

GREATER NAPLES FIRE RESCUE DISTRICT
FIREFIGHTERS' PENSION PLAN

ACTUARIAL VALUATION
AS OF OCTOBER 1, 2018

CONTRIBUTIONS APPLICABLE TO THE
PLAN/FISCAL YEAR ENDING SEPTEMBER 30, 2020

GASB 67/68 DISCLOSURE INFORMATION
AS OF SEPTEMBER 30, 2018



FOSTER & FOSTER
ACTUARIES AND CONSULTANTS

February 6, 2019

Board of Trustees
Greater Naples Fire Rescue District
Firefighters' Pension Plan
c/o Ms. JOYceanna J. Rautio
Plan Administrator
Rautio & Associates, Inc.
10261 Windsor Way
Naples, FL 34109

Re: Greater Naples Fire Rescue District Firefighters' Pension Plan

Dear Board:

We are pleased to present to the Board this report of the annual actuarial valuation of the Greater Naples Fire Rescue District Firefighters' Pension Plan. 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 reflect 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 the valuations, 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. Due to the limited scope of the valuation, we did not perform an analysis of the potential range of such future measurements.

In conducting the valuations, we have relied on personnel, plan design, and asset information supplied by the Greater Naples Fire Rescue 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, 2017. The total pension liability was rolled-forward from the valuation date to the plan's fiscal year ending September 30, 2018 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 are 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 Greater Naples Fire Rescue District, nor does anyone at Foster & Foster, Inc. act as a member of the Board of Trustees of the Firefighters' Pension Plan. 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 us at 239-433-5500.

Respectfully submitted,

Foster & Foster, Inc.

By: 
Sara E. Carlson, ASA, EA, MAAA
Enrolled Actuary #17-8546

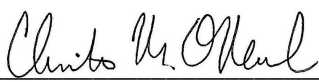

Christine M. O'Neal, FSA, EA, MAAA
Enrolled Actuary #17-7916

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SUMMARY OF REPORT

The regular annual actuarial valuation of the Greater Naples Fire Rescue District Firefighters' Pension Plan, performed as of October 1, 2018, has been completed and the results are presented in this Report. The contribution amounts set forth herein are applicable to the plan/fiscal year ending September 30, 2020.

The contribution requirements, compared with those set forth in the October 1, 2017 actuarial valuation report, are as follows:

Valuation Date	10/1/2018	10/1/2017
Applicable Plan Year End	<u>9/30/2020</u>	<u>9/30/2019</u>
Total Required Contribution		
% of Total Annual Payroll	14.10%	8.66%
Member Contributions (Est.)		
% of Total Annual Payroll	3.00%	3.00%
District and State Required Contribution		
% of Total Annual Payroll	11.10%	5.66%
Normal Cost Minimum Funding (District and State)	32.24%	31.95%
State Contribution (est.) ¹	679,099	679,099
% of Total Annual Payroll	16.49%	16.49%
Balance from District ²		
% of Total Annual Payroll	15.75%	15.46%

¹ Represents the applicable amount received in calendar 2018. As per a Memorandum of Understanding between the Membership and the District, \$679,098.83 of the State Monies received each year will be available to offset the District's required contribution. Any additional State Monies in excess of \$679,098.83 will be used to fund the Share Plan.

² Please note that the Normal Cost Minimum Funding, as shown on the previous page, is required pursuant to provisions of Chapter 2011-216, Laws of Florida for valuations performed on and after October 1, 2011. The required contribution from the combination of District and State sources for the year ending September 30, 2020, is 32.24% of the actual payroll realized in that year. The precise District requirement for the year is this amount, less State Contributions described on the previous page. Please note that the District has access to a prepaid contribution of \$147,713.36 that is available to offset a portion of the above stated requirements for the fiscal year ending September 30, 2019.

