





# **FOSTER & FOSTER**

ACTUARIES AND CONSULTANTS

RETIREMENT PLAN FOR EMPLOYEES  
OF THE CITY OF JONESBORO

ACTUARIAL VALUATION  
AS OF JANUARY 1, 2017

CONTRIBUTIONS APPLICABLE TO THE  
PLAN/FISCAL YEAR ENDED DECEMBER 31, 2017

August 2, 2017

Mr. Michael Burroughs  
300 South Church Street  
Jonesboro, AR 72401

Re: Retirement Plan for Employees of the City of Jonesboro

Dear Ben:

We are pleased to present to the Board this report of the annual actuarial valuation of the Retirement Plan for Employees of the City of Jonesboro. The valuation was performed to determine whether the assets and contributions are sufficient to provide the prescribed benefits and to develop the appropriate funding requirements for the applicable plan year.

The valuation has been conducted in accordance with generally accepted actuarial principles and practices, including the applicable Actuarial Standards of Practice as issued by the Actuarial Standards Board, as well as applicable federal laws and regulations. In our opinion, the assumptions used in this valuation, as adopted by the Board of Trustees, represent reasonable expectations of anticipated plan experience.

In conducting the valuation, we have relied on personnel, plan design, and asset information supplied by the Board of Trustees, financial reports prepared by the custodian bank and the actuarial assumptions and methods described in the Actuarial Assumptions section of this report. While we cannot verify the accuracy of all this information, the supplied information was reviewed for consistency and reasonableness. As a result of this review, we have no reason to doubt the substantial accuracy of the information and believe that it has produced appropriate results. This information, along with any adjustments or modifications, is summarized in various sections of this report.

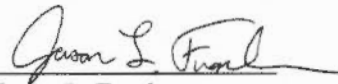
The undersigned is familiar with the immediate and long-term aspects of pension valuations, and meets the Qualification Standards of the American Academy of Actuaries necessary to render the actuarial opinions contained herein. All of the sections of this report are considered an integral part of the actuarial opinions.

To our knowledge, no associate of Foster & Foster, Inc. working on valuations of the program has any direct financial interest or indirect material interest in the City of Jonesboro, nor does anyone at Foster & Foster, Inc. act as a member of the Board of Trustees of the Retirement Plan for Employees of the City of Jonesboro. Thus, there is no relationship existing that might affect our capacity to prepare and certify this actuarial report.

If there are any questions, concerns, or comments about any of the items contained in this report, please contact me at 239-433-5500.

Respectfully submitted,

Foster & Foster, Inc.

By:   
Jason L. Franken  
Enrolled Actuary #17-6888

JLF/lke

Enclosures

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## SUMMARY OF REPORT

The regular annual actuarial valuation of the Retirement Plan for Employees of the City of Jonesboro, performed as of January 1, 2017, has been completed and the results are presented in this Report. The contribution amounts set forth herein are applicable to the plan/fiscal year ended December 31, 2017.

The contribution requirements, compared with those set forth in the January 1, 2015 actuarial valuation, are as follows:

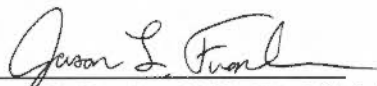
Valuation Date	1/1/2015	1/1/2017
Applicable Plan/Fiscal Year End	<u>12/31/2015</u>	<u>12/31/2017</u>
Total Required Contribution	\$0	\$0
% of Total Annual Payroll	0.0%	0.0%

Experience since the prior valuation has been less favorable than expected, relative to the Plan's actuarial assumptions. The primary source of unfavorable experience is attributable to -0.8% and 4.9% investment returns (Market Value Basis) for fiscal years ending 2015 and 2016, respectively. There were no material sources of actuarial gain.

The balance of this Report presents additional details of the actuarial valuation and the general operation of the Fund. The undersigned would be pleased to meet with the Board of Trustees in order to discuss the Report and answer any pending questions concerning its contents.

Respectfully submitted,

FOSTER & FOSTER, INC.

By:   
Jason L. Franken, FSA, EA, MAAA

Plan Changes Since Prior Valuation

There have been no changes to the Plan since the prior valuation.

Actuarial Assumption/Method Changes Since Prior Valuation

There have been no changes in assumptions or methods since the prior valuation.



COMPARATIVE SUMMARY OF PRINCIPAL VALUATION RESULTS

	<u>1/1/2017</u>	<u>1/1/2015</u>
<b>A. Participant Data</b>		
Number Included		
Actives	125	142
Service Retirees	64	56
Beneficiaries	6	6
Terminated Vested	82	76
	<hr/>	<hr/>
Total	277	280
Total Annual Payroll	N/A	N/A
Payroll Under Assumed Ret. Age	N/A	N/A
Annual Rate of Payments to:		
Service Retirees	369,178	336,318
Beneficiaries	34,028	26,404
Terminated Vested	285,857	283,142
<b>B. Assets</b>		
Actuarial Value	9,408,389	9,814,779
Market Value	9,408,389	9,814,779
<b>C. Liabilities</b>		
Present Value of Benefits		
Active Members		
Retirement Benefits	2,740,639	2,702,622
Death Benefits	986	1,303
Vested Benefits	375,813	465,826
Refund of Contributions	0	0
Service Retirees	3,305,630	3,065,142
Beneficiaries	179,003	128,547
Terminated Vested	1,073,399	1,107,068
	<hr/>	<hr/>
Total	7,675,470	7,470,508

