liability	\$ 63,474,504	\$ 65,099,262	\$ 10,170,409	\$ 138,744,174
Active Member Accrued Liability	\$ 0	\$ 0	\$ 180,974	\$ 180,974
Total Actuarial Accrued Liability	\$ 63,474,504	\$ 65,099,262	\$ 10,351,383	\$ 138,925,148
Assets Applied	51,824,522	37,726,741	10,240,681	99,791,943
Unfunded Actuarial Accrued Liability	\$ 11,649,982	\$ 27,372,521	\$ 110,702	\$ 39,133,205
% Funded	82%	58%	99%	72%
Based on the Market Value of Assets				
Total Actuarial Accrued Liability	\$ 63,474,504	\$ 65,099,262	\$ 10,351,383	\$ 138,925,148
Assets Applied	49,081,700	36,203,513	9,975,069	95,260,282
Unfunded Actuarial Accrued Liability	\$ 14,392,804	\$ 28,895,749	\$ 376,313	\$ 43,664,866
% Funded	77%	56%	96%	69%
Employer Contributions				
Computed	\$ 4,979,533	\$ 6,190,258	\$ 200,641	\$ 11,370,432
Reported	\$ 3,357,872	\$ 3,179,105	\$ 302,802	\$ 6,839,779
% Covered	67%	51%	151%	60%

\* 13 fire plans covering both paid and volunteer members are included in the number of plans valued.  
Some summary data in this report was prepared treating each mixed fund as two separate funds.

## EXHIBIT 2

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

#### Comparison of Valuation Results

	POLICE FUNDS				2022
	<u>12/31/2019</u>	<u>12/31/2020</u>	<u>12/31/2021</u>	<u>12/31/2022</u>	<u>% Change</u>
Plans Valued	7	7	6	6	0%
Active Members	0	0	0	0	0%
Active Payroll	\$ 0	\$ 0	\$ 0	0	0%
DROP Members Retired Members and Beneficiaries	0 182	0 170	0 158	0 153	 -3%
Retirant, Beneficiary & DROP Accrued Liability	\$ 70,766,407	\$ 68,588,224	\$ 61,930,949	\$ 63,474,504	2%
Active Member Accrued Liability	\$ 0	\$ 0	\$ 0	0	0%
Total Actuarial Accrued Liability	\$ 70,766,407	\$ 68,588,224	\$ 61,930,949	\$ 63,474,504	2%
Assets Applied	\$ 54,170,782	\$ 54,565,000	\$ 50,435,791	\$ 51,824,522	3%
% Funded	77%	80%	81%	82%	
Unfunded Actuarial Accrued Liability	\$ 16,595,626	\$ 14,023,224	\$ 11,495,158	\$ 11,649,982	1%
Employer Contributions Computed	\$ 5,910,989	\$ 5,581,825	\$ 5,235,711	\$ 4,979,533	-5%
Reported	\$ 3,865,670	\$ 3,223,377	\$ 2,930,826	\$ 3,357,872	15%
% Covered	65%	58%	56%	67%	

## EXHIBIT 2

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

#### Comparison of Valuation Results

##### FULL PAID FIRE FUNDS

	<u>12/31/2019</u>	<u>12/31/2020</u>	<u>12/31/2021</u>	<u>12/31/2022</u>	<u>2022 % Change</u>
Plans Valued	21	19	16	13	-19%
Active Members	3	2	1	0	-100%
Active Payroll	\$ 190,257	\$ 101,184	\$ 60,324	\$ 78,340	30%
DROP Members	1	1	0	0	N/A
Retired Members and Beneficiaries	308	278	219	212	-3%
Retirant, Beneficiary & DROP Accrued Liability	\$ 84,288,879	\$ 78,541,099	\$ 65,543,355	\$ 65,099,262	-1%
Active Member Accrued Liability	\$ 1,568,773	\$ 940,810	\$ 595,256	\$ 0	-100%
Total Actuarial Accrued Liability	\$ 85,857,652	\$ 79,481,909	\$ 66,138,610	\$ 65,099,262	-2%
Assets Applied	\$ 49,482,587	\$ 46,751,880	\$ 41,066,381	\$ 37,726,741	-8%
% Funded	58%	59%	62%	58%	
Unfunded Actuarial Accrued Liability	\$ 36,375,066	\$ 32,730,029	\$ 25,072,229	\$ 27,372,521	9%
Employer Contributions					
Computed	\$ 8,274,481	\$ 7,485,038	\$ 5,689,949	\$ 6,190,258	9%
Reported	\$ 4,432,084	\$ 3,813,921	\$ 3,046,203	\$ 3,179,105	4%
% Covered	54%	51%	54%	51%	