Plan experience was favorable overall on the basis of the plan's actuarial assumptions. The primary source of favorable experience was an average salary increase of 4.39% which fell short of the 6.50% assumption. This gain was offset in part by a loss associated with an investment return of 7.24% (Actuarial Asset Basis) which fell short of the 7.75% assumption. In spite of this net favorable actuarial experience, the Minimum Required Contribution increased slightly due to an increase in the Normal Cost.

CHANGES SINCE PRIOR VALUATION

Plan Changes

Per a Memorandum of Understanding between the Membership and the District signed November 13, 2018 (and retroactive to June 28, 2018), \$679,098.83 of the State Monies received each year will be available to offset the District's required contribution. Any additional monies in excess of \$679,098.83 will be used to fund the Share Plan.

Actuarial Assumption/Method Changes

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

CONTRIBUTION IMPACT OF ANNUAL CHANGES

(1) Contribution Determined as of October 1, 2017 ¹	14.24%
(2) Summary of Contribution Impact by component:	
Change in State Contribution Percentage	1.22%
Change in Normal Cost Rate	0.29%
Other	<u>0.00%</u>
Total Change in Contribution	1.51%
(3) Contribution Determined as of October 1, 2018 ¹	15.75%

¹ District contribution requirements based on Normal Cost minimum requirement.

COMPARATIVE SUMMARY OF PRINCIPAL VALUATION RESULTS

	<u>10/1/2018</u>	<u>10/1/2017</u>
A. Participant Data		
Actives	42	42
Service Retirees	1	1
Beneficiaries	0	0
Disability Retirees	2	2
Terminated Vested	<u>8</u>	<u>9</u>
Total	53	54
Total Annual Payroll	\$4,118,642	\$3,948,909
Payroll Under Assumed Ret. Age	4,118,642	3,948,909
Annual Rate of Payments to:		
Service Retirees	54,411	52,855
Beneficiaries	0	0
Disability Retirees	55,040	53,466
Terminated Vested	172,458	172,458
B. Assets		
Actuarial Value (AVA) ¹	29,996,511	26,866,771
Market Value (MVA) ¹	29,996,511	26,866,771
C. Liabilities		
Present Value of Benefits		
Actives		
Retirement Benefits	31,867,891	29,621,506
Disability Benefits	1,558,914	1,553,930
Death Benefits	176,527	174,428
Vested Benefits	18,678	25,346
Refund of Contributions	357	878
Service Retirees	702,880	698,427
Beneficiaries	0	0
Disability Retirees	731,573	720,953
Terminated Vested	1,320,985	1,228,447
Share Plan Balances ¹	<u>1,093,247</u>	<u>984,198</u>
Total	37,471,052	35,008,113

C. Liabilities - (Continued)	<u>10/1/2018</u>	<u>10/1/2017</u>
Present Value of Future Salaries	32,982,258	34,172,093
Present Value of Future Member Contributions	989,468	1,025,163
Normal Cost (Retirement)	1,268,616	1,206,122
Normal Cost (Disability)	116,017	109,157
Normal Cost (Death)	9,741	9,052
Normal Cost (Vesting)	2,741	3,934
Normal Cost (Refunds)	<u>204</u>	<u>338</u>
Total Normal Cost	1,397,319	1,328,603
Present Value of Future Normal Costs	11,097,392	11,464,250
Accrued Liability (Retirement)	21,685,765	19,112,861
Accrued Liability (Disability)	722,094	683,134
Accrued Liability (Death)	104,575	99,291
Accrued Liability (Vesting)	12,388	16,190
Accrued Liability (Refunds)	153	362
Accrued Liability (Inactives)	2,755,438	2,647,827
Share Plan Balances ¹	<u>1,093,247</u>	<u>984,198</u>
Total Actuarial Accrued Liability (EAN AL)	26,373,660	23,543,863
Unfunded Actuarial Accrued Liability (UAAL)	(3,622,851)	(3,322,908)
Funded Ratio (AVA / EAN AL)	113.7%	114.1%

