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KAREN SCOTT  
Finance Director

STEPHANIE THOMAS  
Asst. Finance Director

FINANCE DEPARTMENT



CITY SERVICES  
120 MAIN STREET  
NORTH LITTLE ROCK, ARKANSAS 72114

PHONE: (501) 975-8802

FAX: (501) 975-8808

E-mail: nlrfinance@northlittlerock.ar.gov

MEMORANDUM

DATE: October 17, 2017

TO: NLR City Council Members

FROM: Karen Scott, Finance Director

RE: Non-Uniform Pension Funding Recommendation

You may recall that the percentage contributed by the City to the Non-Uniform Pension Plan was increased beginning January 1, 2017 from 6% to 9%. (The employees currently contribute 4%.) The Non-Uniform Pension Board has reviewed the latest version of the actuarial valuation dated June 26, 2017. I am attaching a copy of the report for your information. The actuary continues to recommend a higher contribution percentage, which according to this year's valuation, is 19.45%. After considering several different options for future funding, the Board voted at its meeting on September 25, 2017 to request the City Council approve, at a minimum, the following contribution percentages beginning January 1, 2018:

- 10% - Employer
- 5% - Employee

They further recommend that the employee contributions change to pre-tax, rather than post-tax, as they have been previously. If the employee contributions are changed to pre-tax, the net effect of the increased deduction on the employees' pay will be less painful, based on the individual tax situation of each employee.

Should the Council authorize this request to move forward, I will present legislation in December approving these changes as well as an amended plan document.

I will be available to answer all questions pertaining to this request at the City Council meeting Monday, October 23, 2017. Please feel free to contact me, should you have any questions.

FILED \_\_\_\_\_ A.M. 12 P.M.

BY Karen Scott, Finance

DATE 10-19-17

Diane Whitby, City Clerk and Collector  
North Little Rock, Arkansas

RECEIVED by [Signature]

**THE RETIREMENT SYSTEM OF  
THE CITY OF NORTH LITTLE  
ROCK, ARKANSAS**

ACTUARIAL VALUATION  
AS OF JANUARY 1, 2017  
Report Date: June 26, 2017

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

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ACTUARIES • CONSULTANTS • ANALYSTS

124 West Capitol Avenue, Suite 1690  
Little Rock, AR 72201 (501)376-8043

### **Actuarial Status of Plan**

The Contribution level for the 2017 Plan Year is recommended to be \$4,271,660 (19.45% of covered payroll). The city and member contributions only total 13.00%. We continue to show the 30 year open amortization of unfunded (15.51% of payroll). The recent changes in GASB rules and actuarial "best practices" compel me to recommend an amount based on a fifteen year amortization. Please note that the 30 year percentage of payroll amortization does not cover the interest on the unfunded amount and leads to an unfunded liability that creeps upward even when assumptions are met.

This year, the funded status of the plan decreased from 69.11% to 62.24% due to lower than expected investment return and assumption changes which increased the calculated liability. The plan earned 5.20% in 2016 compared to the assumed return of 6.50%.

The City continues to make contributions to the plan that are significantly lower than the recommended amounts. The increased contributions in 2017 are a step in the right direction, but the City needs to continue to explore avenues to increase funding.

### **Changes Since Last Year**

In addition to the increased employer contribution rate being implemented in 2017, many valuation assumptions were updated for this valuation report as a result of the 2016 experience study. Turnover, salary scale, mortality, and discount rate were all changed in this valuation. These changes, in the aggregate, increased the reported liability of the plan.

### **Accounting Information**

Exhibit 3 contains the accounting information needed in the financial statements of the Plan and the City. The new reporting standards of GASB Statement 67 became effective January 1, 2014 for the Plan's financial statements, and GASB 68 is effective for all participating employers as of January 1, 2015. (These items have replaced the GASB 27 items and that information is no longer a part of this report.) These new standards include several disclosures as well as new tables of Required Supplementary Information. These calculations and disclosures are found in the Appendices at the end of this report.