	<u>1/1/2017</u>	<u>1/1/2015</u>
C. Liabilities - (Continued)		
Present Value of Future Salaries	34,337,940	43,927,062
Present Value of Future Member Cont.	0	0
Normal Cost		
Retirement Benefits	0	0
Death Benefits	0	0
Vested Benefits	0	0
Refund of Contributions	0	0
	<hr/>	<hr/>
Total Normal Cost	0	0
Present Value of Future Normal Costs	0	0
Actuarial Accrued Liability		
Retirement Benefits	2,740,639	2,702,622
Death Benefits	986	1,303
Vested Benefits	375,813	465,826
Refund of Contributions	0	0
Inactives	4,558,032	4,300,757
	<hr/>	<hr/>
Total Actuarial Accrued Liability	7,675,470	7,470,508
Unfunded Actuarial Accrued Liab (UAAL)	(1,732,919)	(2,344,271)
D. Actuarial Present Value of Accrued Benefits		
Vested Accrued Benefits		
Inactives	4,558,032	4,300,757
Actives	3,074,600	3,100,608
Member Contributions	42,838	47,828
	<hr/>	<hr/>
Total	7,675,470	7,449,193
Non-vested Accrued Benefits	0	21,315
	<hr/>	<hr/>
Total Present Value Accrued Benefits	7,675,470	7,470,508
Increase (Decrease) in Present Value of Accrued Benefits Attributable to:		
Plan Amendments	0	
Assumption Changes	0	
New Accrued Benefits	(118,279)	
Benefits Paid	(780,842)	
Interest	1,104,082	
Other	0	
	<hr/>	
Total:	204,962	

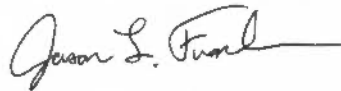
Valuation Date Applicable to Fiscal Year Ending	<u>1/1/2017</u> <u>12/31/2017</u>	<u>1/1/2015</u> <u>12/31/2015</u>
<b>E. Pension Cost</b>		
Normal Cost (with interest)	\$0	\$0
Administrative Expense (with interest)	36,624	36,624
Payment Required to Amortize Unfunded Actuarial Accrued Liability over 30 years (as of 1/1/2017)	(146,729)	(198,492)
Total Required Contribution	0	0
Expected Member Contributions	0	0
Expected City Contribution	0	0
<b>F. Past Contributions</b>		
Plan Year Ending:	<u>12/31/2016</u>	
Total Required Contribution	0	
City Requirement	0	
Actual Contributions Made:		
Members	0	
City	0	
Total	<u>0</u>	
<b>G. Net Experience Gain (Loss) since prior valuation</b>	<b>(852,090)</b>	

H. 3 Year Comparison of Investment Return on Actuarial Value

		<u>Actual</u>	<u>Assumed</u>
Year Ended	12/31/2016	4.9%	7.5%
Year Ended	12/31/2015	-0.8%	7.5%
Year Ended	12/31/2014	4.6%	7.5%

STATEMENT BY ENROLLED ACTUARY

This actuarial valuation was prepared and completed by me or under my direct supervision, and I acknowledge responsibility for the results. To the best of my knowledge, the results are complete and accurate, and in my opinion, the techniques and assumptions used are reasonable and adhere to the Actuarial Standards of Practice. There is no benefit or expense to be provided by the plan and/or paid from the plan's assets for which liabilities or current costs have not been established or otherwise taken into account in the valuation. All known events or trends which may require a material increase in plan costs or required contribution rates have been taken into account in the valuation.



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Jason L. Franken, FSA, EA, MAAA  
Enrolled Actuary #17-6888

RECONCILIATION OF UNFUNDED ACTUARIAL ACCRUED LIABILITIES

(1)	Unfunded Actuarial Accrued Liability as of January 1, 2015	(\$2,344,271)
(2)	Sponsor Normal Cost developed as of January 1, 2015	0
(3)	Expected Administrative expenses for the fiscal year ended December 31, 2015	34,069
(4)	Interest on (1), (2) and (3)	(174,543)
(5)	Sponsor Contributions to the System during the year ending December 31, 2015	0
(6)	Interest on (4)	0
(7)	Expected UAAL as of January 1, 2016 (1)+(2)+(3)+(4)-(5)-(6)	(2,484,745)
(8)	Change in UAAL due to Experience (Gain)/Loss	676,608
(9)	Unfunded Accrued Liability as of January 1, 2016	(\$1,808,137)

	<u>Date Established</u>	<u>Years Remaining</u>	<u>1/1/2017 Amount</u>	<u>Amortization Amount</u>
UAAL	1/1/2016	30	(\$1,808,137)	(\$142,416)

RECONCILIATION OF UNFUNDED ACTUARIAL ACCRUED LIABILITIES

(1)	Unfunded Actuarial Accrued Liability as of January 1, 2016	(\$1,808,137)
(2)	Sponsor Normal Cost developed as of January 1, 2016	0
(3)	Expected Administrative expenses for the fiscal year ended December 31, 2016	34,069
(4)	Interest on (1), (2) and (3)	(134,333)
(5)	Sponsor Contributions to the System during the year ending December 31, 2016	0
(6)	Interest on (4)	0
(7)	Expected UAAL as of January 1, 2017 (1)+(2)+(3)+(4)-(5)-(6)	(1,908,401)
(8)	Change in UAAL due to Experience (Gain)/Loss	175,482
(9)	Unfunded Accrued Liability as of January 1, 2017	(\$1,732,919)

	<u>Date Established</u>	<u>Years Remaining</u>	<u>1/1/2017 Amount</u>	<u>Amortization Amount</u>
UAAL	1/1/2017	30	(\$1,732,919)	(\$136,492)