## EXHIBIT 2

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

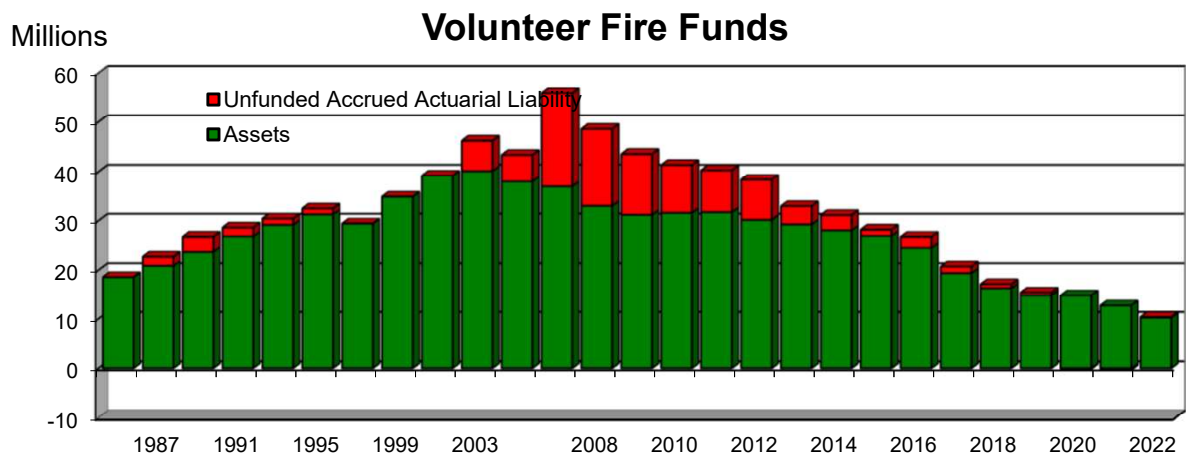
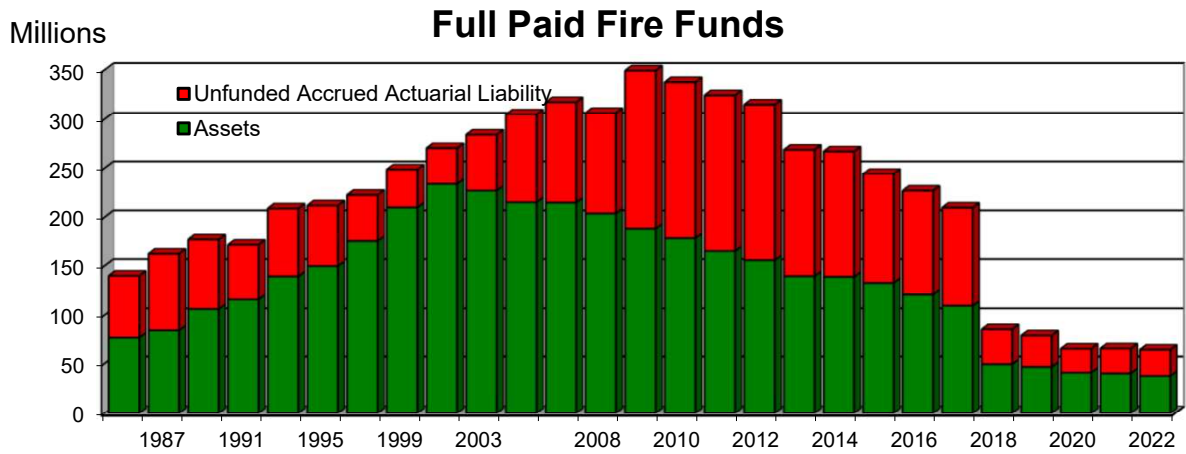
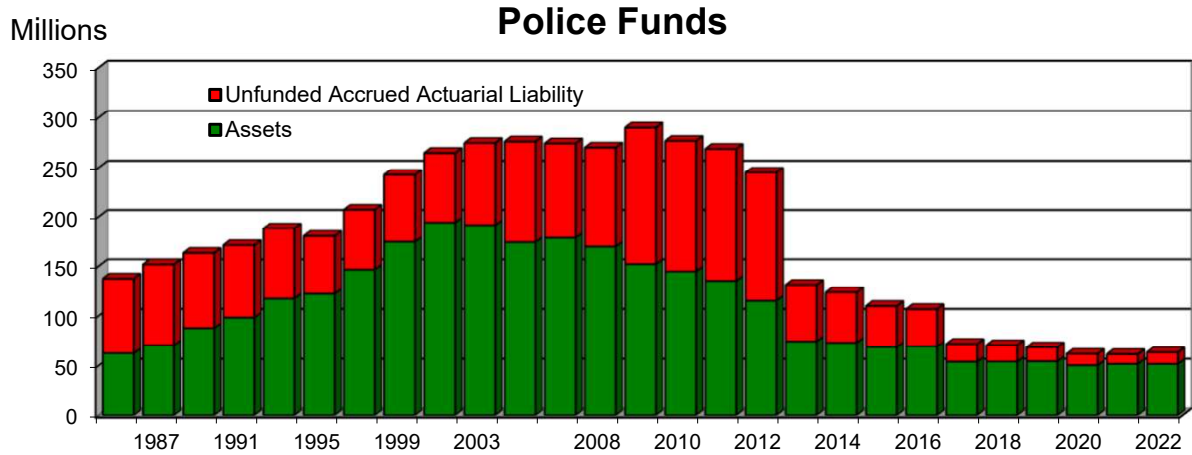
#### Comparison of Valuation Results