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**EXHIBIT 2**

**COSTS AND LIABILITIES**

	<u>1/1/2015</u>	<u>1/1/2016</u>	<u>1/1/2017</u>
A. <u>Normal Cost</u> (Cost to fund current active members)			
1. Total Normal Cost	\$ 1,822,186	\$ 1,842,603	\$ 2,081,105
2. Covered Payroll	\$ 19,305,847	\$ 19,641,076	\$ 21,964,782
3. Normal Cost as Percent of Covered Pay	9.44%	9.38%	9.47%
B. <u>Actuarial Accrued Liability</u>			
1. <u>Active Lives</u>	\$ 39,344,916	\$ 40,112,524	\$ 44,317,798
2. <u>Retired Lives</u>			
Regular/Early – Basic Benefit	8,623,979	9,395,812	12,029,435
Regular/Early – Joint and Survivor	7,600,377	8,164,595	9,570,512
Disableds	613,996	590,970	661,534
Widows	1,620,020	1,552,613	2,094,430
Total Inactive Lives	<u>18,458,371</u>	<u>19,703,990</u>	<u>24,355,911</u>
3. <u>Vested Terminated/Return of Contrib.</u>		512,553	863,555
4. <u>Total Accrued Liability</u>	\$ 57,803,287	\$ 60,329,067	\$ 69,537,264
C. <u>Assets</u>	\$ 44,213,809	\$ 41,696,424	\$ 43,283,200
D. <u>Unfunded Actuarial Accrued Liability</u>	\$ 13,589,478	\$ 18,632,643	\$ 26,254,064
E. <u>Funded Percentage</u>	76.49%	69.11%	62.24%

**EXHIBIT 3 (Continued)**

	<u>12/31/2014</u>	<u>12/31/2015</u>	<u>12/31/2016</u>
C. <u>ASSETS (Market)</u>			
1. <u>Short Term</u>			
Cash and Money Market			
a) Trustee Cash Equivalents	\$ 356,534	\$ 163,502	\$ 10,984
b) SMC Cash Equivalents	933,712	2,723,183	1,838,374
c) Certificates of Deposit	300,886	202,194	2,399,000
2. <u>Mutual Funds</u>			
Equity	17,543,556	17,934,014	18,625,236
Fixed Income	18,203,805	16,594,704	16,517,681
3. <u>Equities</u>			
Common Stocks	0	0	0
Real Estate Investment Trust	941,625	1,343,295	1,109,203
Oil/Gas MLP	4,134,225	1,493,569	1,867,340
4. <u>Bonds</u>			
Government Bonds	223,582	218,818	214,340
Corporate Bonds	1,550,001	1,004,695	687,709
5. <u>Other</u>			
Contributions Receivable	0	0	0
Interest Receivable	25,883	18,450	13,333
Payables	0	0	0
Other	0	0	0
<b>TOTAL ASSETS</b>	<b>\$ 44,213,809</b>	<b>\$ 41,696,424</b>	<b>\$ 43,283,200</b>
D. <u>RATIO OF ASSETS TO ANNUAL EXPENSES:</u>	16.5	14.8	15.2
E. <u>ANNUAL NET INVESTMENT RETURN</u>	2.57%	- 3.65%	5.20%

**EXHIBIT 5**

**PRINCIPAL PROVISIONS OF THE PLAN**

<b><u>EFFECTIVE DATE:</u></b>	January 1, 1977. Plan restated effective January 1, 2008, adopted January 26, 2009. Plan restated effective January 1, 2013, adopted January 7, 2014.
<b><u>EMPLOYEE:</u></b>	Non-Uniformed employees of the City of North Little Rock and NLR Electric.
<b><u>EMPLOYER:</u></b>	City of North Little Rock and NLR Electric.
<b><u>PLAN YEAR:</u></b>	January 1 to December 31.
<b><u>PARTICIPATION:</u></b>	An Employee is eligible to enter the plan on the first of the month following employment.
<b><u>EMPLOYEE CONTRIBUTIONS:</u></b>	4% of Compensation.
<b><u>COMPENSATION:</u></b>	Base Salary of the Member.
<b><u>FINAL AVERAGE EARNINGS:</u></b>	Average compensation over high five (5) calendar years.
<b><u>CREDITED SERVICE:</u></b>	Credited Service equals the actual period of continuous employment from the later of January 1, 1977 or the date of hire, to termination of employment. Partial service is credited for completed months.

