

DESTIN FIRE CONTROL DISTRICT  
FIREFIGHTERS' RETIREMENT TRUST FUND

ACTUARIAL VALUATION  
AS OF OCTOBER 1, 2017

CONTRIBUTIONS APPLICABLE TO THE PLAN  
FISCAL YEAR ENDED SEPTEMBER 30, 2018

November 21, 2017

Board of Trustees  
Destin Fire Control District  
Firefighters' Retirement Trust Fund  
848 Airport Road  
Destin, FL 32541

Re: Destin Fire Control District Firefighters' Retirement Trust Fund

Dear Board:

We are pleased to present to the Board this report of the annual actuarial valuation of the Destin Fire Control District Firefighters' Retirement Trust Fund. Included are the related results for GASB Statements No. 67 and No. 68. The funding 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 calculation of the liability for GASB results was performed for the purpose of satisfying the requirements of GASB Statements No. 67 and No. 68. Use of the results for other purposes may not be applicable and may produce significantly different results.

The valuations have 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, and reflects laws and regulations issued to date pursuant to the provisions of Chapters 112 and 175, Florida Statutes, 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. Future actuarial measurements may differ significantly from the current measurements presented in this report for a variety of reasons including: changes in applicable laws, changes in plan provisions, changes in assumptions, or plan experience differing from expectations.

In conducting the valuations, we have relied on personnel, plan design, and asset information supplied by the Destin Fire Control District, 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 total pension liability, net pension liability, and certain sensitivity information shown in this report are based on an actuarial valuation performed as of October 1, 2016. The total pension liability was rolled-forward from the valuation date to the plan's fiscal year ending September 30, 2017 using generally accepted actuarial principles. It is our opinion that the assumptions used for this purpose are internally consistent, reasonable, and comply with the requirements under GASB No. 67 and No. 68.

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 Destin Fire Control District, nor does anyone at Foster & Foster, Inc. act as a member of the Board of Trustees of the Firefighters' Retirement System. 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:



Drew D. Ballard, EA, MAAA  
Enrolled Actuary #17-8193

DDB/lke

Enclosures

## TABLE OF CONTENTS

Section	Title	Page
I	Introduction and Summary	
	a. Summary of Report	5
	b. Contribution Impact of Annual Changes	7
	c. Changes Since Prior Valuation	8
	d. Comparative Summary of Principal Valuation Results	9
II	Valuation Information	
	a. Reconciliation of Unfunded Actuarial Accrued Liabilities	15
	b. Detailed Actuarial (Gain)/Loss Analysis	17
	c. Actuarial Assumptions and Methods	18
	d. Valuation Notes	20
III	Trust Fund	21
IV	Member Statistics	
	a. Statistical Data	27
	b. Age and Service Distribution	28
	c. Valuation Participant Reconciliation	29
V	Summary of Plan Provisions	30
VI	Governmental Accounting Standards Board Disclosure Information	33

## SUMMARY OF REPORT

The regular annual actuarial valuation of the Destin Fire Control District Firefighters' Retirement Trust Fund, performed as of October 1, 2017, has been completed, and the results are presented in this Report. The results of this valuation are applicable to the plan/fiscal year ended September 30, 2018.

The funding requirements, compared with the amounts set forth in the October 1, 2016 actuarial valuation report, are as follows:

Valuation Date	10/1/2017	10/1/2016
Applicable Fiscal Year End	<u>9/30/2018</u>	<u>9/30/2017</u>
Total Required Contribution % of Total Annual Payroll	79.3%	86.7%
Member Contributions (Est.) % of Total Annual Payroll	6.8%	6.8%
Required District and State Cont. % of Total Annual Payroll	72.5%	79.9%
State Contributions <sup>1</sup> % of Total Annual Payroll	265,392 15.5%	265,392 15.5%
Balance from District % of Total Annual Payroll	57.0%	64.4%

<sup>1</sup> Amount shown is an estimate based on the amounts received during fiscal 2017. The District and membership have mutually agreed that the District may use all State Contributions when determining its minimum funding requirements for the duration of the current collective bargaining agreement. For budgeting purposes, the required Sponsor Contribution (District and State) is 72.5% of Pensionable Earnings for the fiscal year ending September 30, 2018. The precise District requirement for the year is this amount, less actual allowable State Contributions.

Please note that the District contributed more than what was required in 2017. The excess contribution reduced the plan's unfunded liability by \$283,912.97 and reduced the September 30, 2018 contribution requirement by 1.7% of payroll. As requested, a development of the District's excess contribution can be found on page 26.

As can be seen above, the Total Required Contribution has decreased as a percentage of payroll. The decrease is primarily due to the District's excess contribution during the year as well as Total Annual

Payroll increasing by more than expected. These decreases were offset somewhat by increases associated with net unfavorable experience realized by the plan during the year.

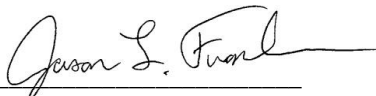
Plan experience was unfavorable overall on the basis of the plan's actuarial assumptions. The principal sources of unfavorable experience were average increases in pensionable salary that were greater than expected, unfavorable turnover experience, no inactive mortality, and a 7.03% investment return (Actuarial Asset basis) that fell short of the 7.50% assumption. There were no significant sources of favorable experience.


For informational purposes, the District's funding requirements, when expressed as a percentage of payroll including an estimate of the annual pay for the DROP Members, is approximately 9% less than the rate shown above. The District should budget based on the information on page 5.

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

By:   
Drew D. Ballard, EA, MAAA

## CHANGES SINCE PRIOR VALUATION

### Plan Changes

There have been no changes since the prior valuation.

### Actuarial Assumption/Method Changes

The following change was made in conjunction with this valuation:

- As mandated by Chapter 2015-157, Laws of Florida, the assumed rates of mortality were changed from the rates used by the Florida Retirement System actuary in the July 1, 2015 actuarial valuation to the rates used in the July 1, 2016 actuarial valuation for special risk lives.

## CONTRIBUTION IMPACT OF ANNUAL CHANGES

(1) Contribution Determined as of October 1, 2016	60.4%
(2) Summary of Contribution Impact by component:	
Change in Available State Money	4.0%
Change in Normal Cost Rate	-0.8%
Change in Administrative Expense Percentage	0.2%
Payroll Change Effect on UAAL Amortization	-6.7%
Investment Return (Actuarial Asset Basis)	0.4%
Salary Increases	1.5%
Active Decrements	0.4%
Inactive Mortality	0.2%
Sponsor Contributions More Than Required	-1.7%
Other	<u>-0.9%</u>
Total Change in Contribution	-3.4%
(3) Contribution Determined as of October 1, 2017	57.0%



## COMPARATIVE SUMMARY OF PRINCIPAL VALUATION RESULTS

	<u>10/1/2017</u>	<u>10/1/2016</u>
A. Participant Data		
Actives	28	25
Service Retirees	10	10
DROP Retirees	4	3
Beneficiaries	1	1
Disability Retirees	1	1
Terminated Vested	<u>8</u>	<u>7</u>
Total	52	47
Total Annual Payroll	\$1,709,674	\$1,507,040
Payroll Under Assumed Ret. Age	1,709,674	1,507,040
Annual Rate of Payments to:		
Service Retirees	720,019	704,831
DROP Retirees	255,881	168,669
Beneficiaries	57,749	56,617
Disability Retirees	14,297	14,297
Terminated Vested	155,026	155,124
B. Assets		
Actuarial Value (AVA) <sup>1</sup>	18,308,131	16,222,499
Market Value (MVA) <sup>1</sup>	18,376,893	15,601,817
C. Liabilities		
Present Value of Benefits		
Actives		
Retirement Benefits	11,311,015	10,798,928
Disability Benefits	53,429	45,593
Death Benefits	30,454	64,655
Vested Benefits	527,433	533,030
Refund of Contributions	26,027	12,810
Service Retirees	10,631,399	10,535,592
DROP Retirees <sup>1</sup>	4,801,104	3,308,136
Beneficiaries	411,376	437,458
Disability Retirees	176,373	177,037
Terminated Vested	<u>1,443,461</u>	<u>1,336,131</u>
Total	29,412,071	27,249,370

C. Liabilities - (Continued)	<u>10/1/2017</u>	<u>10/1/2016</u>
Present Value of Future Salaries	9,879,644	7,918,292
Present Value of Future Member Contributions	671,816	538,444
Normal Cost (Retirement)	395,765	359,796
Normal Cost (Disability)	5,693	4,684
Normal Cost (Death)	2,466	4,992
Normal Cost (Vesting)	52,203	45,987
Normal Cost (Refunds)	<u>3,192</u>	<u>2,019</u>
Total Normal Cost	459,319	417,478
Present Value of Future Normal Costs	2,307,119	2,040,995
Accrued Liability (Retirement)	9,334,722	9,058,662
Accrued Liability (Disability)	19,016	19,862
Accrued Liability (Death)	17,454	40,511
Accrued Liability (Vesting)	268,291	293,585
Accrued Liability (Refunds)	1,756	1,401
Accrued Liability (Inactives) <sup>1</sup>	<u>17,463,713</u>	<u>15,794,354</u>
Total Actuarial Accrued Liability (EAN AL)	27,104,952	25,208,375
Unfunded Actuarial Accrued Liability (UAAL)	8,796,821	8,985,876
Funded Ratio (AVA / EAN AL)	67.5%	64.4%