##### VOLUNTEER FIRE FUNDS

	<u>12/31/2019</u>	<u>12/31/2020</u>	<u>12/31/2021</u>	<u>12/31/2022</u>	<u>2022 % Change</u>
Plans Valued	64	58	54	35	-35%
Active Members	13	10	9	3	-67%
Active Payroll	\$ 0	\$ 0	\$ 0	0	
DROP Members Retired Members and Beneficiaries	0 637	0 517	0 490	0 300	N/A -39%
Retirant, Beneficiary & DROP Accrued Liability	\$ 16,423,844	\$ 14,821,064	\$ 14,147,621	\$ 10,170,409	-28%
Active Member Accrued Liability	\$ 720,585	\$ 613,792	\$ 573,812	\$ 180,974	-68%
Total Actuarial Accrued Liability	\$ 17,144,429	\$ 15,434,856	\$ 14,721,433	\$ 10,351,383	-30%
Assets Applied	\$ 16,310,131	\$ 14,819,680	\$ 14,825,151	\$ 10,240,681	-31%
% Funded	95%	96%	101%	99%	
Unfunded Actuarial Accrued Liability	\$ 834,298	\$ 615,176	\$ -103,718	\$ 110,702	-207%
Employer Contributions Computed	\$ 449,789	\$ 322,627	\$ 270,151	\$ 200,641	-26%
Reported	\$ 463,111	\$ 413,052	\$ 399,844	\$ 302,802	-24%
% Covered	103%	128%	148%	151%	