**EXHIBIT 5 (Continued)**

**DEATH BENEFITS:**

Eligibility: Death of a Participant.

- Benefits:
1. Unless otherwise eligible, return of contributions
  2. Age 50 and 10 years of service, 50% of Accrued Benefit payable to eligible beneficiary.
  3. Age 55, not less than 100% Joint and Survivor benefit payable to eligible beneficiary.

VESTING: According to the following schedule:

<u>Years of Service</u>	<u>Vested Percentage</u>
Under 10	0%
10 +	100%

ACTUARIAL EQUIVALENT: UP84 Table at 7.0%.



**EXHIBIT 6 (Continued)**

Annual termination rates at a few sample ages  
(prior to any multipliers) are:

<u>AGE</u>	<u>TERMINATION RATE PER 1,000</u>
25	129.6
30	83.9
35	71.5
40	60.1
45	58.2
50	53.2

**EXPECTED RETIREMENT  
PATTERN:**

Retirement assumptions were updated in the 2017  
valuation. Retirement was assumed to occur in the  
following pattern for those eligible:

<u>AGE</u>	<u>LIKELIHOOD OF RETIRING</u>
55-60	5%
62	20%
63-64	10%
65	30%
66-69	20%
70 & Older	100%

**DISABILITIES:**

Taken from 1952 Society of Actuaries Disability  
incidence study.

**ASSUMED INVESTMENT  
RETURN/DISCOUNT:**

6.50% annually pre-retirement.  
6.50% annually post-retirement.

**PAYROLL GROWTH:**

3.5% annually.

## APPENDIX A

### DISCUSSION OF GASB DISCLOSURES

#### Accounting Standards

For pension plans that are administered through trusts or equivalent arrangements, Governmental Accounting Standards Board (GASB) Statement No. 67, "Financial Reporting for Pension Plans," (GASB 67) replaces Statements No. 25 and No. 50. GASB 67 establishes standards of financial reporting and specifies the required approach for measuring the pension liability of employers for benefits provided through the pension plan.

This discussion provides a summary of the information that is required to be disclosed under GASB 67. A number of these disclosure items are provided. However, certain information, such as notes regarding accounting policies and investments, is not included in this report, and your internal staff will be responsible for preparing that information to fully comply with this accounting standard.

#### Financial Statements

GASB 67 requires defined benefit plans to present to financial statements: a statement of fiduciary plan net position and a statement of changes in fiduciary plan net position. Based on the information that was provided to our firm, we compiled the Financial Statements that are included in this report as Exhibit 3.

#### Notes to Financial Statements

Paragraph 30 of GASB 67 is an extensive list of notes to the plan's financial statements that are required to provide additional disclosure. Many of these notes concern the plan provisions and the actuarial assumptions used in making the calculations under this standard. Those items are included in Exhibits 5 and 6 in this report.

Please note that several items mentioned in Paragraph 30 are beyond the scope of the included information. Your internal staff will be responsible for preparing those notes.

This report includes some notes that are actuarial in nature written in the format we understand is desired by GASB 67. These are only selected notes and not intended to be a complete compilation of notes to the financial statements.