PROJECTION OF BENEFIT PAYMENTS

Year	Payments for Current Actives	Payments for Current Inactives	Total Payments
2017	60,303	411,294	471,597
2018	68,964	395,735	464,699
2019	101,306	398,308	499,614
2020	117,955	390,134	508,089
2021	155,798	384,049	539,847
2022	216,067	393,696	609,763
2023	226,188	391,590	617,778
2024	239,796	381,405	621,201
2025	289,038	368,122	657,160
2026	300,327	362,786	663,113
2027	315,032	355,926	670,958
2028	326,990	343,973	670,963
2029	347,874	346,081	693,955
2030	344,981	335,158	680,139
2031	337,882	332,078	669,960
2032	342,344	327,452	669,796
2033	344,100	330,029	674,129
2034	344,553	326,656	671,209
2035	356,196	325,289	681,485
2036	370,323	313,343	683,666
2037	390,291	308,249	698,540
2038	380,656	301,095	681,751
2039	365,891	281,955	647,846
2040	352,869	269,953	622,822
2041	345,276	255,960	601,236
2042	340,261	251,245	591,506
2043	327,902	236,950	564,852
2044	312,216	227,666	539,882
2045	305,930	211,657	517,587
2046	289,576	204,051	493,627
2047	267,492	195,019	462,511
2048	255,276	187,044	442,320
2049	241,641	180,764	422,405
2050	225,327	173,902	399,229
2051	208,303	164,030	372,333
2052	191,066	151,685	342,751
2053	175,551	140,972	316,523
2054	161,611	130,100	291,711
2055	146,075	120,541	266,616
2056	133,385	110,425	243,810



## ACTUARIAL ASSUMPTIONS AND METHODS

Mortality Rate	IRS Prescribed Mortality Optional Combined Table for Small Plans as of the valuation date.
Interest Rate	7.5% per year compounded annually, net of investment related expenses
Retirement Age	100% retiring at age 65.
Termination Rate	2003 Society of Actuaries Small Plan Age Table, multiplied by 0.60. See below.
Salary Increases	N/A – frozen plan.
Administrative Expenses	\$34,069
Disability	None
Interest Rate for Member Contributions	2.95%
Funding Method	Projected Unit Credit Cost Method
Actuarial Asset Method	Market Value of Assets
Amortization Method	Level Dollar, Open

<u>Age</u>	<u>% Terminating During the Year</u>
20	14.58%
30	9.30
40	5.64
50	3.36

## VALUATION NOTES

Total Annual Payroll is the projected annual rate of pay for the fiscal year following the valuation date of all covered Members.

Present Value of Benefits is the single sum value on the valuation date of all future benefits to be paid to current Members, Retirees, Beneficiaries and Vested Terminations.

Normal (Current Year's) Cost is the current year's cost for benefits yet to be funded.

Unfunded Accrued Liability is a liability which arises when a pension plan is initially established or improved and such establishment or improvement is applicable to all years of past service.

Total Required Contribution is equal to the Normal Cost plus an amount sufficient to amortize the Unfunded Accrued Liability over no more than 30 years. The required amount is adjusted for interest according to the timing of contributions during the year.

Projected Unit Credit Cost Method - Under this method, the normal cost for an active participant is the present value of the projected increase in the benefit earned during the year. The total normal cost is the sum of the individual normal costs for all active participants.

The accrued liability is the sum of the individual accrued liabilities for all participants and beneficiaries. A participant's accrued liability equals the present value, at the participant's attained age, of the accrued benefits with projections made for salary increases. A beneficiary's accrued liability equals the present value, at the beneficiary's attained age, of future benefits. The unfunded accrued liability equals the total accrued liability less the actuarial value of assets.

STATEMENT OF FIDUCIARY NET POSITION  
DECEMBER 31, 2015

<u>ASSETS</u>	COST VALUE	MARKET VALUE
Cash and Cash Equivalents:		
Money Market	342,416.35	342,416.35
Cash	43,539.16	43,539.16
Total Cash and Equivalents	385,955.51	385,955.51
Total Receivable	0.00	0.00
Investments:		
Mutual Funds: Principal		
Fixed Income	3,256,845.96	3,256,845.96
Equity	4,162,010.31	4,162,010.31
Pooled/Common/Commingled Funds: Stephens		
Fixed Income	382,720.97	378,791.60
Equity	1,204,459.16	1,175,004.56
Total Investments	9,006,036.40	8,972,652.43
Total Assets	9,391,991.91	9,358,607.94
<u>LIABILITIES</u>		
Total Liabilities	0.00	0.00
NET POSITION RESTRICTED FOR PENSIONS	9,391,991.91	9,358,607.94

STATEMENT OF CHANGES IN FIDUCIARY NET POSITION  
FOR THE YEAR ENDED DECEMBER 31, 2015  
Market Value Basis

ADDITIONS

Total Contributions		0.00
Investment Income:		
Unrealized Gain (Loss)	(82,865.33)	
Net Increase in Fair Value of Investments		(82,865.33)
Interest & Dividends		40,742.04
Less Investment Expense <sup>1</sup>		(31,299.80)
Net Investment Income		(73,423.09)
Total Additions		(73,423.09)

DEDUCTIONS

Distributions to Members:		
Benefit Payments	382,748.16	
Total Distributions		382,748.16
Administrative Expense		0.00
Total Deductions		382,748.16
Net Increase in Net Position		(456,171.25)
<b>NET POSITION RESTRICTED FOR PENSIONS</b>		
Beginning of the Year		9,814,779.19
End of the Year		9,358,607.94
Market Value Rate of Return		-0.8%
Actuarial Gain/(Loss) due to Investment Return		(797,993.06)

<sup>1</sup>Investment related expenses include investment advisory, custodial and performance monitoring fees.