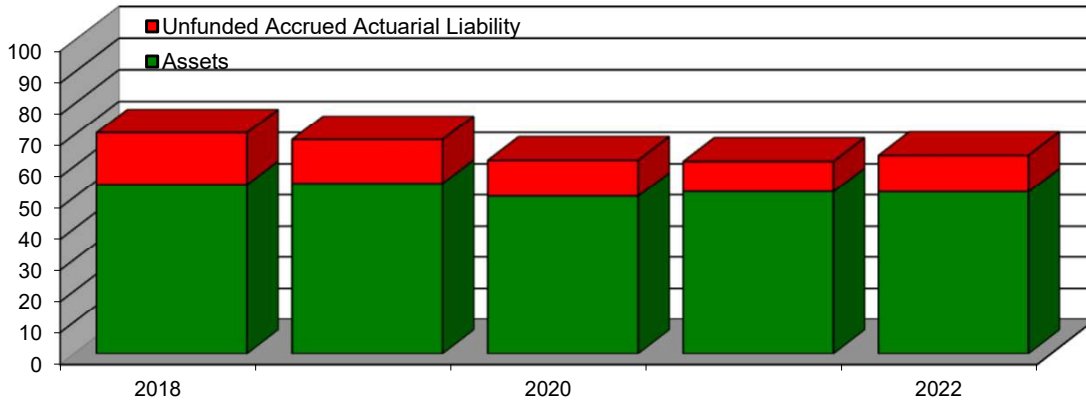
## EXHIBIT 2



**EXHIBIT 2  
Most Recent Five Years**

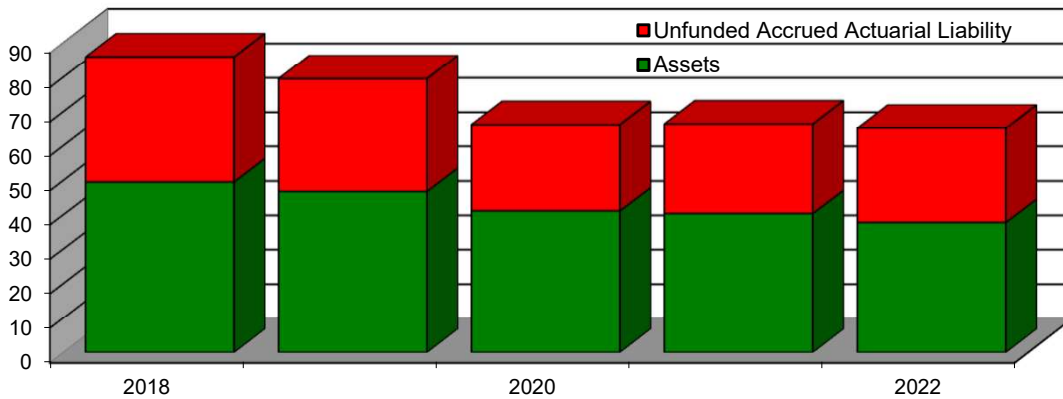
Millions

**Police Funds**



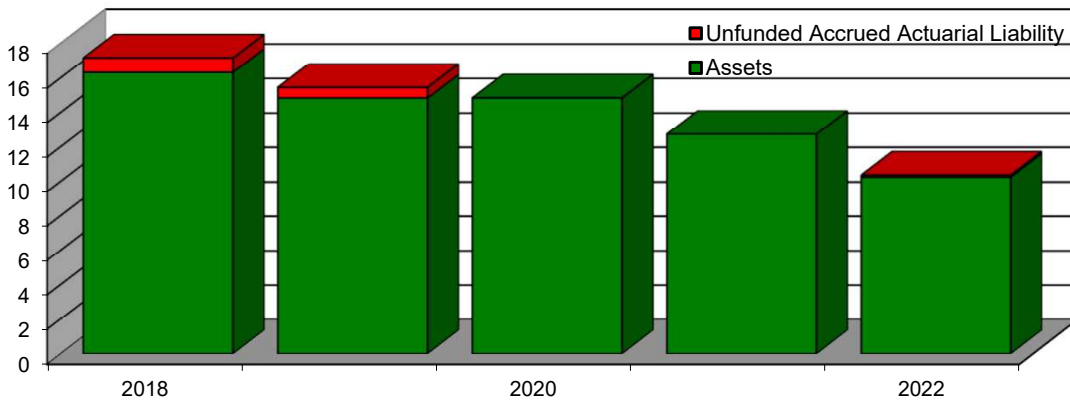
Millions

**Full Paid Fire Funds**



Millions

**Volunteer Fire Funds**



## 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. Funding Status is defined here for use by the board in understanding the risks facing the various plans. We changed definitions for status D and below beginning with the December 31, 2015 report.

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

1. Contribution Test: The actual contributions for the previous year exceeded the actuarially calculated contribution (fully funded in five years).
2. Ratio Tests: 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%.

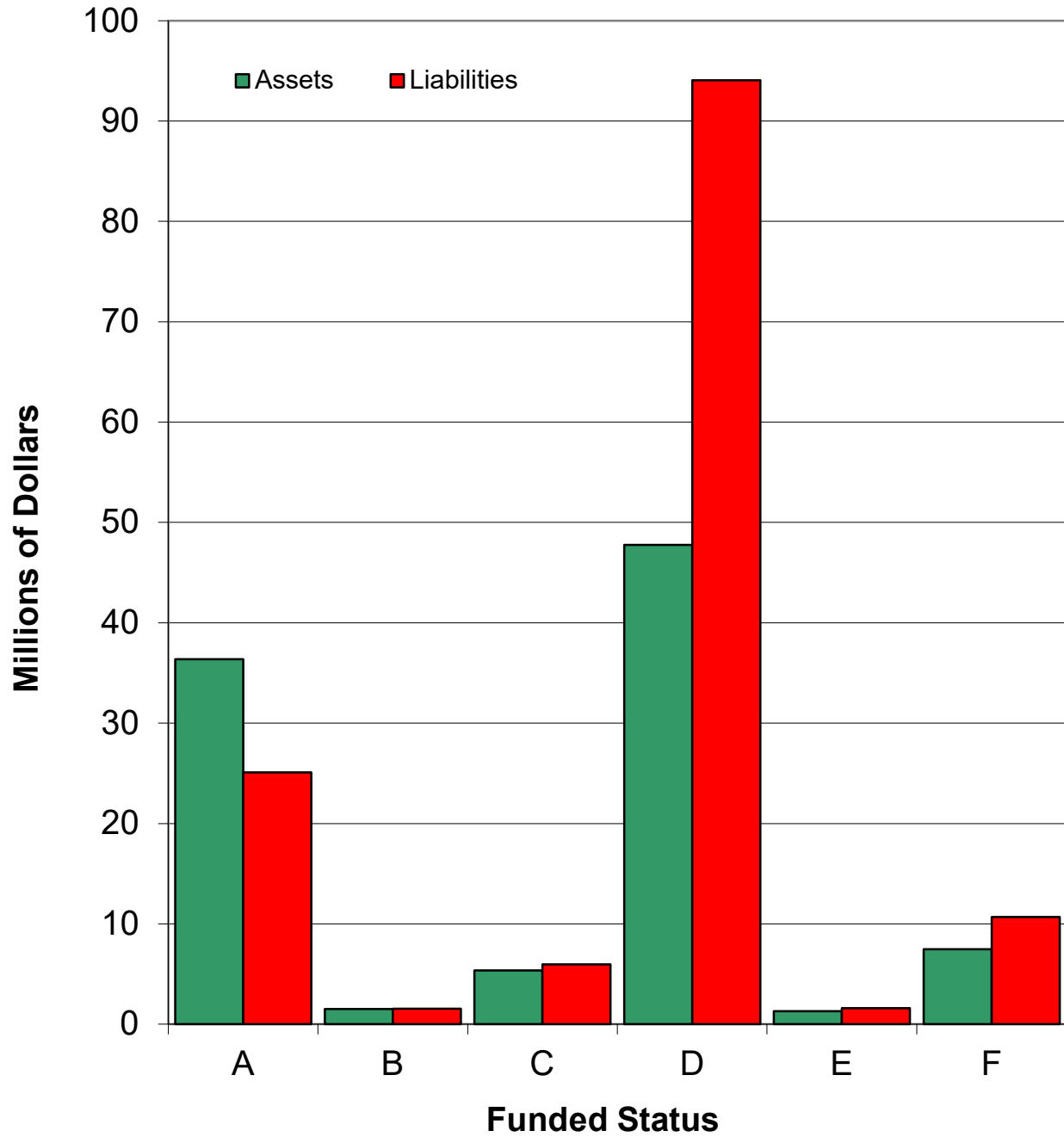
In order to further evaluate potential funding risks, we have assigned a "Funding Status" to each plan. The "Funding Status" for each plan is determined as follows:

- A. (Fully Funded) The calculated contribution amount is \$0. A plan in this classification should remain adequately funded even with no further contributions.
- B. (Actuarially Sound) 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. (On Track) The plans in this classification pass the contribution test, but do NOT pass the ratio tests, which are defined above. A plan in this classification should *eventually* meet both standards of actuarial soundness.
- D. (Not Actuarially Sound) The plans in this category did NOT pass the contribution test. (They may or may not have passed the ratio tests.) These plans will likely require more contributions in order to pay promised benefits.
- E. (At Risk) These plans are projected to deplete their assets in the next *ten to twenty years*. The initial risk indicator suggests that these plans should be considered for the At Risk designation.
- F. (Projected Insolvent) These plans are projected to deplete their assets in the *next ten years*. The initial risk indicator suggests that these plans should be considered for the Projected Insolvent designation.