**APPENDIX B**

**PENSION EXPENSE/(INCOME) UNDER GASB 68**

	<u>January 1,2015-</u> <u>December 31, 2015</u>	<u>January 1,2016-</u> <u>December 31, 2016</u>
1. Service Cost	\$ 2,432,932	\$ 1,842,603
2. Interest on Total Pension Liability	3,885,117	4,189,965
3. Current Period Benefit Changes	0	0
4. Offset for Employee Contributions	(755,749)	(909,519)
5. Projected Earnings on Plan Assets	(3,062,728)	(2,898,918)
6. Administrative Expenses	0	52,952
7. Other Changes in Plan Net Position	(55,210)	0
8. Rec. of outflow (inflow) due to liabilities	(1,191,994)	(529,428)
9. Rec. of outflow (inflow) due to assets	931,805	1,080,910
	<hr/>	<hr/>
10. Total Pension Expense/(Income)	<u>\$ 2,184,173</u>	<u>\$ 2,828,565</u>

This schedule is provided to assist with bringing forward all balance sheet items. It is not a required schedule under GASB 67/68. Summary of Balance Sheet Items:

	(A) Net Pension Asset / (Liability)	(B) Deferred Outflow of Resources	(C) Deferred (Inflow) of Resources	(D) Total Assets (A)+(B)+(C)
1. Balance 1/1/2016	\$ (18,632,643)	\$ 3,727,218	\$ (9,535,956)	\$ (24,441,381)
2. Contributions during measuring period	1,364,281	0	0	1,364,281
3. Pension Expense	(2,277,082)	(1,743,478)	1,191,995	(2,828,565)
4. Addition to Deferred outflows	(6,708,620)	6,708,620	0	0
5. Addition to Deferred inflows	0	0	0	0
	<hr/>	<hr/>	<hr/>	<hr/>
6. Balance 12/31/2016	<u>(26,254,064)</u>	<u>8,692,360</u>	<u>(8,343,961)</u>	<u>(25,905,665)</u>

**Appendix C (continued)**

**GASB 68 Pension Expense and Deferred Outflows/Inflows**

For the year ended December 31, 2016, the City of North Little Rock (and agency employers) recognized pension expense of \$2,828,565. At December 31, 2016, the City of North Little Rock reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources:

	Deferred Outflows Of Resources	Deferred Inflows Of Resources
Difference between expected and actual experience	1,665,569	1,163,078
Changes of assumptions	3,634,956	7,180,883
Net difference between projected and actual earnings on pension plan investments	3,391,837	0
Subtotal	8,692,362	8,343,961
Contributions subsequent to measurement date	0	0
Total	<u>8,692,362</u>	<u>8,343,961</u>

Other amounts reported as deferred outflows of resources and deferred inflows of resources related to pensions will be recognized in pension expense as follows:

Year ending December 31:	Net Deferred Outflow/(Inflow) of Resources
2017	551,482
2018	551,482
2019	551,482
2020	(380,323)
2021	(529,429)
Total thereafter	(396,292)
Total	348,402

### Components of Net Pension Liability

The components of the net pension liability at December 31, 2016 were as follows:

Total Pension Liability	\$69,537,264
Plan's Fiduciary Net Position	43,283,200
Net Pension Liability	<u>\$26,254,064</u>

Plan Fiduciary Net Position as a Percentage of Total Pension Liability	62.24%
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Regarding the sensitivity of the Net Pension Liability to changes in the single discount rate, the following presents the plan's Net Pension Liability calculated using a single discount rate of 6.50%, as well as what the plan's Net Pension Liability would be if it were calculated using a single discount rate one percentage point lower and one percentage point higher:

	1% Decrease 5.50%	Current Single Rate Assumed	1% Increase 7.50%
Total Pension Liability	80,598,302	69,537,264	60,715,379
Net Pension Liability	37,315,102	26,254,064	17,432,179