STATEMENT OF FIDUCIARY NET POSITION  
DECEMBER 31, 2016

<u>ASSETS</u>	COST VALUE	MARKET VALUE
Cash and Cash Equivalents:		
Money Market	35,425.35	35,425.35
Cash	39,255.50	39,255.50
Total Cash and Equivalents	74,680.85	74,680.85
Total Receivable	0.00	0.00
Investments:		
Mutual Funds: Principal		
Fixed Income	3,512,322.70	3,512,322.70
Equity	4,088,209.56	4,088,209.56
Pooled/Common/Commingled Funds: Stephens		
Fixed Income	370,985.19	371,242.75
Equity	1,375,919.59	1,361,933.37
Total Investments	9,347,437.04	9,333,708.38
Total Assets	9,422,117.89	9,408,389.23
<u>LIABILITIES</u>		
Total Liabilities	0.00	0.00
NET POSITION RESTRICTED FOR PENSIONS	9,422,117.89	9,408,389.23

STATEMENT OF CHANGES IN FIDUCIARY NET POSITION  
FOR THE YEAR ENDED DECEMBER 31, 2016  
Market Value Basis

ADDITIONS

Total Contributions		0.00
Investment Income:		
Net Increase in Fair Value of Investments	440,048.20	
Interest & Dividends	40,587.04	
Less Investment Expense <sup>1</sup>	(32,760.36)	
Net Investment Income		447,874.88
Total Additions		447,874.88

DEDUCTIONS

Distributions to Members:		
Benefit Payments	398,093.59	
Total Distributions		398,093.59
Administrative Expense		0.00
Total Deductions		398,093.59
Net Increase in Net Position		49,781.29

**NET POSITION RESTRICTED FOR PENSIONS**

Beginning of the Year		9,358,607.94
End of the Year		9,408,389.23
Actuarial Asset Rate of Return		4.9%
Actuarial Gain/(Loss) due to Investment Return		(240,457.42)

<sup>1</sup>Investment related expenses include investment advisory, custodial and performance monitoring fees.

STATISTICAL DATA

	<u>1/1/2013</u>	<u>1/1/2014</u>	<u>1/1/2015</u>	<u>1/1/2017</u>
<u>Active Members</u>				
Number	181	164	142	125
Average Current Age	47.4	48.7	50.3	51.8
Average Age at Employment	37.6	37.7	38.1	37.3
Average Past Service	9.8	11.0	12.2	14.5
Average Annual Salary	\$36,094	\$36,250	N/A	N/A
<u>Retirees &amp; Beneficiaries</u>				
Number	54	56	62	70
Average Current Age	69.2	70.6	70.0	70.7
Average Annual Benefit	\$5,516	\$5,727	\$5,850	\$5,760
<u>Terminated Vested Members</u>				
Number	57	64	76	82
Average Current Age	48.1	48.3	47.2	48.0
Average Annual Benefit	\$3,857	\$3,910	\$3,726	\$3,486

AGE AND SERVICE DISTRIBUTION

PAST SERVICE

AGE	0	1	2	3	4	5-9	10-14	15-19	20-24	25-29	30+	Total
15 - 19	0	0	0	0	0	0	0	0	0	0	0	0
20 - 24	0	0	0	0	0	0	0	0	0	0	0	0
25 - 29	0	0	0	0	0	2	0	0	0	0	0	2
30 - 34	0	0	0	0	0	3	4	0	0	0	0	7
35 - 39	0	0	0	0	0	4	3	3	0	0	0	10
40 - 44	0	0	0	0	0	7	2	1	1	0	0	11
45 - 49	0	0	0	0	0	3	4	9	4	0	0	20
50 - 54	0	0	0	0	0	8	6	3	2	1	0	20
55 - 59	0	0	0	0	0	4	2	7	2	2	0	17
60 - 64	0	0	0	0	0	6	7	3	3	6	0	25
65+	0	0	0	0	0	5	2	3	2	1	0	13
Total	0	0	0	0	0	42	30	29	14	10	0	125



VALUATION PARTICIPANT RECONCILIATION

1. Active lives

a. Number in prior valuation 1/1/2016	142
b. Terminations	
i. Vested (partial or full) with deferred benefits	16
ii. Non-vested or full lump sum distribution received	4
c. Deaths	
i. Beneficiary receiving benefits	0
ii. No future benefits payable	0
d. Retired	5
e. Voluntary withdrawal	0
f. Continuing participants	117
g. Rehired / data corrections	8
h. Total active life participants in 1/1/2017 valuation	125

2. Non-Active lives (including beneficiaries receiving benefits)

	Service Retirees, Vested Receiving <u>Benefits</u>	Receiving Death <u>Benefits</u>	Vested <u>Deferred</u>	<u>Total</u>
a. Number prior valuation	56	6	76	138
b. In	11	1	16	28
c. Out	3	1	10	14
d. Number current valuation	64	6	82	152

## SUMMARY OF CURRENT PLAN

<u>Eligibility</u>	Any full-time employee who is employed for more than 20 hours per week and more than five months per year.
<u>Accrual Service</u>	Years and fractional parts of years (to the nearest month) of service as employed by the City through December 31, 2011.
<u>Compensation</u>	Gross annual compensation, without reduction for flexible spending account contributions.
<u>Average Compensation</u>	The monthly average of the five latest Compensation Years through December 31, 2011.
<u>Normal Retirement</u>	
Date	Age 65 and 5 years of Accrual Service.
Benefit	1.5% for each year of Accrual Service times average compensation. Minimum of \$25 per month.
Form of Benefit	For the Retiree's lifetime with 120 payments guaranteed.
<u>Early Retirement</u>	
Date	Age 55 and 5 years of Accrual Service.
Benefit	Accrued benefit, reduced 6.7% per year for the first five years then 3.3% per year for the next five years.
Form of Benefit	For the Retiree's lifetime with 120 payments guaranteed.
<u>Vesting</u>	
Schedule	100% after 5 years of Accrual Service.
Benefit Amount	Member will receive the vested portion of his (her) accrued benefit payable at the otherwise Normal Retirement Date.
<u>Death Benefit</u>	
Benefit	100% refund of Member's contribution account.