D. Actuarial Present Value of

Accrued Benefits

10/1/2017

10/1/2016

Vested Accrued Benefits

Inactives <sup>1</sup>

17,463,713

15,794,354

Actives

5,815,951

5,976,061

Member Contributions

1,116,110

1,095,111

Total

24,395,774

22,865,526

Non-vested Accrued Benefits

1,327,562

1,177,123

Total Present Value

Accrued Benefits (PVAB)

25,723,336

24,042,649

Funded Ratio (MVA / PVAB)

71.4%

64.9%

Increase (Decrease) in Present Value of  
Accrued Benefits Attributable to:

Plan Amendments

0

Assumption Changes

0

New Accrued Benefits

682,324

Benefits Paid

(775,745)

Interest

1,774,108

Other

0

Total

1,680,687

Valuation Date	10/1/2017	10/1/2016
Applicable to Fiscal Year Ending	<u>9/30/2018</u>	<u>9/30/2017</u>

#### E. Pension Cost

Normal Cost (with interest)		
% of Total Annual Payroll <sup>2</sup>	27.9	28.7
Administrative Expenses (with interest)		
% of Total Annual Payroll <sup>2</sup>	1.9	1.7
Payment Required to Amortize Unfunded Actuarial Accrued Liability over 25 years (as of 10/1/2017, with interest)		
% of Total Annual Payroll <sup>2</sup>	49.5	56.3
Total Required Contribution		
% of Total Annual Payroll <sup>2</sup>	79.3	86.7
Expected Member Contributions		
% of Total Annual Payroll <sup>2</sup>	6.8	6.8
Expected District and State Contribution		
% of Total Annual Payroll <sup>2</sup>	72.5	79.9

#### F. Past Contributions

Plan Years Ending:	<u>9/30/2017</u>
Total Required Contribution	1,436,031
District and State Requirement	1,323,401
Actual Contributions Made:	
Members (excluding buyback)	112,630
District	1,315,961
State	<u>291,353</u>
Total	1,719,944

G. Net Actuarial (Gain)/Loss	434,905
------------------------------	---------

<sup>1</sup> The asset values and liabilities include accumulated DROP Plan Balances as of 9/30/2017 and 9/30/2016.

<sup>2</sup> Contributions developed as of 10/1/2017 are expressed as a percentage of total annual payroll at 10/1/2017 of \$1,709,674.

H. Schedule Illustrating the Amortization of the Total Unfunded Actuarial Accrued Liability as of:

<u>Year</u>	<u>Projected Unfunded Actuarial Accrued Liability</u>
2017	8,796,821
2018	8,579,680
2019	8,346,254
2025	6,528,479
2031	3,723,108
2036	575,980
2042	0

I. (i) 3 Year Comparison of Actual and Assumed Salary Increases

		<u>Actual</u>	<u>Assumed</u>
Year Ended	9/30/2017	5.30%	4.61%
Year Ended	9/30/2016	-1.94%	4.63%
Year Ended	9/30/2015	0.70%	7.50%

(ii) 3 Year Comparison of Investment Return on Actuarial Value

		<u>Actual</u>	<u>Assumed</u>
Year Ended	9/30/2017	7.03%	7.50%
Year Ended	9/30/2016	7.75%	8.00%
Year Ended	9/30/2015	6.87%	8.00%

(iii) Average Annual Payroll Growth

(a) Payroll as of:	10/1/2017	\$1,709,674
	10/1/2007	2,019,855
(b) Total Increase		-15.36%
(c) Number of Years		10.00
(d) Average Annual Rate		-1.65%

## 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 meet the requirements and intent of Part VII, Chapter 112, Florida Statutes. 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.



Drew D. Ballard, EA, MAAA  
Enrolled Actuary #17-8193

Please let us know when the report is approved by the Board and unless otherwise directed we will provide copies of the report to the following offices to comply with Chapter 112 Florida Statutes:

Mr. Keith Brinkman  
Bureau of Local  
Retirement Systems  
Post Office Box 9000  
Tallahassee, FL 32315-9000

Ms. Sarah Carr  
Municipal Police and Fire  
Pension Trust Funds  
Division of Retirement  
Post Office Box 3010  
Tallahassee, FL 32315-3010

## RECONCILIATION OF UNFUNDED ACTUARIAL ACCRUED LIABILITIES

(1)	Unfunded Actuarial Accrued Liability as of October 1, 2016	\$8,985,876
(2)	Sponsor Normal Cost developed as of October 1, 2016	314,999
(3)	Expected administrative expenses for the year ended September 30, 2017	25,310
(4)	Expected interest on (1), (2) and (3)	698,515
(5)	Sponsor contributions to the System during the year ended September 30, 2017	1,607,314
(6)	Expected interest on (5)	55,470
(7)	Expected Unfunded Actuarial Accrued Liability as of September 30, 2017 (1)+(2)+(3)+(4)-(5)-(6)	8,361,916
(8)	Change to UAAL due to Assumption Change	0
(9)	Change to UAAL due to Actuarial (Gain)/Loss	434,905
(10)	Unfunded Actuarial Accrued Liability as of October 1, 2017	8,796,821

Type of <u>Base</u>	Date <u>Established</u>	Years <u>Remaining</u>	10/1/2017 <u>Amount</u>	Amortization <u>Amount</u>
Benefit Improv.	10/1/2002	15	463,257	48,820
Benefit Improv.	10/1/2005	18	869,914	83,373
Actuarial Loss	10/1/2006	19	955,957	89,292
Method Change	10/1/2006	19	496,655	46,390
Actuarial Loss	10/1/2007	20	191,858	17,507
Benefit Improv.	10/1/2007	20	1,723,882	157,302
Benefit Improv.	10/1/2007	20	2,796,897	255,213
Actuarial Loss	10/1/2008	20	2,279,080	207,963
Method Change	10/1/2008	20	(138,522)	(12,640)
Actuarial Gain	10/1/2009	20	(822,780)	(75,077)
Assump Change	10/1/2009	20	288,123	26,291
Actuarial Loss	10/1/2010	20	472,325	43,099
Method Change	10/1/2010	20	(30,686)	(2,800)
Actuarial Gain	10/1/2011	20	(192,627)	(17,577)
Actuarial Gain	10/1/2012	20	(125,354)	(11,438)
Benefit Improv.	10/1/2012	20	612,854	55,922
Actuarial Gain	10/1/2013	21	(348,221)	(31,106)
Actuarial Gain	10/1/2014	22	(1,698,847)	(148,846)
Actuarial Gain	10/1/2015	23	(250,278)	(21,544)

Type of <u>Base</u>	Date <u>Established</u>	Years <u>Remaining</u>	10/1/2017 <u>Amount</u>	Amortization <u>Amount</u>
Assump Change	10/1/2015	23	(24,136)	(2,078)
Assump Change	10/1/2016	24	1,652,603	139,972
Actuarial Gain	10/1/2016	24	(810,038)	(68,608)
Actuarial Loss	10/1/2017	25	<u>434,905</u>	<u>36,294</u>
			8,796,821	815,724



## DETAILED ACTUARIAL (GAIN)/LOSS ANALYSIS

(1) Unfunded Actuarial Accrued Liability (UAAL) as of October 1, 2016	\$8,985,876
(2) Expected UAAL as of October 1, 2017	8,361,916
(3) Summary of Actuarial (Gain)/Loss, by component:	
Investment Return (Actuarial Asset Basis)	78,949
Salary Increases	290,455
Active Decrements	81,025
Inactive Mortality	48,941
Other	<u>(64,465)</u>
Increase in UAAL due to (Gain)/Loss	434,905
Assumption Changes	<u>0</u>
(4) Actual UAAL as of October 1, 2017	\$8,796,821

## ACTUARIAL ASSUMPTIONS AND METHODS

### Mortality Rate

#### *Healthy Lives (Inactive):*

**Female:** RP2000 Generational, 100% Annuitant White Collar, Scale BB.

**Male:** RP2000 Generational, 10% Annuitant White Collar / 90% Annuitant Blue Collar, Scale BB.

#### *Healthy Lives (Active):*

**Female:** RP2000 Generational, 100% Combined Healthy White Collar, Scale BB.

**Male:** RP2000 Generational, 10% Combined Healthy White Collar / 90% Combined Healthy Blue Collar, Scale BB.

#### *Disabled Lives:*

**Female:** 60% RP2000 Disabled Female set forward two years / 40% Annuitant White Collar with no setback, no projection scale.

**Male:** 60% RP2000 Disabled Male setback four years / 40% Annuitant White Collar with no setback, no projection scale.

The above assumption rates were mandated by Chapter 2015-157, Laws of Florida. This law mandates the use of the assumption used in either of the two most recent valuations of the Florida Retirement System (FRS). The above rates are those outlined in Milliman's July 1, 2016 FRS valuation report. Prior assumption was the July 1, 2015 FRS special risk mortality rates. We feel this assumption sufficiently accommodates future mortality improvements.