### Changes in the Net Pension Liability

	Total Pension Liability	Plan Fiduciary Net Position	Net Pension Liability
Balances at 12/31/2015	\$ 60,329,067	\$ 41,696,424	\$ 18,632,643
Changes for the year:			
a) Service Cost	1,842,603		1,842,603
b) Interest on NPL	4,189,965		4,189,965
c) Differences between expected and actual experience	1,873,765		1,873,765
d) Employer contributions		1,364,281	(1,364,281)
e) Employee contributions		909,519	(909,519)
f) Service Purchases			0
g) Net investment income		2,153,389	(2,153,389)
h) Benefits and refunds	(2,787,461)	(2,787,461)	0
i) Administrative expenses		(52,951)	52,951
j) Assumption change	4,089,326		4,089,326
k) Other		0	0
Net changes	9,208,198	1,586,777	7,621,421
Balances at 12/31/2016	\$ 69,537,264	\$ 43,283,200	\$ 26,254,064

Appendix E (continued)

**The Retirement System of the City of North Little Rock, Arkansas**  
**Schedule of Required Supplementary Information**  
**Schedule of Changes in the Employers' Net Pension Liability and Related Ratios**

Fiscal Year ending December 31,	2016	2015	2014	2013	2012	2011	2010	2009	2008	2007
<b>Total Pension Liability</b>										
Service Cost	1,842,603	2,432,932	1,864,257	1,817,824						
Interest	4,189,965	3,885,117	3,918,262	3,719,151						
Benefit Changes	0	0								
Difference between Actual & Expected Experience	1,873,765	-1,495,386	-1,694,088	-158,110						
Assumption changes	4,089,326	-9,232,564	9,665,047	0						
Benefit Payments	-2,787,461	-2,755,249	-2,604,613	-2,510,652						
Net Change in Total Pension Liability	9,208,198	-7,165,150	11,148,865	2,868,213						
Total Pension Liability - Beginning	60,329,067	67,494,217	56,345,351	53,477,138						
Total Pension Liability - Ending	69,537,265	60,329,067	67,494,217	56,345,351						
<b>Plan Fiduciary Net Position</b>										
Contributions - Employee Mandatory	909,519	755,749	846,533	776,207						
Contributions - Employer	1,364,281	1,133,620	1,228,646	1,164,511						
Net Investment Income	2,153,389	-1,596,295	1,113,897	4,546,615						
Benefit Payments	-2,787,461	-2,755,249	-2,604,613	-2,510,652						
Administrative Expense	-52,951	-55,210	-72,146	-58,516						
Reconciliation	0	0	0	0						
Net Change in Plan Net Position	1,586,777	-2,517,385	512,317	3,918,165						
Plan Fiduciary N P - Beginning	41,696,424	44,213,809	43,701,492	39,783,327						
Plan Fiduciary N P - Ending	43,283,200	41,696,424	44,213,809	43,701,492						
Plan Fiduciary Net Position as a Percentage of Total Pension Liability	62.24%	69.11%	65.51%	77.56%						
Covered Employee Payroll	21,964,782	19,641,076	19,305,847	19,610,843						
Net Pension Liability as a Percentage of Covered Employee Payroll	119.53%	94.87%	120.59%	64.47%						

**Appendix E (continued)**

**The Retirement System of the City of North Little Rock, Arkansas  
Schedule of Required Supplementary Information**

**Schedule of Contributions**

FY ending December 31,	Actuarially Determined Contribution	Actual Contribution	Contribution Deficiency (Excess)	Covered Payroll	Contribution as % of Payroll
2007					
2008					
2009					
2010					
2011					
2012					
2013					
2014	2,136,418	1,228,646	907,772	19,610,843	6.27%
2015	2,185,569	1,133,620	1,051,949	19,305,847	5.87%
2016	2,923,512	1,364,281	1,559,231	21,964,782	6.21%

**Key Assumptions for ADC:**

Cost Method	Entry Age Normal
*Amortization Method	Level Percentage of Pay (3.5% Growth)
Remaining amortization	15 years
Asset Valuation	Market Value
*Investment rate of return	6.5%
*Mortality	RP-2014 Table

\*Starting in FYE 2017, ADC calculations will reflect updated assumptions. Prior to 2017, 4% payroll growth, 7.0% investment return, and 1983 GAM mortality were used.