The Board Rule which defines actuarial soundness has an alternative definition for some plans. The plan may prove actuarial soundness through a cash flow or alternate cash flow study defined in the Rule. These statuses are based on the initial risk indicator and do not reflect any of these cash flow studies.

### EXHIBIT 3

#### Arkansas Municipal Police and Fire Pension Funds Summary of Funded Status December 31, 2021 Valuations



### EXHIBIT 3

#### 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	2	32	19,925,658	30,360,269	-10,434,612	0
B	0	0	0	0	0	0
C	1	9	3,059,710	2,726,768	332,942	0
D	3	109	40,489,135	18,737,484	21,751,651	2,099,899
E	0	0	0	0	0	0
F	0	0	0	0	0	0
Total	6	150	63,474,504	51,824,522	11,649,982	2,099,899

##### PAID/MIXED FIRE FUNDS

Funding Status	Number of Plans	Total Actives & Retirees	Actuarial Accrued Liability	Assets	Unfunded Actuarial Accrued Liability	Contribution Shortfall
A	1	11	1,812,195	1,895,375	-83,180	0
B	0	0	0	0	0	0
C	2	32	1,168,643	1,056,266	112,377	0
D	9	195	53,313,352	28,814,005	24,499,348	2,461,292
E	0	0	0	0	0	0
F	1	35	10,673,044	7,483,074	3,189,970	676,241
Total	13	273	66,967,235	39,248,720	27,718,516	3,137,533

### EXHIBIT 3

#### 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	11	100	3,348,050	4,125,757	-777,707	0
B	1	16	1,552,812	1,520,846	31,966	0
C	3	36	1,729,418	1,571,514	157,904	0
D	2	21	260,090	202,723	57,367	4,577
E	5	47	1,593,039	1,297,862	295,177	65,465
F	0	0	0	0	0	0
Total	22	220	8,483,409	8,718,702	-235,293	70,042

##### ALL FUNDS

Funding Status	Number of Plans	Total Actives & Retirees	Actuarial Accrued Liability	Assets	Unfunded Actuarial Accrued Liability	Contribution Shortfall
A	14	143	25,085,903	36,381,401	-11,295,498	0
B	1	16	1,552,812	1,520,846	31,966	0
C	6	77	5,957,772	5,354,548	603,224	0
D	14	325	94,062,578	47,754,212	46,308,366	4,565,768
E	5	47	1,593,039	1,297,862	295,177	65,465
F	1	35	10,673,044	7,483,074	3,189,970	676,241
Total	41	643	138,925,148	99,791,943	39,133,205	5,307,474