### Interest Rate

7.5% per year compounded annually, net of investment related expenses. This assumption is supported by the Plan's target asset allocation and expected long-term rate of return by asset class.

### Retirement Age

Earlier of: 1) Age 55 and 10 years of Credited Service or 2) 20 Years of Credited Service regardless of age (Age 52 with 25 years of Credited Service for Members hired on or after October 1, 2012). Also, any member who has reached Normal Retirement is assumed to continue employment for one additional year. This assumption is reasonable based on plan provisions.

### Early Retirement

Commencing with the earliest Early Retirement Age (50), members are assumed to retire with an immediate

subsidized benefit at the rate of 5% per year. This assumption is reasonable based on plan provisions.

Disability Rate

See table below (1201). It is assumed that 75% of disablements are service related. This assumption is based on assumptions used for other plans containing municipal firefighters.

Termination Rate

See table below (1302). This assumption is based on assumptions used for other plans containing municipal firefighters.

Salary Increases

Credited Service	Salary Increase
0	10.0%
1	9.0%
2	8.0%
3	7.5%
4	7.0%
5	6.5%
6	6.0%
7	5.5%
8	5.0%
9	4.5%
10+	4.0%

This assumption is based on the results of an experience study dated August 28, 2015.

Administrative Expenses

\$32,011, based on administrative expenses incurred during the prior fiscal year.

Payroll Increase

None.

Funding Method

Entry Age Normal Actuarial Cost Method

Actuarial Asset Method

All assets are valued at market value with an adjustment made to uniformly spread actuarial investment gains and losses (as measured by actual market value investment return against expected market value investment return) over a five-year period.

	<u>% Becoming Disabled During the Year</u>	<u>% Terminating During the Year</u>
20	0.03%	6.0%
30	0.04%	5.0%
40	0.07%	2.6%
50	0.18%	0.8%

## 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, Disability Retirees and Vested Terminations.

Normal (Current Year's) Cost is determined for each participant as the present value of future benefits, determined as of the member's entry age, amortized as a level percentage of compensation over the anticipated number of years of participation, determined as of the entry age.

Individual Entry Age Normal Actuarial Cost Method (Level Percent of Compensation) is the method used to determine required contributions under the Plan. The use of this method involves the systematic funding of the Normal Cost (described above) and the Unfunded Accrued (Past Service) Liability. The actuarial accrued liability for active participants is the difference between the present value of future benefits and the present value of future Normal Costs. The actuarial accrued liability for inactive participants is the present value of future benefits.

Unfunded Actuarial Accrued Liability (UAAL) is the difference between the actuarial accrued liability (described above) and the actuarial value of assets. Under the Entry Age Normal Actuarial Cost Method, an actuarial gain or loss, based on actual versus expected UAAL, is determined in conjunction with each valuation of the plan.

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.

STATEMENT OF FIDUCIARY NET POSITION  
SEPTEMBER 30, 2017

<u>ASSETS</u>	COST VALUE	MARKET VALUE
Cash and Cash Equivalents:		
Short Term Investments	234,845.11	234,845.11
Total Cash and Equivalents	234,845.11	234,845.11
Receivables:		
Investment Income	11,781.24	11,781.24
Total Receivable	11,781.24	11,781.24
Investments:		
Mutual Funds:		
Fixed Income	5,261,599.77	5,318,923.25
Equity	10,000,438.33	11,299,649.13
Pooled/Common/Commingled Funds:		
Real Estate	1,496,898.59	1,519,270.09
Total Investments	16,758,936.69	18,137,842.47
Total Assets	17,005,563.04	18,384,468.82
<u>LIABILITIES</u>		
Payables:		
Investment Expenses	7,278.01	7,278.01
Administrative Expenses	297.50	297.50
Total Liabilities	7,575.51	7,575.51
NET POSITION RESTRICTED FOR PENSIONS	16,997,987.53	18,376,893.31

STATEMENT OF CHANGES IN FIDUCIARY NET POSITION  
FOR THE YEAR ENDED SEPTEMBER 30, 2017  
Market Value Basis

ADDITIONS

Contributions:

Member	112,629.85
District	1,315,961.01
State	291,352.69

Total Contributions	1,719,943.55
---------------------	--------------

Investment Income:

Net Realized Gain (Loss)	27,768.35	
Unrealized Gain (Loss)	1,393,295.38	
Net Increase in Fair Value of Investments		1,421,063.73
Interest & Dividends		485,591.65
Less Investment Expense <sup>1</sup>		(43,767.40)

Net Investment Income	1,862,887.98
-----------------------	--------------

Total Additions	3,582,831.53
-----------------	--------------

DEDUCTIONS

Distributions to Members:

Benefit Payments	775,744.53
Lump Sum DROP Distributions	0.00
Refunds of Member Contributions	0.00

Total Distributions	775,744.53
---------------------	------------

Administrative Expense	32,010.71
------------------------	-----------

Total Deductions	807,755.24
------------------	------------

Net Increase in Net Position	2,775,076.29
------------------------------	--------------

NET POSITION RESTRICTED FOR PENSIONS

Beginning of the Year	15,601,817.02
-----------------------	---------------

End of the Year	18,376,893.31
-----------------	---------------

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

ACTUARIAL ASSET VALUATION  
September 30, 2017

Actuarial Assets for funding purposes are developed by recognizing the total actuarial investment gain or loss for each Plan Year over a five year period. In the first year, 20% of the gain or loss is recognized. In the second year 40%, in the third year 60%, in the fourth year 80%, and in the fifth year 100% of the gain or loss is recognized. The actuarial investment gain or loss is defined as the actual return on investments minus the actuarial assumed investment return. Actuarial Assets shall not be less than 80% nor greater than 120% of Market Value of Assets.

Plan Year Ending	Gain/(Loss)	<u>Gains/Losses Not Yet Recognized</u>				
		Amounts Not Yet Recognized by Valuation Year				
		2017	2018	2019	2020	2021
09/30/2013	243,204	0	0	0	0	0
09/30/2014	519,012	103,804	0	0	0	0
09/30/2015	(1,940,329)	(776,132)	(388,065)	0	0	0
09/30/2016	359,088	215,453	143,635	71,816	0	0
09/30/2017	657,046	525,637	394,228	262,818	131,410	0
Total		68,762	149,798	334,634	131,410	0

<u>Development of Investment Gain/Loss</u>	
Market Value of Assets, including Prepaid Contributions, 09/30/2016	15,641,779
Contributions Less Benefit Payments & Admin Expenses	872,226
Expected Investment Earnings	1,205,842
Actual Net Investment Earnings	1,862,888
2017 Actuarial Investment Gain/(Loss)	<u>657,046</u>

\*Expected Investment Earnings =  $0.075 * (15,641,779 + 0.5 * 872,226)$

<u>Development of Actuarial Value of Assets</u>	
(1) Market Value of Assets, 09/30/2017	18,376,893
(2) Gains/(Losses) Not Yet Recognized	<u>68,762</u>
(3) Actuarial Value of Assets, 09/30/2017, (1) - (2)	18,308,131
(A) 09/30/2016 Actuarial Assets, including Prepaid Contributions:	16,262,461
(I) Net Investment Income:	
1. Interest and Dividends	485,592
2. Realized Gains (Losses)	27,768
3. Change in Actuarial Value	703,851
4. Investment Expenses	<u>(43,767)</u>
Total	1,173,444
(B) 09/30/2017 Actuarial Assets:	18,308,131
Actuarial Assets Rate of Return = $2I/(A+B-I)$ :	7.03%
Market Value of Assets Rate of Return:	11.67%
Actuarial Gain/(Loss) due to Investment Return (Actuarial Asset Basis)	(78,949)
10/01/2017 Limited Actuarial Assets:	18,308,131

CHANGES IN NET ASSETS AVAILABLE FOR BENEFITS  
SEPTEMBER 30, 2017  
Actuarial Asset Basis

REVENUES

Contributions:		
Member	112,629.85	
District	1,315,961.01	
State	291,352.69	
Total Contributions		1,719,943.55
Earnings from Investments:		
Interest & Dividends	485,591.65	
Net Realized Gain (Loss)	27,768.35	
Change in Actuarial Value	703,851.38	
Total Earnings and Investment Gains		1,217,211.38

EXPENDITURES

Distributions to Members:		
Benefit Payments	775,744.53	
Lump Sum DROP Distributions	0.00	
Refunds of Member Contributions	0.00	
Total Distributions		775,744.53
Expenses:		
Investment related <sup>1</sup>	43,767.40	
Administrative	32,010.71	
Total Expenses		75,778.11
Change in Net Assets for the Year		2,085,632.29
Net Assets Beginning of the Year		16,222,499.02
Net Assets End of the Year <sup>2</sup>		18,308,131.31

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

<sup>2</sup>Net Assets may be limited for actuarial consideration.