D. Actuarial Present Value of		
Accrued Benefits	<u>10/1/2018</u>	<u>10/1/2017</u>
Vested Accrued Benefits		
Inactives + Share Plan Balances ¹	3,848,685	3,632,025
Actives	11,728,307	9,810,348
Member Contributions	<u>803,600</u>	<u>687,292</u>
Total	16,380,592	14,129,665
Non-vested Accrued Benefits	<u>1,865,228</u>	<u>1,617,150</u>
Total Present Value		
Accrued Benefits (PVAB)	18,245,820	15,746,815
Funded Ratio (MVA / PVAB)	164.4%	170.6%
Increase (Decrease) in Present Value of		
Accrued Benefits Attributable to:		
Plan Amendments	0	
Assumption Changes	0	
New Accrued Benefits	1,396,389	
Benefits Paid	(113,369)	
Interest	1,215,985	
Other	<u>0</u>	
Total	2,499,005	

Valuation Date	10/1/2018	10/1/2017
Applicable to Fiscal Year Ending	<u>9/30/2020</u>	<u>9/30/2019</u>

E. Pension Cost

Normal Cost (with interest)		
% of Total Annual Payroll ²	35.24	34.95
Administrative Expenses (with interest)		
% of Total Annual Payroll ²	4.57	4.15
Payment Required to Amortize Unfunded Actuarial Accrued Liability over 24 years (as of 10/1/2018, with interest)		
% of Total Annual Payroll ²	(25.71)	(30.44)
Total Required Contribution		
% of Total Annual Payroll ²	14.10	8.66
Expected Member Contributions		
% of Total Annual Payroll ²	3.00	3.00
Expected District and State Contribution		
% of Total Annual Payroll ²	11.10	5.66

F. Past Contributions

Plan Years Ending:	<u>9/30/2018</u>
District and State Requirement	1,224,718
Actual Contributions Made:	
Members (excluding buyback)	116,308
District	545,619
State	<u>679,099</u>
Total	1,341,026

G. Net Actuarial (Gain)/Loss	(252,072)
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¹ The asset values and liabilities include accumulated Share Plan Balances as of 9/30/2018 and 9/30/2017.

² Contributions developed as of 10/1/2018 are expressed as a percentage of total annual payroll at 10/1/2018 of \$4,118,642.

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

<u>Year</u>	<u>Projected Unfunded Actuarial Accrued Liability</u>
2018	(3,622,851) ¹

I. (i) 5 Year Comparison of Actual and Assumed Salary Increases

	<u>Actual</u>	<u>Assumed</u>
Year Ended 9/30/2018	4.39%	6.50%
Year Ended 9/30/2017	10.64%	6.57%
Year Ended 9/30/2016	0.45%	6.92%
Year Ended 9/30/2015	7.00%	7.13%
Year Ended 9/30/2014	18.08%	7.13%

(ii) 5 Year Comparison of Investment Return on Market Value and Actuarial Value

	<u>Market Value</u>	<u>Actuarial Value</u>	<u>Assumed</u>
Year Ended 9/30/2018	7.24%	7.24%	7.75%
Year Ended 9/30/2017	10.74%	10.74%	7.75%
Year Ended 9/30/2016	9.34%	9.34%	7.75%
Year Ended 9/30/2015	-0.72%	-0.72%	7.75%
Year Ended 9/30/2014	8.97%	8.97%	7.75%


(iii) Average Annual Payroll Growth

(a) Payroll as of:	10/1/2018	\$4,118,642
	10/1/2008	3,558,238
(b) Total Increase		15.75%
(c) Number of Years		10.00
(d) Average Annual Rate		1.47%

¹ Based on current State law and the existing UAAL bases, the UAAL will never be positive.

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.