Note: a full 10 year schedule will be completed as information is available.

## APPENDIX F

### GASB 67 CALCULATION OF THE SINGLE DISCOUNT RATE

GASB 67 includes a specific requirement for the discount rate that is used for the purpose of the measurement of the Total Pension Liability. This rate considers the ability of the fund to meet benefit obligations in the future. To make this determination, employer contributions, employee contributions, benefit payments, expenses and investment returns are projected into the future. The Plan Net Position (assets) in future years can then be projected and compared to the obligation to make benefit payments in those years. As long as assets are projected to be on hand in a future year, the assumed valuation discount rate is used. In years where assets are not projected to be sufficient to meet benefit payments, the use of a "risk-free" rate is required. The single discount rate is equivalent to applying these two rates to the benefits that are projected to be paid during the different time periods.

Our projections show that Plan Net Position (assets) together with employer contributions and projected investment returns will be sufficient to meet benefit payments and expenses in all future years. Therefore, for the purpose of this valuation, the expected rate of return on pension plan investments is 6.50%, the municipal bond rate is 3.71%, and the resulting single discount rate is 6.50%.

These projections are generated under the guidelines of GASB 67 and the related implementation guide. They should be used solely to determine the single discount rate as defined in the GASB statements. Any implication beyond that determination is beyond the scope of this report.

**For the purpose of this valuation, the expected rate of return on pension plan investments is 6.50%; the municipal bond rate is 3.71%; since assets are projected to be sufficient to meet benefit payments, the resulting single discount rate is 6.50%. The details of these projections are available upon request.**



**Appendix G (continued)**

**Deferred Outflows of Resources**

<u>Employer</u>	Differences Between Expected and Actual Experience	Changes Of Assumptions	Changes In Proportion	Difference Between Projected and Actual Investment Earnings	Total Deferred Outflows of Resources
City	0	1,515,777	0	1,414,396	2,930,173
Airport	0	10,905	0	10,176	21,080
Community Dev.	0	25,445	0	23,743	49,188
Parks	0	403,480	34,196	376,494	814,170
Street	0	352,591	68,395	329,008	749,994
Electric	0	923,279	0	861,527	1,784,806
UAD	0	225,367	0	210,294	435,661
Library	0	178,113	68,394	166,200	412,707
Total	0	3,634,956	170,985	3,391,837	7,197,778

**Deferred Inflows of Resources**

<u>Employer</u>	Differences Between Expected and Actual Experience	Changes Of Assumptions	Changes In Proportion	Difference Between Projected and Actual Investment Earnings	Total Deferred Outflows of Resources
City	209,539	-2,994,428	-34,197	0	-2,819,087
Airport	1,507	-21,543	0	0	-20,035
Community Dev.	3,517	-50,266	-11,399	0	-58,148
Parks	55,776	-797,078	0	0	-741,302
Street	48,742	-696,546	0	0	-647,804
Electric	127,633	-1,823,944	-56,995	0	-1,753,307
UAD	31,154	-445,215	-68,395	0	-482,455
Library	24,622	-351,863	0	0	-327,241
Total	502,491	-7,180,883	-170,986	0	-6,849,378

**Schedule of Amortization of Deferred Inflows and Outflows**

<u>Employer</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>
City	225,693	225,693	225,693	-162,869	-225,046
Airport	1,654	1,654	1,654	-1,141	-1,588
Community Dev.	2,435	2,435	2,435	-4,087	-5,131
Parks	65,489	65,489	65,489	-37,941	-54,492
Street	62,043	62,043	62,043	-28,342	-42,805
Electric	132,952	132,952	132,952	-103,726	-141,599
UAD	25,642	25,642	25,642	-32,129	-41,374
Library	35,572	35,572	35,572	-10,087	-17,393
Total	551,482	551,482	551,482	-380,323	-529,429