DEFERRED RETIREMENT OPTION PLAN ACTIVITY  
October 1, 2016 to September 30, 2017

Beginning of the Year Balance	537,064.37
Plus Additions	168,669.12
Investment Return Earned	40,790.56
Less Distributions	0.00
End of the Year Balance	746,524.05

RECONCILIATION OF DISTRICT'S EXCESS CONTRIBUTION  
FOR THE FISCAL YEAR ENDED (FYE) SEPTEMBER 30, 2017

(1) Total Required Contribution Rate	86.70%
(2) Pensionable Payroll Derived from Member Contributions	\$1,656,321.32
(3) Total Required Contribution (1) x (2)	1,436,030.58
(4) Less Actual Member Contributions	(112,629.85)
(5) Less Allowable State Contribution	<u>(291,352.69)</u>
(6) Equals Required District Contribution for Fiscal 2017	1,032,048.04
(7) Less 2016 Prepaid Contribution	(39,961.90)
(8) Less Actual District Contributions	<u>(1,275,999.11)</u>
(9) Equals District's Shortfall/(Excess) Contribution <sup>1</sup> as of September 30, 2017	(\$283,912.97)

<sup>1</sup> Please note that the District elected to apply the entire contribution towards the September 30, 2017 contribution requirement. As requested, this exhibit develops the amount of the excess contribution. The excess contribution reduces the unfunded liability and does not generate a prepaid contribution to be used in the future.

# STATISTICAL DATA <sup>1</sup>

	<u>10/1/2014</u>	<u>10/1/2015</u>	<u>10/1/2016</u>	<u>10/1/2017</u>
<u>Actives - Hired Before 10/1/12</u>				
Number	24	23	21	20
Average Current Age	39.8	40.8	41.9	42.5
Average Age at Employment	26.5	26.8	26.8	27.0
Average Past Service	13.3	14.0	15.1	15.5
Average Annual Salary	\$66,609	\$64,902	\$63,454	\$67,579
<u>Actives - Hired On/After 10/1/12</u>				
Number	2	2	4	8
Average Current Age	31.8	32.8	31.8	30.2
Average Age at Employment	31.7	31.7	30.4	28.9
Average Past Service	0.1	1.1	1.4	1.3
Average Annual Salary	\$42,075	\$43,227	\$43,626	\$44,762
<u>Service Retirees</u>				
Number	7	9	10	10
Average Current Age	N/A	55.3	56.8	57.8
Average Annual Benefit	\$79,930	\$71,101	\$70,483	\$72,002
<u>DROP Retirees</u>				
Number	3	4	3	4
Average Current Age	N/A	49.4	46.8	48.7
Average Annual Benefit	\$54,355	\$53,866	\$56,223	\$63,970
<u>Beneficiaries</u>				
Number	0	0	1	1
Average Current Age	N/A	N/A	52.4	53.4
Average Annual Benefit	N/A	N/A	\$56,617	\$57,749
<u>Disability Retirees</u>				
Number	1	1	1	1
Average Current Age	N/A	51.9	52.9	53.9
Average Annual Benefit	\$14,297	\$14,297	\$14,297	\$14,297
<u>Terminated Vested</u>				
Number	8	6	7	8
Average Current Age	N/A	37.7	38.1	39.1
Average Annual Benefit <sup>2</sup>	\$26,252	\$23,820	\$22,161	\$22,147

<sup>1</sup> Prior to 10/1/2015, averages were salary weighted.

<sup>2</sup> The Average Annual Benefit excludes participants awaiting a refund of contributions.

## 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	2	0	0	1	0	0	0	0	0	0	0	3
25 - 29	1	0	0	0	0	1	0	0	0	0	0	2
30 - 34	1	1	0	0	0	0	0	0	0	0	0	2
35 - 39	0	0	0	0	0	1	1	3	0	0	0	5
40 - 44	1	0	0	0	0	0	2	5	0	0	0	8
45 - 49	0	0	0	1	0	0	0	3	1	0	0	5
50 - 54	0	0	0	0	0	0	2	0	0	0	0	2
55 - 59	0	0	0	0	0	0	0	0	1	0	0	1
60 - 64	0	0	0	0	0	0	0	0	0	0	0	0
65+	0	0	0	0	0	0	0	0	0	0	0	0
Total	5	1	0	2	0	2	5	11	2	0	0	28

## VALUATION PARTICIPANT RECONCILIATION

### 1. Active lives

a. Number in prior valuation 10/1/2016	25
b. Terminations	
i. Vested (partial or full) with deferred benefits	(1)
ii. Non-vested or full lump sum distribution received	0
c. Deaths	
i. Beneficiary receiving benefits	0
ii. No future benefits payable	0
d. Disabled	0
e. Retired	0
f. DROP	<u>(1)</u>
g. Continuing participants	23
h. New entrants	<u>5</u>
i. Total active life participants in valuation	28

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

	Service Retirees, Vested Receiving <u>Benefits</u>	DROP <u>Benefits</u>	Receiving Death <u>Benefits</u>	Receiving Disability <u>Benefits</u>	Vested Deferred	<u>Total</u>
a. Number prior valuation	10	3	1	1	7	22
Retired	0	0	0	0	0	0
DROP	0	1	0	0	0	1
Vested Deferred	0	0	0	0	1	1
Death, With Survivor	0	0	0	0	0	0
Death, No Survivor	0	0	0	0	0	0
Disabled	0	0	0	0	0	0
Refund of Contributions	0	0	0	0	0	0
Rehires	0	0	0	0	0	0
Expired Annuities	0	0	0	0	0	0
Data Corrections	0	0	0	0	0	0
b. Number current valuation	10	4	1	1	8	24

SUMMARY OF PLAN PROVISIONS  
(Through Resolution No. 16-09)

<u>Eligibility</u>	Full-time employees who are classified as full-time certified firefighters participate in the System as a condition of employment.
<u>Credited Service</u>	Total years and fractional parts of years of employment with the District as a Firefighter.
<u>Salary</u>	Base pay, plus state supplemental education pay, plus EMT and Paramedic educational differential pay.
<u>Average Final Compensation</u>	Average Salary for the best 5 years during the 10 years immediately preceding retirement or termination.
<u>Member Contributions</u>	6.8% of Salary.
<u>District and State Contributions</u>	Remaining amount required in order to pay current costs and amortize any unfunded past service cost as provided in Part VII of Chapter 112, F.S.
<u>Normal Retirement</u>	
Date	Earlier of: 1) Age 55 and 10 years of Credited Service or 2) 20 Years of Credited Service regardless of age.  Members hired on or after October 1, 2012 become eligible following the earlier of 1) Age 55 with 10 years of Credited Service or 2) Age 52 with 25 years of Credited Service.
Benefit	3.5% of Average Final Compensation <u>times</u> Credited Service (2.5% if hired on or after October 1, 2012)
Form of Benefit	Ten Year Certain and Life Annuity (options available).
<u>Early Retirement</u>	
Eligibility	Age 50 and 10 Years of Credited Service.
Benefit	Accrued benefit, reduced 3% for each year prior to Normal Retirement.

### Cost-of-Living Adjustment

Service retirees on and after 10/1/02 (hired before 10/1/12) receive annual 2% increases beginning the October 1 following one full year of retirement. Members hired on and after 10/1/12 are not eligible for the cost-of-living adjustment.

### Vesting

#### Schedule

100% after 7 years of contributing service if hired before 10/1/12. Members hired on and after 10/1/12 are 100% vested after 10 years.

#### Benefit Amount

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

### Disability

#### Eligibility

##### Service Incurred

Covered from Date of Employment.

##### Non-Service Incurred

10 years of Credited Service.

#### Exclusions

Disability resulting from use of drugs, illegal participation in riots, service in military, etc.

#### Benefit

Benefit accrued to date of disability but not less than 42% of Average Final Compensation (if Service Incurred).

#### Duration

Payable for life and ten years certain or until recovery (as determined by the Board). Options available.

### Death Benefits

#### Pre-Retirement

##### Vested

Monthly accrued benefit payable to designated beneficiary for 10 years.

##### Non-Vested

Refund of accumulated contributions without interest.

#### Post-Retirement

Benefits payable to beneficiary in accordance with option selected at retirement.

### Board of Trustees

Two District appointees, two Members of the Department elected by the membership, and a fifth Member elected by other 4 and appointed by the District.

### Deferred Retirement Option Plan

Eligibility	Satisfaction of Normal Retirement requirements.
Participation	Not to exceed 60 months.
Rate of Return	At Member's election:  (1) Actual net rate of investment return (total return net of brokerage commissions, management fees and transaction costs) credited each fiscal quarter, or  (2) 6.5% per annum compounded monthly.  Members may elect to change form of return one time.
Form of Distribution	Cash lump sum (options available) at termination of employment.