STATEMENT OF FIDUCIARY NET POSITION  
 DECEMBER 31, 2016

<u>ASSETS</u>	MARKET VALUE
Cash and Cash Equivalents:	
Money Market	35,425
Cash	39,256
Total Cash and Equivalents	74,681
Total Receivable	0
Investments:	
Mutual Funds: Principal	
Fixed Income	3,512,323
Equity	4,088,209
Pooled/Common/Commingled Funds: Stephens	
Fixed Income	371,243
Equity	1,361,933
Total Investments	9,333,708
Total Assets	9,408,389
Total Liabilities	0
NET POSITION RESTRICTED FOR PENSIONS	9,408,389

STATEMENT OF CHANGES IN FIDUCIARY NET POSITION  
FOR THE YEAR ENDED DECEMBER 31, 2016  
Market Value Basis

ADDITIONS

Total Contributions		0
Investment Income:		
Net Increase in Fair Value of Investments	440,048	
Interest & Dividends	40,587	
Less Investment Expense <sup>1</sup>	(32,760)	
Net Investment Income		447,875
Total Additions		447,875

DEDUCTIONS

Distributions to Members:		
Benefit Payments	398,094	
Total Distributions		398,094
Administrative Expense		0
Total Deductions		398,094
Net Increase in Net Position		49,781
NET POSITION RESTRICTED FOR PENSIONS		
Beginning of the Year		9,358,608
End of the Year		9,408,389

<sup>1</sup>Investment related expenses include investment advisory, custodial and performance monitoring fees.

NOTES TO THE FINANCIAL STATEMENTS  
(For the Year Ended December 31, 2016)

Plan Description

*Plan Administration*

The Plan Administrator has complete control of the administration of the Plan. The Plan Administrator has all the powers necessary for it to properly carry out its administrative duties.

*Plan Membership as of January 1, 2017:*

Inactive Plan Members or Beneficiaries Currently Receiving Benefits	70
Inactive Plan Members Entitled to But Not Yet Receiving Benefits	82
Active Plan Members	125
	277

*Benefits Provided*

The Plan provides retirement, termination and death benefits.

**Benefits are frozen as of December 31, 2011.**

Normal Retirement:

Date: Age 65 and 5 years of Accrual Service.

Benefit: 1.5% for each year of Accrual Service times average compensation. Minimum of \$25 per month.

Early Retirement:

Date: Age 55 and 5 years of Accrual Service.

Benefit: Accrued benefit, reduced 6.7% per year for the first five years then 3.3% per year for the next five years.

Vesting:

Schedule: 100% after 5 years of Accrual Service.

Benefit Amount: Member will receive the vested portion of his (her) accrued benefit payable at the otherwise Normal Retirement Date.

Death Benefits:

100% refund of Member's contribution account.

*Contributions*

The amount and timing of Employer Contributions shall be determined based on actuarial valuations and recommendations as to the amounts required to fund benefits under this Plan. Dividends, if any, declared under the Annuity Contract and forfeitures shall be applied to reduce future Employer Contributions.

Investments

The following was the asset classes of the Balance Sheet as of December 31, 2016:

Asset Class	Target Allocation
Cash	1%
Fixed Income	41%
Equity	58%
Total	100%

*Concentrations:*

The Plan did not hold investments in any one organization that represent 5 percent or more of the Pension Plan's Fiduciary Net Position.

*Rate of Return:*

For the year ended December 31, 2016, the annual money-weighted rate of return on Pension Plan investments, net of Pension Plan investment expense, was 4.88 percent.

The money-weighted rate of return expresses investment performance, net of investment expense, adjusted for the changing amounts actually invested.

NET PENSION LIABILITY OF THE SPONSOR

The components of the Net Pension Liability of the Sponsor on December 31, 2016 were as follows:

Total Pension Liability	\$ 7,065,367
Plan Fiduciary Net Position	<u>\$ (9,408,389)</u>
Sponsor's Net Pension Liability	<u>\$ (2,343,022)</u>
Plan Fiduciary Net Position as a percentage of Total Pension Liability	133.16%

*Actuarial Assumptions:*

The Total Pension Liability was determined by an actuarial valuation as of January 1, 2017 using the following actuarial assumptions:

Inflation	3.00%
Salary Increases	4.50% (including 3.00% inflation rate)
Discount Rate	7.50%
Investment Rate of Return	7.50%

Mortality Rate: IRS Prescribed Mortality Optional Combined Table for Small Plans as of the valuation date.

The date of the most recent experience study for which significant assumptions are based upon is not available.

The Long-Term Expected Rate of Return on Pension Plan investments was determined using a building-block method in which best-estimate ranges of expected future real rates of return (expected returns, net of Pension Plan investment expenses and inflation) are developed for each major asset class.

These ranges are combined to produce the Long-Term Expected Rate of Return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation.

Best estimates of arithmetic real rates of return for each major asset class included in the Pension Plan's target asset allocation as of December 31, 2016 are summarized in the following table:

<u>Asset Class</u>	<u>Long Term Expected Real Rate of Return</u>
Cash	N/A
Fixed Income	N/A
Equity	N/A

**Discount Rate:**

The Discount Rate used to measure the Total Pension Liability was 7.50 percent.