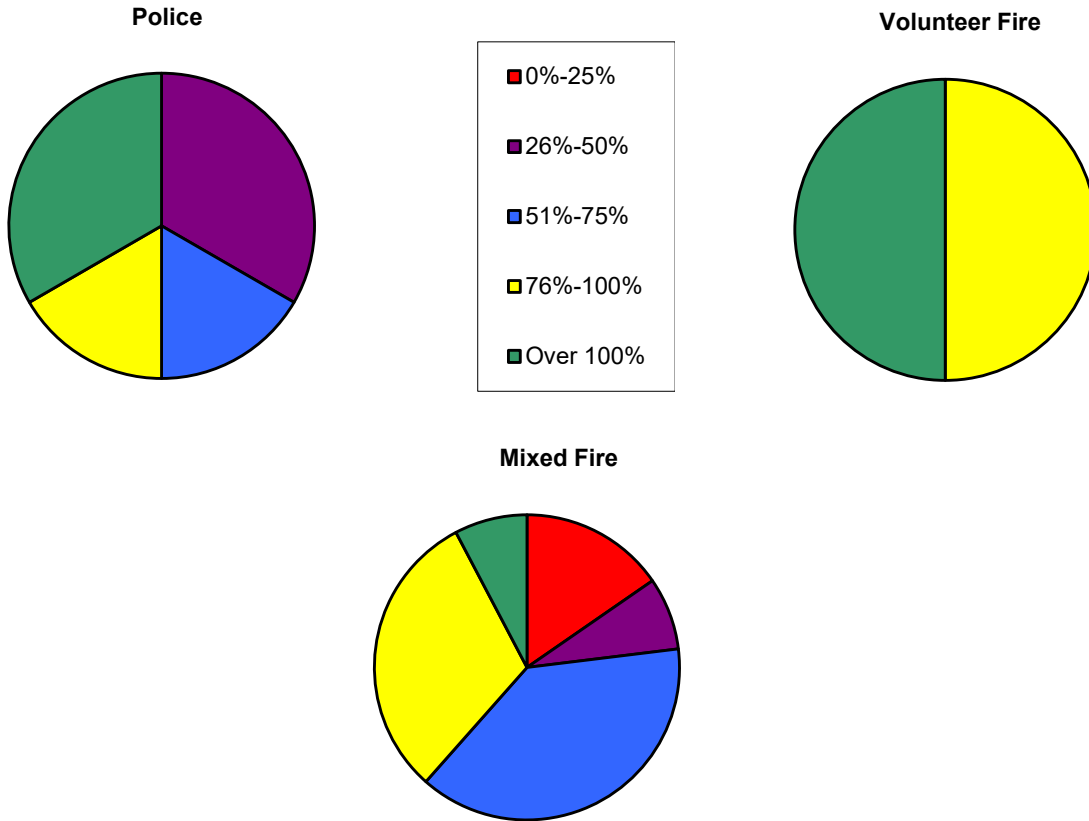
## EXHIBIT 4

### Arkansas Municipal Police and Fire Pension and Relief Funds 12/31/2022

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

#### Number of Plans

<u>Type of Plan</u>	<u>0%-25%</u>	<u>26%-50%</u>	<u>51%-75%</u>	<u>76%-100%</u>	<u>Over 100%</u>
Police	0	2	1	1	2
Fire (Volunteer Only)	0	0	0	11	11
Fire (Mixed)	2	1	5	4	1
Fire (Full Paid)	0	0	0	0	0



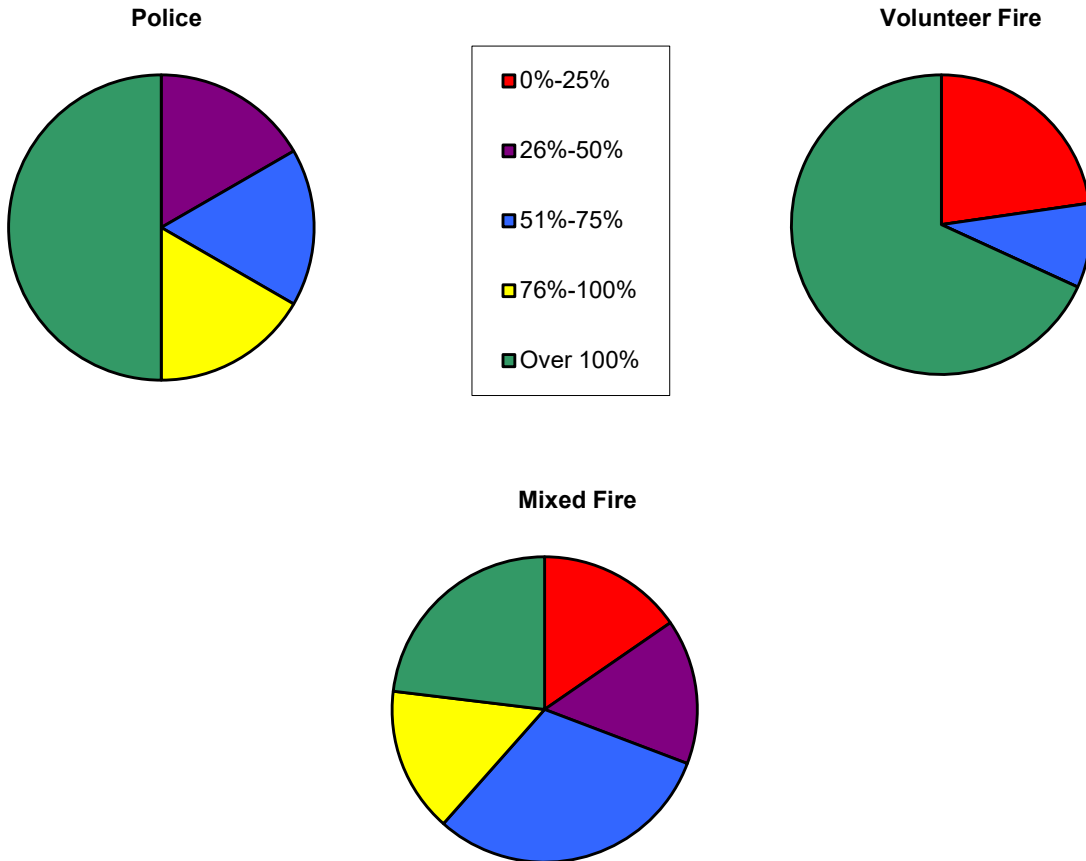
## EXHIBIT 4

### Arkansas Municipal Police and Fire Pension and Relief Funds 12/31/2022

2022 Reported Contributions  
as Percentages of  
Computed Contributions

#### Number of Plans

<u>Type of Plan</u>	<u>0%-25%</u>	<u>26%-50%</u>	<u>51%-75%</u>	<u>76%-100%</u>	<u>Over 100%</u>
Police	0	1	1	1	3
Fire (Volunteer Only)	5	0	2	0	15
Fire (Mixed)	2	2	4	2	3
Fire (Full Paid)	0	0	0	0	0