### Share Plan

Funded Status	Not currently funded.
---------------	-----------------------



STATEMENT OF FIDUCIARY NET POSITION  
SEPTEMBER 30, 2017

<u>ASSETS</u>	MARKET VALUE
Cash and Cash Equivalents:	
Short Term Investments	234,845
Total Cash and Equivalents	234,845
Receivables:	
Investment Income	11,781
Total Receivable	11,781
Investments:	
Mutual Funds:	
Fixed Income	5,318,923
Equity	11,299,649
Pooled/Common/Commingled Funds:	
Real Estate	1,519,270
Total Investments	18,137,842
Total Assets	18,384,468
<u>LIABILITIES</u>	
Payables:	
Investment Expenses	7,278
Administrative Expenses	297
Total Liabilities	7,575
NET POSITION RESTRICTED FOR PENSIONS	18,376,893

STATEMENT OF CHANGES IN FIDUCIARY NET POSITION  
FOR THE YEAR ENDED SEPTEMBER 30, 2017  
Market Value Basis

ADDITIONS

## Contributions:

Member	112,630
District	1,275,999
State	291,353

Total Contributions	1,679,982
---------------------	-----------

## Investment Income:

Net Increase in Fair Value of Investments	1,421,064
Interest & Dividends	485,591
Less Investment Expense <sup>1</sup>	(43,767)

Net Investment Income	1,862,888
-----------------------	-----------

Total Additions	3,542,870
-----------------	-----------

DEDUCTIONS

## Distributions to Members:

Benefit Payments	775,745
Lump Sum DROP Distributions	0
Refunds of Member Contributions	0

Total Distributions	775,745
---------------------	---------

Administrative Expense	32,011
------------------------	--------

Total Deductions	807,756
------------------	---------

Net Increase in Net Position	2,735,114
------------------------------	-----------

## NET POSITION RESTRICTED FOR PENSIONS

Beginning of the Year	15,641,779
-----------------------	------------

End of the Year	18,376,893
-----------------	------------

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

## NOTES TO THE FINANCIAL STATEMENTS

(For the Year Ended September 30, 2017)

### Plan Description

#### *Plan Administration*

The Plan is a single-employer defined benefit pension plan administered by the Plan's Board of Trustees comprised of: Two District appointees, two Members of the Department elected by the membership, and a fifth Member elected by other four and appointed by the District.

#### *Plan Membership as of October 1, 2016:*

Inactive Plan Members or Beneficiaries Currently Receiving Benefits	15
Inactive Plan Members Entitled to But Not Yet Receiving Benefits	7
Active Plan Members	25
	<hr style="border-top: 1px solid black;"/>
	47
	<hr style="border-top: 1px solid black;"/>

#### *Benefits Provided*

The Plan provides retirement, termination, disability and death benefits.

##### Normal Retirement:

Date: Earlier of: 1) Age 55 and 10 years of Credited Service or 2) 20 Years of Credited Service regardless of age.

Benefit: 3.5% of Average Final Compensation times Credited Service (2.5% if hired on or after October 1, 2012).

##### Early Retirement:

Eligibility: Age 50 and 10 Years of Credited Service.

Benefit: Accrued benefit, reduced 3% for each year prior to Normal Retirement.

##### Cost-of-Living Adjustment:

Service retirees on and after 10/1/02 (hired before 10/1/12) receive annual 2% increases beginning the October 1 following one full year of retirement. Members hired on and after 10/1/12 are not eligible for the cost-of-living adjustment.

##### Vesting (Termination):

Schedule: 100% after 7 years of contributing service if hired before 10/1/12, Members hired on and after 10/1/12 are 100% vested after 10 years.

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

##### Disability:

Eligibility: Service Incurred: Covered from Date of Employment.

Non-Service Incurred: 10 years of Credited Service.

Benefit: Benefit accrued to date of disability but not less than 42% of Average Final Compensation (if Service Incurred).

##### Pre-Retirement Death Benefits:

Vested: Monthly accrued benefit payable to designated beneficiary for 10 years.

Non-Vested: Refund of accumulated contributions without interest.

#### *Contributions*

Member Contributions: 6.8% of Salary.

District and State Contributions: Remaining amount required in order to pay current costs and amortize unfunded past service cost, if any, as provided in Chapter 112, Florida Statutes.

## Investments

*Investment Policy:*

The following was the Board's adopted asset allocation policy as of September 30, 2017:

<u>Asset Class</u>	<u>Target Allocation</u>
Domestic Equity	50%
International Equity	10%
Broad Market Fixed Income	25%
Global Fixed Income	5%
Real Estate	10%
<u>Total</u>	<u>100%</u>

*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 September 30, 2017, the annual money-weighted rate of return on Pension Plan investments, net of Pension Plan investment expense, was 11.67 percent.

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

Deferred Retirement Option Program

Eligibility: Satisfaction of Normal Retirement requirements.

Participation: Not to exceed 60 months.

Rate of Return: At Member's election:

(1) Actual net rate of investment return (total return net of brokerage commissions, management fees and transaction costs) credited each fiscal quarter, or

(2) 6.5% per annum compounded monthly.

Members may elect to change form of return one time.

The DROP balance as September 30, 2017 is \$746,524.

## NET PENSION LIABILITY OF THE SPONSOR

The components of the Net Pension Liability of the Sponsor on September 30, 2017 were as follows:

Total Pension Liability	\$ 26,714,062
Plan Fiduciary Net Position	<u>\$ (18,376,893)</u>
Sponsor's Net Pension Liability	<u>\$ 8,337,169</u>
Plan Fiduciary Net Position as a percentage of Total Pension Liability	68.79%

*Actuarial Assumptions:*

The Total Pension Liability was determined by an actuarial valuation as of October 1, 2016 updated to September 30, 2017 using the following actuarial assumptions:

Inflation	2.50%
Salary Increases	Service based
Discount Rate	7.50%
Investment Rate of Return	7.50%

*Mortality Rate Healthy Lives:*

Female: RP2000 Generational, 100% Annuitant White Collar, Scale BB.

Male: RP2000 Generational, 10% Annuitant White Collar /90% Annuitant Blue Collar, Scale BB.

*Mortality Rate Disabled Lives:*

Female: 60% RP2000 Disabled Female set forward two years / 40% Annuitant White Collar with no setback, no projection scale.

Male: 60% RP2000 Disabled Male setback four years / 40% Annuitant White Collar with no setback, no projection scale.

The most recent actuarial experience study used to review the other significant assumptions was dated August 28, 2015.

The Long-Term Expected Rate of Return on Pension Plan investments can be 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.

For 2017 the inflation rate assumption of the investment advisor was 2.50%.

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 geometric real rates of return for each major asset class included in the Pension Plan's target asset allocation as of September 30, 2017 are summarized in the following table:

Asset Class	Long Term Expected Real Rate of Return
Domestic Equity	7.5%
International Equity	8.5%
Broad Market Fixed Income	2.5%
Global Fixed Income	3.5%
Real Estate	4.5%

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.

	1% Decrease	Current	1% Increase
	6.50%	Discount Rate	8.50%
	7.50%		
Sponsor's Net Pension Liability	\$ 11,853,648	\$ 8,337,169	\$ 5,475,193

# SCHEDULE OF CHANGES IN NET PENSION LIABILITY AND RELATED RATIOS

## Last 10 Fiscal Years

	09/30/2017	09/30/2016	09/30/2015
Total Pension Liability			
Service Cost	430,846	412,422	540,120
Interest	1,948,687	1,854,384	1,893,391
Changes of benefit terms	-	-	-
Differences between Expected and Actual Experience	(829,240)	(240,493)	(1,748,273)
Changes of assumptions	-	1,634,737	(256,184)
Benefit Payments, including Refunds of Employee Contributions	(775,745)	(977,835)	(600,036)
Net Change in Total Pension Liability	774,548	2,683,215	(170,982)
Total Pension Liability - Beginning	25,939,514	23,256,299	23,427,281
Total Pension Liability - Ending (a)	<u>\$ 26,714,062</u>	<u>\$ 25,939,514</u>	<u>\$ 23,256,299</u>
Plan Fiduciary Net Position			
Contributions - Employer	1,275,999	836,684	687,531
Contributions - State	291,353	293,567	371,910
Contributions - Employee	112,630	107,918	104,560
Net Investment Income	1,862,888	1,482,436	(784,838)
Benefit Payments, including Refunds of Employee Contributions	(775,745)	(977,835)	(600,036)
Administrative Expense	(32,011)	(25,310)	(32,924)
Net Change in Plan Fiduciary Net Position	2,735,114	1,717,460	(253,797)
Plan Fiduciary Net Position - Beginning	15,641,779	13,924,319	14,178,116
Plan Fiduciary Net Position - Ending (b)	<u>\$ 18,376,893</u>	<u>\$ 15,641,779</u>	<u>\$ 13,924,319</u>
Net Pension Liability - Ending (a) - (b)	<u>\$ 8,337,169</u>	<u>\$ 10,297,735</u>	<u>\$ 9,331,980</u>
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	68.79%	60.30%	59.87%
Covered Employee Payroll	\$ 1,656,321	\$ 1,587,030	\$ 1,537,650
Net Pension Liability as a percentage of Covered Employee Payroll	503.35%	648.87%	606.90%

**Notes to Schedule:***Changes of assumptions:*

For measurement date 09/30/2016, amounts reported as changes of assumptions resulted from the following changes:

- The investment return assumption was reduced from 8.00% to 7.50%.
- As mandated by Chapter 2015-157, Laws of Florida, the assumed rates of mortality were changed from the RP-2000 Combined Healthy Tables to the mortality tables used by the Florida Retirement System for special risk employees.

For measurement date 09/30/2015, amounts reported as changes of assumptions were in conjunction with the August 28, 2015 experience study, the Board adopted the following assumption changes:

- Salary Increases change from 7.5% per year to a table based on service that grades down from 10% to 4%.
- Mortality Rates change from the RP 2000 table with no-projection for healthy lives to the RP-2000 table projected with scale BB through 2015 (disabled lives are set forward 5 years).