The projection of cash flows used to determine the Discount Rate assumed that Plan Member contributions will be made at the current contribution rate and that Sponsor contributions will be made at rates equal to the difference between actuarially determined contribution rates and the Member rate. Based on those assumptions, the Pension Plan's Fiduciary Net Position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the Long-Term Expected Rate of Return on Pension Plan investments was applied to all periods of projected benefit payments to determine the Total Pension Liability.

For purpose of this valuation, the expected rate of return on pension plan investments is 7.50%; the municipal bond rate is 3.78% (based on the weekly rate closest to but not later than the measurement date of the Bond Buyer 20-Bond Index as published by the Bond Buyer); and the resulting single discount rate is 7.50%.

	1% Decrease	Current Discount Rate	1% Increase
	<u>6.50%</u>	<u>7.50%</u>	<u>8.50%</u>
Sponsor's Net Pension Liability	\$ (1,640,012)	\$ (2,343,022)	\$ (2,953,351)

SCHEDULE OF CHANGES IN NET PENSION LIABILITY AND RELATED RATIOS  
Last 10 Years

	12/31/2016	12/31/2015	12/31/2014
Total Pension Liability			
Service Cost	87,598	N/A	127,963
Interest	491,762	N/A	476,915
Changes of benefit terms	-	N/A	-
Differences between Expected and Actual Experience	215,824	N/A	-
Changes of assumptions	-	N/A	-
Benefit Payments, including Refunds of Employee Contributions	(398,094)	N/A	(335,004)
Net Change in Total Pension Liability	397,090	N/A	269,874
Total Pension Liability - Beginning	6,668,277	N/A	6,398,403
Total Pension Liability - Ending (a)	<u>\$ 7,065,367</u>	<u>N/A</u>	<u>\$ 6,668,277</u>
Plan Fiduciary Net Position			
Net Investment Income	447,875	N/A	443,767
Benefit Payments, including Refunds of Employee Contributions	(398,094)	N/A	(335,004)
Administrative Expense	-	N/A	-
Net Change in Plan Fiduciary Net Position	49,781	N/A	108,763
Plan Fiduciary Net Position - Beginning	9,358,608	N/A	9,706,016
Plan Fiduciary Net Position - Ending (b)	<u>\$ 9,408,389</u>	<u>N/A</u>	<u>\$ 9,814,779</u>
Net Pension Liability - Ending (a) - (b)	<u>\$ (2,343,022)</u>	<u>N/A</u>	<u>\$ (3,146,502)</u>
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	133.16%	N/A	147.19%
Covered Employee Payroll	N/A	N/A	\$ 5,681,391
Net Pension Liability as a percentage of Covered Employee Payroll	N/A	N/A	-55.38%

**SCHEDULE OF CONTRIBUTIONS**  
Last 10 Years

	12/31/2016	12/31/2015	12/31/2014
Actuarially Determined Contribution	-	N/A	-
Contributions in relation to the Actuarially Determined Contributions	-	N/A	-
Contribution Deficiency (Excess)	\$ -	N/A	\$ -
Covered Employee Payroll	N/A	N/A	\$ 5,681,391
Contributions as a percentage of Covered Employee Payroll	N/A	N/A	0.00%

Notes to Schedule

Valuation Date: 01/01/2015

Methods and assumptions used to determine contribution rates:

Mortality Rate: IRS Prescribed Mortality Optional Combined Table for Small Plans as of the valuation date.

Interest Rate: 7.5% per year compounded annually, net of investment related expenses.

Retirement Age: 100% retiring at age 65.

Termination Rate: 2003 Society of Actuaries Small Plan Age Table, multiplied by 0.60. See table below.

Salary Increases: N/A - frozen plan.

Disability: None.

Interest Rate for Member Contributions: 2.95%

Funding Method: Projected Unit Credit Cost Method.

Actuarial Asset Method: Market Value of Assets.

Amortization Method: Level Dollar, Open

Remaining Amortization Period: 30 Years.

Termination table:	Age	% Terminating During the Year
	20	14.58%
	30	9.30%
	40	5.64%
	50	3.36%



SCHEDULE OF INVESTMENT RETURNS  
Last 10 Years

	<u>12/31/2016</u>	<u>12/31/2015</u>	<u>12/31/2014</u>
Annual Money-Weighted Rate of Return Net of Investment Expense	4.88%	N/A	4.64%

NOTES TO THE FINANCIAL STATEMENTS  
(For the Year Ended December 31, 2016)

General Information about the Pension Plan

*Plan Description*

The Plan Administrator has complete control of the administration of the Plan. The Plan Administrator has all the powers necessary for it to properly carry out its administrative duties.

Any full-time employee who is employed for more than 20 hours per week and more than five months per year.

*Plan Membership as of January 1, 2017:*

Inactive Plan Members or Beneficiaries Currently Receiving Benefits	70
Inactive Plan Members Entitled to But Not Yet Receiving Benefits	82
Active Plan Members	125
	277
	277

*Benefits Provided*

The Plan provides retirement, termination and death benefits.

**Benefits are frozen as of December 31, 2011.**

Normal Retirement:

Date: Age 65 and 5 years of Accrual Service.

Benefit: 1.5% for each year of Accrual Service times average compensation. Minimum of \$25 per month.

Early Retirement:

Date: Age 55 and 5 years of Accrual Service.

Benefit: Accrued benefit, reduced 6.7% per year for the first five years then 3.3% per year for the next five years.

Vesting:

Schedule: 100% after 5 years of Accrual Service.

Benefit Amount: Member will receive the vested portion of his (her) accrued benefit payable at the otherwise Normal Retirement Date.

Death Benefits:

100% refund of Member's contribution account.