**EXHIBIT 4 (continued)**

Comparison of Percentages of Accrued Liabilities Covered by Assets and  
2022 Reported Contributions as Percent of Computed Contributions

Total of All Plans

Number of Plans

<u>Contribution Ratio</u>	<u>Funded Percentage</u>				
	<u>0%-25%</u>	<u>26%-50%</u>	<u>51%-75%</u>	<u>76%-100%</u>	<u>Over 100%</u>
0%-25%	0	0	1	6	0
26%-50%	1	1	0	1	0
51%-75%	1	2	2	2	0
76%-100%	0	0	3	0	0
Over 100%	0	0	0	7	14

## EXHIBIT 5

### Arkansas Municipal Police and Fire Funds

Average Market Rates of Returns 2013-2022

Based on Summary Results of the

December 31, 2022 Actuarial Valuations

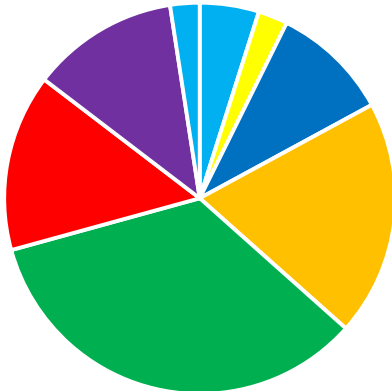
	<u>2021 Rate of Return</u>	<u>5-year Average</u>	<u>10-year Average</u>
Less than 0%	39	2	0
Less than 1%, greater than 0%	1	1	2
Less than 2%, greater than 1%	0	4	2
Less than 3%, greater than 2%	1	8	1
Less than 4%, greater than 3%	0	14	9
Less than 5%, greater than 4%	0	6	10
Less than 6%, greater than 5%	0	5	8
Greater than 6%	0	1	9

2022 Market Investment Returns

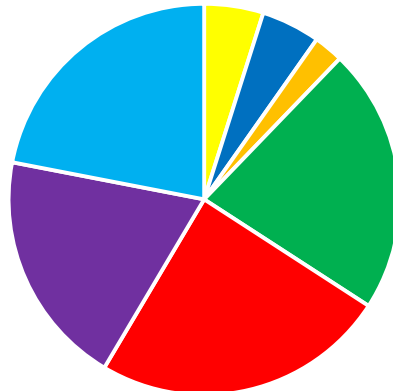


- Less than 0%
- Less than 1%, greater than 0%
- Less than 2%, greater than 1%
- Less than 3%, greater than 2%
- Less than 4%, greater than 3%
- Less than 5%, greater than 4%
- Less than 6%, greater than 5%
- Greater than 6%

Five Year Average Return



Ten Year Average Return



## EXHIBIT 6

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

#### Selected Financial Information by Plan

This exhibit contains selected financial and actuarial information for each plan that reported for December 31, 2022. The mixed fire plans are shown as one plan on a single line.

The information shown in this exhibit:

- (1) City or fire protection district.
- (2) Type of plan - i.e., police officers, full-paid firefighters, volunteer/part paid firefighters, or a mixed plan covering both volunteers and full-paid firefighters.
- (3) Assets. We have shown both the Valuation Assets and the Market Value of Assets.
- (4) Unfunded Actuarial Accrued Liability, which is based on the Valuation Assets.
- (5) Number of individuals included. This number includes active members as well as retirees, beneficiaries, and participants on DROP.
- (6) Actuarially Computed Contribution. This is the calculated contribution amount from each valuation report.
- (7) Actual 2022 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.
- (8) Funded Status. See Exhibit 3 for a complete description of the six "grades".
- (9) Projected Years until all Assets Depleted. Based on the projection used to determine whether a "crossover point" exists for GASB purposes. This is the number of years until the plan depletes its assets. These categories are related to the Funded Status and are used to identify plans which may need further attention.
- (10) Risk Indicators. These four indicators are included in the cover letters of the valuation reports. They range from 1 (least risk) to 5 (most risk); in order, a, b, c, and d correspond to: funding percentage risk, market-return risk, contribution risk, and future crossover risk, respectively.

Risk Level	Funded Percentage	10-year Market Rate of Return	Contribution Actual/Recommend	Crossover Point
5	<60%	<3%	<25%	<10 yrs.
4	60%-75%	3%-4%	25%-50%	10-20 yrs.
3	75%-90%	4%-5%	50%-75%	>20 yrs.
2	90%-110%	5%-6%	75%-100%	No Crossover
1	>110%	>6%	>100%	And Act. Sound

EXHIBIT 6 (Continued)