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

	09/30/2014	09/30/2013
Total Pension Liability		
Service Cost	702,391	650,362
Interest	1,756,834	1,616,439
Changes of benefit terms	-	-
Differences between Expected and Actual Experience	-	-
Changes of assumptions	-	-
Benefit Payments, including Refunds of Employee Contributions	(579,955)	(547,818)
Net Change in Total Pension Liability	1,879,270	1,718,983
Total Pension Liability - Beginning	21,548,011	19,829,028
Total Pension Liability - Ending (a)	<u>\$ 23,427,281</u>	<u>\$ 21,548,011</u>
Plan Fiduciary Net Position		
Contributions - Employer	697,413	882,319
Contributions - State	326,318	342,803
Contributions - Employee	126,109	141,681
Net Investment Income	1,510,241	1,092,797
Benefit Payments, including Refunds of Employee Contributions	(579,955)	(547,818)
Administrative Expense	(14,883)	(18,656)
Net Change in Plan Fiduciary Net Position	2,065,243	1,893,126
Plan Fiduciary Net Position - Beginning	12,112,873	10,219,747
Plan Fiduciary Net Position - Ending (b)	<u>\$ 14,178,116</u>	<u>\$ 12,112,873</u>
Net Pension Liability - Ending (a) - (b)	<u>\$ 9,249,165</u>	<u>\$ 9,435,138</u>
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	60.52%	56.21%
Covered Employee Payroll	\$ 1,854,542	\$ 2,083,542
Net Pension Liability as a percentage of Covered Employee Payroll	498.73%	452.84%



## SCHEDULE OF CONTRIBUTIONS

Last 10 Fiscal Years

	09/30/2017	09/30/2016	09/30/2015	09/30/2014	09/30/2013
Actuarially Determined Contribution	1,323,401	1,090,290	1,059,441	1,023,707	1,225,122
Contributions in relation to the Actuarially Determined Contributions	1,567,352	1,130,251	1,059,441	1,023,731	1,225,122
Contribution Deficiency (Excess)	\$ (243,951)	\$ (39,961)	\$ -	\$ (24)	\$ -
Covered Employee Payroll	\$ 1,656,321	\$ 1,587,030	\$ 1,537,650	\$ 1,854,542	\$ 2,083,542
Contributions as a percentage of Covered Employee Payroll	94.63%	71.22%	68.90%	55.20%	58.80%

Notes to Schedule

Valuation Date: 10/01/2016

Actuarially determined contribution rates are calculated as of October 1, one year prior to the end of the fiscal year in which contributions are reported.

Methods and assumptions used to determine contribution rates:

Funding Method:	Entry Age Normal Actuarial Cost Method.
Amortization Method:	Level percentage of pay, closed.
Remaining Amortization Period:	25 Years (as of 10/01/2016 Valuation).
Mortality:	<p>Healthy Males: RP2000 Generational, 10% Annuitant White Collar / 90% Annuitant Blue Collar, Scale BB.</p> <p>Healthy Females: RP2000 Generational, 100% Annuitant White Collar, Scale BB.</p> <p>Disabled Males: 60% RP2000 Disabled Male setback four years / 40% Annuitant White Collar with no setback, no projection scale.</p> <p>Disabled Females: 60% RP2000 Disabled Female set forward two years / 40% Annuitant White Collar with no setback, no projection scale.</p> <p>The assumed rates of mortality were mandated by Chapter 2015-157, Laws of Florida. This law mandates the use of the assumptions used in either of the two most recent valuations of the Florida Retirement System (FRS). The above rates are those outlined in the July 1, 2015 FRS actuarial valuation report for special risk employees. We feel this assumption sufficiently accommodates future mortality improvements.</p>
Interest Rate:	7.5% per year compounded annually, net of investment related expenses. This assumption is supported by the Plan's target asset allocation and expected long-term rate of return by asset class.
Retirement Age:	Earlier of: 1) Age 55 and 10 years of Credited Service or 2) 20 Years of Credited Service regardless of age. (Age 52 with 25 years of Credited Service for Members hired on or after October 1, 2012). Also, any member who has reached Normal Retirement is assumed to continue employment for one additional year. This assumption is reasonable based on plan provisions.
Early Retirement:	Commencing with the earliest Early Retirement Age (50), Members are assumed to retire with an immediate subsidized benefit at the rate of 5% per year. This assumption is reasonable based on plan provisions.
Disability Rates:	See Table on following page (1201). It is assumed that 75% of disablements are service related. This assumption is based on assumptions used for other plans containing municipal firefighters.
Termination Rates:	See Table on following page (1302). This assumption is based on assumptions used for other plans containing municipal firefighters.

## GASB 67

### Salary Increases:

Credited Service	Salary Increase
0	10.00%
1	9.00%
2	8.00%
3	7.50%
4	7.00%
5	6.50%
6	6.00%
7	5.50%
8	5.00%
9	4.50%
10+	4.00%

This assumption is based on the results of an experience study dated August 28, 2015.

### Payroll Increase:

None.

### Actuarial Asset Method:

All assets are valued at market value with an adjustment made to uniformly spread actuarial investment gains and losses (as measured by actual market value investment return against expected market value investment return) over a five-year period.

### Termination and Disability Rate Tables:

Age	% Becoming Disabled During the Year	% Terminating During the Year
20	0.03%	6.0%
30	0.04%	5.0%
40	0.07%	2.6%
50	0.18%	0.8%

SCHEDULE OF INVESTMENT RETURNS  
Last 10 Fiscal Years

	09/30/2017	09/30/2016	09/30/2015	09/30/2014	09/30/2013
Annual Money-Weighted Rate of Return					
Net of Investment Expense	11.67%	10.74%	-5.49%	12.26%	10.08%

## NOTES TO THE FINANCIAL STATEMENTS

(For the Year Ended September 30, 2018)

### General Information about the Pension Plan

#### *Plan Description*

The Plan is a single-employer defined benefit pension plan administered by the Plan's Board of Trustees comprised of: Two District appointees, two Members of the Department elected by the membership, and a fifth Member elected by other four and appointed by the District.

Full-time employees who are classified as full-time certified firefighters participate in the System as a condition of employment.

#### *Plan Membership as of October 1, 2016:*

Inactive Plan Members or Beneficiaries Currently Receiving Benefits	15
Inactive Plan Members Entitled to But Not Yet Receiving Benefits	7
Active Plan Members	25
	47
	47

#### *Benefits Provided*

The Plan provides retirement, termination, disability and death benefits.

##### Normal Retirement:

Date: Earlier of: 1) Age 55 and 10 years of Credited Service or 2) 20 Years of Credited Service regardless of age.

Benefit: 3.5% of Average Final Compensation times Credited Service (2.5% if hired on or after October 1, 2012).

##### Early Retirement:

Eligibility: Age 50 and 10 Years of Credited Service.

Benefit: Accrued benefit, reduced 3% for each year prior to Normal Retirement.

##### Cost-of-Living Adjustment:

Service retirees on and after 10/1/02 (hired before 10/1/12) receive annual 2% increases beginning the October 1 following one full year of retirement. Members hired on and after 10/1/12 are not eligible for the cost-of-living adjustment.

##### Vesting (Termination):

Schedule: 100% after 7 years of contributing service if hired before 10/1/12, Members hired on and after 10/1/12 are 100% vested after 10 years.

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

##### Disability:

Eligibility: Service Incurred: Covered from Date of Employment.

Non-Service Incurred: 10 years of Credited Service.

Benefit: Benefit accrued to date of disability but not less than 42% of Average Final Compensation (if Service Incurred).

##### Pre-Retirement Death Benefits:

Vested: Monthly accrued benefit payable to designated beneficiary for 10 years.

Non-Vested: Refund of accumulated contributions without interest.

#### *Contributions*

Member Contributions: 6.8% of Salary.

District and State Contributions: Remaining amount required in order to pay current costs and amortize unfunded past service cost, if any, as provided in Chapter 112, Florida Statutes.

## Net Pension Liability

The measurement date is September 30, 2017.

The measurement period for the pension expense was October 1, 2016 to September 30, 2017.

The reporting period is October 1, 2017 through September 30, 2018.

The Sponsor's Net Pension Liability was measured as of September 30, 2017.

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 October 1, 2016 updated to September 30, 2017 using the following actuarial assumptions:

Inflation	2.50%
Salary Increases	Service based
Discount Rate	7.50%
Investment Rate of Return	7.50%

### *Mortality Rate Healthy Lives:*

Female: RP2000 Generational, 100% Annuitant White Collar, Scale BB.

Male: RP2000 Generational, 10% Annuitant White Collar /90% Annuitant Blue Collar, Scale BB.

### *Mortality Rate Disabled Lives:*

Female: 60% RP2000 Disabled Female set forward two years / 40% Annuitant White Collar with no setback, no projection scale.

Male: 60% RP2000 Disabled Male setback four years / 40% Annuitant White Collar with no setback, no projection scale.

The most recent actuarial experience study used to review the other significant assumptions was dated August 28, 2015.

The Long-Term Expected Rate of Return on Pension Plan investments can be 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.

For 2017 the inflation rate assumption of the investment advisor was 2.50%.