*Contributions*

The amount and timing of Employer Contributions shall be determined based on actuarial valuations and recommendations as to the amounts required to fund benefits under this Plan. Dividends, if any, declared under the Annuity Contract and forfeitures shall be applied to reduce future Employer Contributions.

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### Net Pension Liability

The measurement date is December 31, 2016.

The measurement period for the pension expense was January 1, 2016 to December 31, 2016.

The reporting period is January 1, 2016 through December 31, 2016.

The Sponsor's Net Pension Liability was measured as of December 31, 2016.

The Total Pension Liability used to calculate the Net Pension Liability was determined as of that date.

#### *Actuarial Assumptions:*

The Total Pension Liability was determined by an actuarial valuation as of January 1, 2017 using the following actuarial assumptions:

Inflation	3.00%
Salary Increases	4.50% (including 3.00% inflation rate)
Discount Rate	7.50%
Investment Rate of Return	7.50%

Mortality Rate: IRS Prescribed Mortality Optional Combined Table for Small Plans as of the valuation date.

The date of the most recent experience study for which significant assumptions are based upon is not available.

The Long-Term Expected Rate of Return on Pension Plan investments was determined using a building-block method in which best-estimate ranges of expected future real rates of return (expected returns, Net of Pension Plan investment expenses and inflation) are developed for each major asset class.

These ranges are combined to produce the Long-Term Expected Rate of Return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation.

Best estimates of arithmetic real rates of return for each major asset class included in the Pension Plan's target asset allocation as of December 31, 2016 are summarized in the following table:

<u>Asset Class</u>	<u>Target Allocation</u>	<u>Long Term Expected Real Rate of Return</u>
Cash	1%	N/A
Fixed Income	41%	N/A
Equity	58%	N/A
Total	100%	

#### Discount Rate:

The Discount Rate used to measure the Total Pension Liability was 7.50 percent.

The projection of cash flows used to determine the Discount Rate assumed that Plan Member contributions will be made at the current contribution rate and that Sponsor contributions will be made at rates equal to the difference between actuarially determined contribution rates and the Member rate. Based on those assumptions, the Pension Plan's Fiduciary Net Position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the Long-Term Expected Rate of Return on Pension Plan investments was applied to all periods of projected benefit payments to determine the Total Pension Liability.

For purpose of this valuation, the expected rate of return on pension plan investments is 7.50%; the municipal bond rate is 3.78% (based on the weekly rate closest to but not later than the measurement date of the Bond Buyer 20-Bond Index as published by the Bond Buyer); and the resulting single discount rate is 7.50%.

## CHANGES IN NET PENSION LIABILITY

	Increase (Decrease)		
	Total Pension Liability	Plan Fiduciary Net Position	Net Pension Liability
	(a)	(b)	(a)-(b)
Beginning Balance	\$ 6,668,277	\$ 9,358,608	\$ (2,690,331)
Changes for a Year:			
Service Cost	87,598	-	87,598
Interest	491,762	-	491,762
Differences between Expected and Actual Experience	215,824	-	215,824
Changes of assumptions	-	-	-
Changes of benefit terms	-	-	-
Net Investment Income	-	447,875	(447,875)
Benefit Payments, including Refunds of Employee Contributions	(398,094)	(398,094)	-
Administrative Expense	-	-	-
Net Changes	397,090	49,781	347,309
Balances at December 31, 2016	\$ 7,065,367	\$ 9,408,389	\$ (2,343,022)

*Sensitivity of the Net Pension Liability to changes in the Discount Rate.*

	Current Discount		
	1% Decrease	Rate	1% Increase
	6.50%	7.50%	8.50%
Sponsor's Net Pension Liability	\$ (1,640,012)	\$ (2,343,022)	\$ (2,953,351)

*Pension Plan Fiduciary Net Position.*

Detailed information about the pension Plan's Fiduciary Net Position is available in a separately issued Plan financial report.

**PENSION EXPENSE AND DEFERRED OUTFLOWS OF RESOURCES AND DEFERRED  
INFLOWS OF RESOURCES RELATED TO PENSIONS  
FOR THE YEAR DECEMBER 31, 2016**

For the year ended December 31, 2016, the Sponsor will recognize a Pension Expense of \$37,700.  
On December 31, 2016, the Sponsor 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
Differences between Expected and Actual Experience	172,660	-
Changes of assumptions	-	-
Net difference between Projected and Actual Earnings on Pension Plan investments	299,923	-
<b>Total</b>	<b>\$ 472,583</b>	<b>\$ -</b>

Amounts reported as Deferred Outflows of Resources and Deferred Inflows of Resources related to pensions will be recognized in Pension Expense as follows:

Year ended December 31:			
2017		\$	145,309
2018		\$	145,308
2019		\$	90,983
2020		\$	90,983
2021		\$	-
Thereafter		\$	-

## SCHEDULE OF CHANGES IN NET PENSION LIABILITY AND RELATED RATIOS

Last 10 Years

Measurement Date	12/31/2016	12/31/2015	12/31/2014
Total Pension Liability			
Service Cost	87,598	N/A	127,963
Interest	491,762	N/A	476,915
Changes of benefit terms	-	N/A	-
Differences between Expected and Actual Experience	215,824	N/A	-
Changes of assumptions	-	N/A	-
Benefit Payments, including Refunds of Employee Contributions	(398,094)	N/A	(335,004)
Net Change in Total Pension Liability	397,090	N/A	269,874
Total Pension Liability - Beginning	6,668,277	N/A	6,398,403
Total Pension Liability - Ending (a)	<u>\$ 7,065,367</u>	<u>N/A</u>	<u>\$ 6,668,277</u>
Plan Fiduciary Net Position			
Net Investment Income	447,875	N/A	443,767
Benefit Payments, including Refunds of Employee Contributions	(398,094)	N/A	(335,004)
Administrative Expense	-	N/A	-
Net Change in Plan Fiduciary Net Position	49,781	N/A	108,763
Plan Fiduciary Net Position - Beginning	9,358,608	N/A	9,706,016
Plan Fiduciary Net Position - Ending (b)	<u>\$ 9,408,389</u>	<u>N/A</u>	<u>\$ 9,814,779</u>
Net Pension Liability - Ending (a) - (b)	<u>\$ (2,343,022)</u>	<u>N/A</u>	<u>\$ (3,146,502)</u>
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	133.16%	N/A	147.19%
Covered Employee Payroll	N/A	N/A	\$ 5,681,391
Net Pension Liability as a percentage of Covered Employee Payroll	N/A	N/A	-55.38%