Arkansas Municipal Police and Fire Pension and Relief Funds

Based on the December 31, 2022 Actuarial Valuation

Type of Plan	Market Value Assets as of 12/31/2022	Valuation Assets as of 12/31/2022	Unfunded Actuarial Liability	Number of Individuals Covered	Actuarially Computed Contribution	Actual 2022 Contribution	Funded Status	Projected Years until all Assets Depleted	Risk Indicators			
									a	b	c	d
Alma	707,183	683,515	77,908	10	17,566	43,541	C	*	3	1	1	2
Arkadelphia	504,765	382,392	544,758	16	122,830	72,579	D	*	5	3	3	2
Ashdown	629,607	715,524	(154,899)	12	0	2,800	A	*	1	2	1	1
Batesville	364,564	368,650	2,378,798	15	536,360	281,853	D	*	5	5	3	2
Brinkley	593,771	529,677	119,565	7	26,959	0	D	20+	3	1	5	3
Dardanelle	641,334	635,723	(99,083)	10	0	34,577	A	*	1	4	1	1
Dermott	313,434	320,340	(5,336)	13	0	8,872	A	*	2	1	1	1
Dumas	441,561	426,278	130,211	10	29,359	24	E	10-20	3	4	5	4
Earle	204,079	179,692	55,976	8	12,621	0	E	10-20	3	5	5	4
Elaine	176,755	199,374	(40,548)	6	0	3,713	A	*	1	4	1	1
Eureka Springs	675,908	703,159	91,835	19	20,707	44,890	C	*	3	2	1	2
Fayetteville	1,702,542	2,086,016	11,762,960	40	2,652,258	1,114,390	D	*	5	4	4	2
Fayetteville	5,679,717	5,380,068	9,877,139	39	2,227,052	1,066,125	D	*	5	2	4	2
Flippin	211,430	212,939	(50,169)	6	0	6,765	A	*	1	3	1	1
Fordyce	528,459	557,642	25,996	14	5,861	14,616	C	*	2	2	1	2
Foreman	184,038	212,152	3,840	9	866	0	E	10-20	2	1	5	4
Glenwood	167,668	169,087	49,983	9	11,270	350	E	10-20	3	3	5	4
Harrison	3,843,448	3,708,612	2,084,419	17	469,985	236,772	D	*	4	1	3	2
Harrison	2,710,192	2,726,768	332,942	9	75,070	114,993	C	*	3	1	1	2
Hope	1,789,837	1,895,375	(83,180)	11	0	87,640	A	*	2	5	1	1
Hughes	152,762	180,180	(19,233)	8	0	0	A	*	1	2	1	3
Jacksonville	5,608,570	5,536,175	2,111,602	31	476,114	375,405	D	*	4	4	2	2
Jacksonville	5,899,363	6,455,082	(189,498)	15	0	350,701	A	*	2	4	1	1
Judsonia	159,901	174,229	(19,603)	10	0	0	A	*	1	4	1	1
Lepanto	104,943	101,565	28,527	11	6,432	4,559	D	*	3	5	3	2
Lonoke	457,172	517,943	(7,265)	9	0	20,968	A	*	2	3	1	1
Manila	328,265	330,357	53,999	12	12,175	13,414	C	*	3	3	1	2

EXHIBIT 6 (Continued)

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

Based on the December 31, 2022 Actuarial Valuation

Type of Plan	Market Value Assets as of 12/31/2022	Valuation Assets as of 12/31/2022	Unfunded Actuarial Liability	Number of Individuals Covered	Actuarially Computed Contribution	Actual 2022 Contribution	Funded Status	Projected Years until all Assets Depleted	Risk Indicators						
									a	b	c	d			
Morrilton	1,531,416	1,520,846	31,966	16	7,208	44,634	B	*	2	1	1	1	1		
Mountainburg	101,158	101,158	28,840	10	6,503	3,799	D	*	3	5	3	2	2		
Nashville	296,812	310,653	55,167	11	12,439	716	E	10-20	3	3	5	4	4		
Osceola	2,651,453	2,751,945	861,055	14	194,147	83,784	D	*	3	3	4	2	2		
Prairie Grove	276,139	286,617	(45,173)	8	0	0	A	*	1	4	1	1	1		
Rogers	6,775,982	7,483,074	3,189,970	35	719,260	43,019	F	Less than 10	4	4	5	5	5		
Rogers	22,198,386	23,905,187	(10,245,114)	17	0	87,615	A	*	1	2	1	1	1		
Siloam Springs	3,351,787	3,230,884	1,205,044	14	271,708	145,126	D	*	4	1	3	2	2		
Springdale	9,521,380	10,219,654	3,431,147	41	773,639	752,799	D	*	4	1	2	2	2		
Springdale	8,129,325	8,858,387	4,169,172	32	940,046	868,168	D	*	4	3	2	2	2		
Texarkana	4,464,717	4,499,030	7,705,340	38	1,737,365	870,270	D	*	5	2	3	2	2		
Waldron	219,499	224,670	(70,010)	8	0	6,000	A	*	1	2	1	1	1		
Warren	337,021	353,107	20,542	13	4,632	18,170	C	*	2	3	1	2	2		
Yellville	623,939	658,218	(266,387)	10	0	16,132	A	*	1	3	1	1	1		
<b>Totals:</b>	<b>95,260,282</b>	<b>99,791,943</b>	<b>39,133,205</b>	<b>643</b>	<b>11,370,432</b>	<b>6,839,779</b>			<b>Key:</b>	<b>Least Risk</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>

Note: Risk Indicators are the metrics included in the cover letter of the Annual Actuarial Valuation for each Local Plan.

a) Funding Percentage Risk

b) 10-Year Market Return Risk

c) Recommended Contribution Risk

d) Future Crossover Point Risk