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 geometric real rates of return for each major asset class included in the Pension Plan's target asset allocation as of September 30, 2017 are summarized in the following table:

Asset Class	Target Allocation	Long Term Expected Real Rate of Return
Domestic Equity	50%	7.5%
International Equity	10%	8.5%
Broad Market Fixed Income	25%	2.5%
Global Fixed Income	5%	3.5%
Real Estate	10%	4.5%
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.

## CHANGES IN NET PENSION LIABILITY

	Increase (Decrease)		
	Total Pension Liability	Plan Fiduciary Net Position	Net Pension Liability
	(a)	(b)	(a)-(b)
Reporting period ending at September 30, 2017	\$ 25,939,514	\$ 15,641,779	\$ 10,297,735
Changes for a Year:			
Service Cost	430,846	-	430,846
Interest	1,948,687	-	1,948,687
Differences between Expected and Actual Experience	(829,240)	-	(829,240)
Changes of assumptions	-	-	-
Changes of benefit terms	-	-	-
Contributions - Employer	-	1,275,999	(1,275,999)
Contributions - State	-	291,353	(291,353)
Contributions - Employee	-	112,630	(112,630)
Net Investment Income	-	1,862,888	(1,862,888)
Benefit Payments, including Refunds of Employee Contributions	(775,745)	(775,745)	-
Administrative Expense	-	(32,011)	32,011
Net Changes	774,548	2,735,114	(1,960,566)
Reporting period ending at September 30, 2018	\$ 26,714,062	\$ 18,376,893	\$ 8,337,169

*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	\$ 11,853,648	\$ 8,337,169	\$ 5,475,193

*Pension Plan Fiduciary Net Position.*

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

**FINAL PENSION EXPENSE AND DEFERRED OUTFLOWS OF RESOURCES AND DEFERRED  
INFLOWS OF RESOURCES RELATED TO PENSIONS**  
FISCAL YEAR SEPTEMBER 30, 2017

For the year ended September 30, 2017, the Sponsor has recognized a Pension Expense of \$1,120,745.

On September 30, 2017, 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	-	1,054,505
Changes of assumptions	1,226,052	128,092
Net difference between Projected and Actual Earnings on Pension Plan investments	669,322	-
Employer and State contributions subsequent to the measurement date	1,567,352	-
Total	<u>\$ 3,462,726</u>	<u>\$ 1,182,597</u>

The outcome of the Deferred Outflows of resources related to pensions resulting from Employer and State contributions subsequent to the measurement date has been recognized as a reduction of the Net Pension Liability in the year ended September 30, 2017.

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 ended September 30:	
2018	\$ 59,893
2019	\$ 59,893
2020	\$ 664,809
2021	\$ (71,818)
2022	\$ -
Thereafter	\$ -

**PRELIMINARY PENSION EXPENSE AND DEFERRED OUTFLOWS OF RESOURCES AND  
DEFERRED INFLOWS OF RESOURCES RELATED TO PENSIONS  
FISCAL YEAR SEPTEMBER 30, 2018**

For the year ended September 30, 2018, the Sponsor will recognize a Pension Expense of \$814,245.

On September 30, 2018, 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	-	1,179,244
Changes of assumptions	817,368	64,046
Net difference between Projected and Actual Earnings on Pension Plan investments	-	68,760
Employer and State contributions subsequent to the measurement date	TBD	-
Total	<u>TBD</u>	<u>\$ 1,312,050</u>

The outcome of the Deferred Outflows of resources related to pensions resulting from Employer and State contributions subsequent to the measurement date will be recognized as a reduction of the Net Pension Liability in the year ended September 30, 2018.

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 ended September 30:	
2019	\$ (278,826)
2020	\$ 326,090
2021	\$ (410,537)
2022	\$ (131,409)
2023	\$ -
Thereafter	\$ -



# SCHEDULE OF CHANGES IN NET PENSION LIABILITY AND RELATED RATIOS

## Last 10 Fiscal Years

Reporting Period Ending Measurement Date	09/30/2018 09/30/2017	09/30/2017 09/30/2016	09/30/2016 09/30/2015
Total Pension Liability			
Service Cost	430,846	412,422	540,120
Interest	1,948,687	1,854,384	1,893,391
Changes of benefit terms	-	-	-
Differences between Expected and Actual Experience	(829,240)	(240,493)	(1,748,273)
Changes of assumptions	-	1,634,737	(256,184)
Benefit Payments, including Refunds of Employee Contributions	(775,745)	(977,835)	(600,036)
Net Change in Total Pension Liability	774,548	2,683,215	(170,982)
Total Pension Liability - Beginning	25,939,514	23,256,299	23,427,281
Total Pension Liability - Ending (a)	<u>\$ 26,714,062</u>	<u>\$ 25,939,514</u>	<u>\$ 23,256,299</u>
Plan Fiduciary Net Position			
Contributions - Employer	1,275,999	836,684	687,531
Contributions - State	291,353	293,567	371,910
Contributions - Employee	112,630	107,918	104,560
Net Investment Income	1,862,888	1,482,436	(784,838)
Benefit Payments, including Refunds of Employee Contributions	(775,745)	(977,835)	(600,036)
Administrative Expense	(32,011)	(25,310)	(32,924)
Net Change in Plan Fiduciary Net Position	2,735,114	1,717,460	(253,797)
Plan Fiduciary Net Position - Beginning	15,641,779	13,924,319	14,178,116
Plan Fiduciary Net Position - Ending (b)	<u>\$ 18,376,893</u>	<u>\$ 15,641,779</u>	<u>\$ 13,924,319</u>
Net Pension Liability - Ending (a) - (b)	<u>\$ 8,337,169</u>	<u>\$ 10,297,735</u>	<u>\$ 9,331,980</u>
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	68.79%	60.30%	59.87%
Covered Employee Payroll	\$ 1,656,321	\$ 1,587,030	\$ 1,537,650
Net Pension Liability as a percentage of Covered Employee Payroll	503.35%	648.87%	606.90%

### Notes to Schedule:

#### Changes of assumptions:

For measurement date 09/30/2016, amounts reported as changes of assumptions resulted from the following changes:

- The investment return assumption was reduced from 8.00% to 7.50%.
- As mandated by Chapter 2015-157, Laws of Florida, the assumed rates of mortality were changed from the RP-2000 Combined Healthy Tables to the mortality tables used by the Florida Retirement System for special risk employees.

For measurement date 09/30/2015, amounts reported as changes of assumptions were in conjunction with the August 28, 2015 experience study, the Board adopted the following assumption changes:

- Salary Increases change from 7.5% per year to a table based on service that grades down from 10% to 4%.
- Mortality Rates change from the RP 2000 table with no-projection for healthy lives to the RP-2000 table projected with scale BB through 2015 (disabled lives are set forward 5 years).

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

Reporting Period Ending	09/30/2015	09/30/2014
Measurement Date	09/30/2014	09/30/2013
Total Pension Liability		
Service Cost	702,391	650,362
Interest	1,756,834	1,616,439
Changes of benefit terms	-	-
Differences between Expected and Actual Experience	-	-
Changes of assumptions	-	-
Benefit Payments, including Refunds of Employee Contributions	(579,955)	(547,818)
Net Change in Total Pension Liability	1,879,270	1,718,983
Total Pension Liability - Beginning	21,548,011	19,829,028
Total Pension Liability - Ending (a)	<u>\$ 23,427,281</u>	<u>\$ 21,548,011</u>
Plan Fiduciary Net Position		
Contributions - Employer	697,413	882,319
Contributions - State	326,318	342,803
Contributions - Employee	126,109	141,681
Net Investment Income	1,510,241	1,092,797
Benefit Payments, including Refunds of Employee Contributions	(579,955)	(547,818)
Administrative Expense	(14,883)	(18,656)
Net Change in Plan Fiduciary Net Position	2,065,243	1,893,126
Plan Fiduciary Net Position - Beginning	12,112,873	10,219,747
Plan Fiduciary Net Position - Ending (b)	<u>\$ 14,178,116</u>	<u>\$ 12,112,873</u>
Net Pension Liability - Ending (a) - (b)	<u>\$ 9,249,165</u>	<u>\$ 9,435,138</u>
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	60.52%	56.21%
Covered Employee Payroll	\$ 1,854,542	\$ 2,083,542
Net Pension Liability as a percentage of Covered Employee Payroll	498.73%	452.84%

## SCHEDULE OF CONTRIBUTIONS

### Last 10 Fiscal Years

	09/30/2017	09/30/2016	09/30/2015	09/30/2014	09/30/2013
Actuarially Determined Contribution	1,323,401	1,090,290	1,059,441	1,023,707	1,225,122
Contributions in relation to the Actuarially Determined Contributions	1,567,352	1,130,251	1,059,441	1,023,731	1,225,122
Contribution Deficiency (Excess)	\$ (243,951)	\$ (39,961)	\$ -	\$ (24)	\$ -
Covered Employee Payroll	\$ 1,656,321	\$ 1,587,030	\$ 1,537,650	\$ 1,854,542	\$ 2,083,542
Contributions as a percentage of Covered Employee Payroll	94.63%	71.22%	68.90%	55.20%	58.80%

#### Notes to Schedule

Valuation Date: 10/01/2016

Actuarially determined contribution rates are calculated as of October 1, one year prior to the end of the fiscal year in which contributions are reported.