**SCHEDULE OF CONTRIBUTIONS**  
Last 10 Years

	12/31/2016	12/31/2015	12/31/2014
Actuarially Determined Contribution	-	N/A	-
Contributions in relation to the			
Actuarially Determined Contributions	-	N/A	-
Contribution Deficiency (Excess)	\$ -	N/A	\$ -
Covered Employee Payroll	N/A	N/A	\$ 5,681,391
Contributions as a percentage of Covered			
Employee Payroll	N/A	N/A	\$ -

Notes to Schedule

Valuation Date: 01/01/2015

Methods and assumptions used to determine contribution rates:

Mortality Rate: IRS Prescribed Mortality Optional Combined Table for Small Plans as of the valuation date.

Interest Rate: 7.5% per year compounded annually, net of investment related expenses.

Retirement Age: 100% retiring at age 65.

Termination Rate: 2003 Society of Actuaries Small Plan Age Table, multiplied by 0.60. See table below.

Salary Increases: N/A - frozen plan.

Disability: None.

Interest Rate for Member Contributions: 2.95%

Funding Method: Projected Unit Credit Cost Method.

Actuarial Asset Method: Market Value of Assets.

Amortization Method: Level Dollar, Open

Remaining Amortization Period: 30 Years.

Termination table:

Age	% Terminating During the Year
20	14.58%
30	9.30%
40	5.64%
50	3.36%

**COMPONENTS OF PENSION EXPENSE  
FOR THE YEAR DECEMBER 31, 2016**

	Net Pension Liability	Deferred Inflows	Deferred Outflows	Pension Expense
Prior Reporting Ending	\$ (3,146,502)	\$ -	\$ 217,298	\$ -
Prior Period Adjustment	\$ 456,171	\$ -	\$ (54,324)	\$ -
Beginning balance	<u>\$ (2,690,331)</u>	<u>\$ -</u>	<u>\$ 162,974</u>	<u>\$ -</u>
<b>Total Pension Liability Factors:</b>				
Service Cost	87,598	-	-	87,598
Interest	491,762	-	-	491,762
Changes in benefit terms	-	-	-	-
Differences between Expected and Actual Experience with regard to economic or demographic assumptions	215,824	-	215,824	-
Current year amortization of experience difference	-	-	(43,164)	43,164
Change in assumptions about future economic or demographic factors or other inputs	-	-	-	-
Current year amortization of change in assumptions	-	-	-	-
Benefit Payments	(398,094)	-	-	(398,094)
Net change	<u>397,090</u>	<u>-</u>	<u>172,660</u>	<u>224,430</u>
<b>Plan Fiduciary Net Position:</b>				
Projected Net Investment Income	686,967	-	-	(686,967)
Difference between projected and actual earnings on Pension Plan investments	(239,092)	-	239,092	-
Current year amortization	-	-	(102,143)	102,143
Benefit Payments	(398,094)	-	-	398,094
Administrative Expenses	-	-	-	-
Net change	<u>49,781</u>	<u>-</u>	<u>136,949</u>	<u>(186,730)</u>
Ending Balance	<u><u>\$ (2,343,022)</u></u>	<u><u>\$ -</u></u>	<u><u>\$ 472,583</u></u>	<u><u>\$ 37,700</u></u>



AMORTIZATION SCHEDULE - INVESTMENTS

Increase (Decrease) in Pension Expense Arising from the Recognition of the Differences Between Projected and Actual Earnings on Pension Plan Investments

Plan Year Ending	Differences Between Projected and Actual Earnings	Recognition Period (Years)	Plan Investments												
			2016	2017	2018	2019	2020	2021	2022	2023	2024	2025			
2014	\$ 271,622	5	\$ 54,324	\$ 54,325	\$ 54,325	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2015	\$ -	5	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2016	\$ 239,092	5	\$ 47,819	\$ 47,819	\$ 47,818	\$ 47,818	\$ 47,818	\$ 47,818	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Net Increase (Decrease) in Pension Expense			\$ 102,143	\$ 102,144	\$ 102,143	\$ 47,818	\$ 47,818	\$ 47,818	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

AMORTIZATION SCHEDULE - EXPERIENCE

Increase (Decrease) in Pension Expense Arising from the Recognition of the Effects of Differences between Expected and Actual Experience

Plan Year Ending	Differences Between Expected and Actual Experience	Recognition Period (Years)	Increase (Decrease) in Pension Expense Arising from the Recognition of the Effects of Differences between Expected and Actual Experience														
			2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026				
2016	\$ 215,824	5	\$ 43,164	\$ 43,165	\$ 43,165	\$ 43,165	\$ 43,165	\$ 43,165	\$ 43,165	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Net Increase (Decrease) in Pension Expense			\$ 43,164	\$ 43,165	\$ 43,165	\$ 43,165	\$ 43,165	\$ 43,165	\$ 43,165	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -



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