Methods and assumptions used to determine contribution rates:

Funding Method: Entry Age Normal Actuarial Cost Method.  
Amortization Method: Level percentage of pay, closed.  
Remaining Amortization Period: 25 Years (as of 10/01/2016 Valuation).  
Mortality: Healthy Males: RP2000 Generational, 10% Annuitant White Collar / 90% Annuitant Blue Collar, Scale BB.  
Healthy Females: RP2000 Generational, 100% Annuitant White Collar, Scale BB.  
Disabled Males: 60% RP2000 Disabled Male setback four years / 40% Annuitant White Collar with no setback, no projection scale.  
Disabled Females: 60% RP2000 Disabled Female set forward two years / 40% Annuitant White Collar with no setback, no projection scale.  
The assumed rates of mortality were mandated by Chapter 2015-157, Laws of Florida. This law mandates the use of the assumptions used in either of the two most recent valuations of the Florida Retirement System (FRS). The above rates are those outlined in the July 1, 2015 FRS actuarial valuation report for special risk employees. We feel 7.5% per year compounded annually, net of investment related expenses. This assumption is supported by the Plan's target asset allocation and expected long-term rate of return by asset class.

Interest Rate: 7.5% per year compounded annually, net of investment related expenses. This assumption is supported by the Plan's target asset allocation and expected long-term rate of return by asset class.

Retirement Age: Earlier of: 1) Age 55 and 10 years of Credited Service or 2) 20 Years of Credited Service regardless of age. (Age 52 with 25 years of Credited Service for Members hired on or after October 1, 2012). Also, any member who has reached Normal Retirement is assumed to continue employment for one additional year. This assumption is reasonable based on plan provisions.

Early Retirement: Commencing with the earliest Early Retirement Age (50), Members are assumed to retire with an immediate subsidized benefit at the rate of 5% per year. This assumption is reasonable based on plan provisions.

Disability Rates: See Table on following page (1201). It is assumed that 75% of disablements are service related. This assumption is based on assumptions used for other plans containing municipal firefighters.

Termination Rates: See Table on following page (1302). This assumption is based on assumptions used for other plans containing municipal firefighters.

## GASB 68

### Salary Increases:

Credited Service	Salary Increase
0	10.00%
1	9.00%
2	8.00%
3	7.50%
4	7.00%
5	6.50%
6	6.00%
7	5.50%
8	5.00%
9	4.50%
10+	4.00%

This assumption is based on the results of an experience study dated August 28, 2015.  
None.

### Payroll Increase:

### Actuarial Asset Method:

All assets are valued at market value with an adjustment made to uniformly spread actuarial investment gains and losses (as measured by actual market value investment return against expected market value investment return) over a five-year period.

### Termination and Disability Rate Tables:

Age	% Becoming Disabled During the Year	% Terminating During the Year
20	0.03%	6.00%
30	0.04%	5.00%
40	0.07%	2.60%
50	0.18%	0.80%

FINAL COMPONENTS OF PENSION EXPENSE  
FISCAL YEAR SEPTEMBER 30, 2017

	Net Pension Liability	Deferred Inflows	Deferred Outflows	Pension Expense
Beginning balance	\$ 9,331,980	\$ 1,814,748	\$ 2,682,515	\$ -
Employer and State Contributions made after 09/30/2016	-	-	1,567,352	-
Total Pension Liability Factors:				
Service Cost	412,422	-	-	412,422
Interest	1,854,384	-	-	1,854,384
Changes in benefit terms	-	-	-	-
Differences between Expected and Actual Experience with regard to economic or demographic assumptions	(240,493)	240,493	-	-
Current year amortization of experience difference	-	(497,192)	-	(497,192)
Change in assumptions about future economic or demographic factors or other inputs	1,634,737	-	1,634,737	-
Current year amortization of change in assumptions	-	(64,046)	(408,685)	344,639
Benefit Payments	(977,835)	-	-	-
Net change	<u>2,683,215</u>	<u>(320,745)</u>	<u>2,793,404</u>	<u>2,114,253</u>
Plan Fiduciary Net Position:				
Contributions - Employer	836,684	-	(836,684)	-
Contributions - State	293,567	-	(293,567)	-
Contributions - Employee	107,918	-	-	(107,918)
Projected Net Investment Income	1,123,346	-	-	(1,123,346)
Difference between projected and actual earnings on Pension Plan investments	359,090	359,090	-	-
Current year amortization	-	(175,620)	(388,066)	212,446
Benefit Payments	(977,835)	-	-	-
Administrative Expenses	(25,310)	-	-	25,310
Net change	<u>1,717,460</u>	<u>183,470</u>	<u>(1,518,317)</u>	<u>(993,508)</u>
Ending Balance	<u>\$ 10,297,735</u>	<u>\$ 1,677,473</u>	<u>\$ 3,957,602</u>	<u>\$ 1,120,745</u>

**PRELIMINARY COMPONENTS OF PENSION EXPENSE**  
**FISCAL YEAR SEPTEMBER 30, 2018**

	Net Pension Liability	Deferred Inflows	Deferred Outflows	Pension Expense
Beginning balance	\$ 10,297,735	\$ 1,677,473	\$ 3,957,602	\$ -
Employer and State Contributions made after 09/30/2017	-	-	TBD*	-
Total Pension Liability Factors:				
Service Cost	430,846	-	-	430,846
Interest	1,948,687	-	-	1,948,687
Changes in benefit terms	-	-	-	-
Differences between Expected and Actual Experience with regard to economic or demographic assumptions	(829,240)	829,240	-	-
Current year amortization of experience difference	-	(704,501)	-	(704,501)
Change in assumptions about future economic or demographic factors or other inputs	-	-	-	-
Current year amortization of change in assumptions	-	(64,046)	(408,684)	344,638
Benefit Payments	(775,745)	-	-	-
Net change	<u>774,548</u>	<u>60,693</u>	<u>(408,684)</u>	<u>2,019,670</u>
Plan Fiduciary Net Position:				
Contributions - Employer	1,275,999	-	(1,275,999)	-
Contributions - State	291,353	-	(291,353)	-
Contributions - Employee	112,630	-	-	(112,630)
Projected Net Investment Income	1,205,842	-	-	(1,205,842)
Difference between projected and actual earnings on Pension Plan investments	657,046	657,046	-	-
Current year amortization	-	(307,030)	(388,066)	81,036
Benefit Payments	(775,745)	-	-	-
Administrative Expenses	(32,011)	-	-	32,011
Net change	<u>2,735,114</u>	<u>350,016</u>	<u>(1,955,418)</u>	<u>(1,205,425)</u>
Ending Balance	<u>\$ 8,337,169</u>	<u>\$ 2,088,182</u>	<u>TBD</u>	<u>\$ 814,245</u>

\* Employer and State Contributions subsequent to the measurement date made after September 30, 2017 but made on or before September 30, 2018 need to be added.

AMORTIZATION SCHEDULE - INVESTMENTS

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

Plan Year	Differences Between	Recognition														
Ending	Projected and Actual	Period (Years)	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026				
Earnings																
2014	\$ (519,011)	5	\$ (103,802)	\$ (103,802)	\$ (103,802)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2015	\$ 1,940,329	5	\$ 388,066	\$ 388,066	\$ 388,066	\$ 388,066	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2016	\$ (359,090)	5	\$ (71,818)	\$ (71,818)	\$ (71,818)	\$ (71,818)	\$ (71,818)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2017	\$ (657,046)	5	\$ -	\$ (131,410)	\$ (131,409)	\$ (131,409)	\$ (131,409)	\$ (131,409)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Net Increase (Decrease) in Pension Expense			\$ 212,446	\$ 81,036	\$ 81,037	\$ 184,839	\$ (203,227)	\$ (131,409)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

AMORTIZATION SCHEDULE - CHANGES OF ASSUMPTIONS

Increase (Decrease) in Pension Expense Arising from the Recognition of the Effects of Changes of Assumptions												
Plan Year Ending	Changes of Assumptions	Recognition Period (Years)	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
2015	\$ (256,184)	4	\$ (64,046)	\$ (64,046)	\$ (64,046)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2016	\$ 1,634,737	4	\$ 408,685	\$ 408,684	\$ 408,684	\$ 408,684	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Net Increase (Decrease) in Pension Expense			\$ 344,639	\$ 344,638	\$ 344,638	\$ 408,684	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -



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)	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
2015	\$ (1,748,273)	4	\$ (437,068)	\$ (437,068)	\$ (437,068)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2016	\$ (240,493)	4	\$ (60,124)	\$ (60,123)	\$ (60,123)	\$ (60,123)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2017	\$ (829,240)	4	\$ -	\$ (207,310)	\$ (207,310)	\$ (207,310)	\$ (207,310)	\$ -	\$ -	\$ -	\$ -	\$ -
Net Increase (Decrease) in Pension Expense			\$ (497,192)	\$ (704,501)	\$ (704,501)	\$ (267,433)	\$ (207,310)	\$ -	\$ -	\$ -	\$ -	\$ -