Sara E. Carlson, ASA, EA, MAAA
Enrolled Actuary #17-8546

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

Mr. Steve Bardin
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, 2017	(\$3,322,908)
(2)	Sponsor Normal Cost developed as of October 1, 2017	1,210,136
(3)	Expected administrative expenses for the year ended September 30, 2018	157,893
(4)	Expected interest on (1), (2) and (3)	(157,621)
(5)	Sponsor contributions to the System during the year ended September 30, 2018	1,224,718
(6)	Expected interest on (5)	33,561
(7)	Expected Unfunded Actuarial Accrued Liability as of September 30, 2018 (1)+(2)+(3)+(4)-(5)-(6)	(3,370,779)
(8)	Change to UAAL due to Assumption Change	0
(9)	Change to UAAL due to Actuarial (Gain)/Loss	(252,072)
(10)	Unfunded Actuarial Accrued Liability as of October 1, 2018	(3,622,851)

Type of Base	Date Established	Years Remaining	10/1/2018 Amount	Amortization Amount
Benefit Change	10/1/2012	24	97	8
Actuarial Loss	10/1/2014	1	13,250	13,250
Actuarial Loss	10/1/2015	2	57,961	30,062
Actuarial Gain	10/1/2016	3	(1,575,421)	(564,789)
Assum. Change	10/1/2016	3	385,322	138,138
Actuarial Gain	10/1/2017	4	(1,214,686)	(338,469)
Actuarial Gain ¹	10/1/2018	5	<u>(1,289,374)</u>	<u>(297,733)</u>
			(3,622,851)	(1,019,533)

¹ The expected UAAL as of October 1, 2018 developed in Item (7) above is \$1,037,302 lower than the expected UAAL determined by utilizing the walk-forward approach for all existing bases as of October 1, 2017. The walk-forward approach is determined by subtracting the scheduled 2017 amortization payment from the existing 2017 base amount, and then increasing it with a full year of interest. As requested in a letter dated June 24, 2013 from the Division of Retirement, this calculated difference will be included in the actuarial gain or loss base that is developed with each annual valuation, effective October 1, 2014.

DETAILED ACTUARIAL (GAIN)/LOSS ANALYSIS

(1) Unfunded Actuarial Accrued Liability (UAAL) as of October 1, 2017	(\$3,322,908)
(2) Expected UAAL as of October 1, 2018	(3,370,779)
(3) Summary of Actuarial (Gain)/Loss, by component:	
Investment Return (Actuarial Asset Basis)	139,079
Salary Increases	(394,723)
Active Decrements	33,121
Inactive Mortality	20,926
Other	<u>(50,475)</u>
Increase in UAAL due to (Gain)/Loss	(252,072)
Assumption Changes	<u>0</u>
(4) Actual UAAL as of October 1, 2018	(\$3,622,851)

ACTUARIAL ASSUMPTIONS AND METHODS

Mortality Rate

Healthy Active Lives:

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

Healthy Inactive Lives:

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

Male: RP2000 Generational, 10% Annuitant White Collar / 90% Annuitant 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 assumptions 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, 2018 FRS valuation report for special risk employees. We feel this assumption sufficiently accommodates future mortality improvements.

Interest Rate

7.75% per year compounded annually, net of investment related expenses. This is supported by the target asset allocation of the trust and the expected long-term return by asset class.

Salary Increases

<u>Years of Service</u>	<u>% Increase in Salary</u>
Less than 2	15.0%
2-9	7.0
10-14	6.5
15-19	6.0
20 and Higher	5.5

The above rates are based on results of the August 4, 2014 Experience Study.

Payroll Growth

0.00% for purposes of amortizing the Unfunded Actuarial Accrued Liability. This assumption cannot exceed the ten-year average payroll growth, in compliance with Part VII of Chapter 112, Florida Statutes.

Administrative Expenses

\$181,342 annually, based on actual expenses incurred in the prior fiscal year.

Normal Retirement Age

Earlier of 1) Age 55 with 6 years of Credited Service or 2) the completion of 25 years of Credited Service, regardless of age. Also, any Member who has reached Normal Retirement is assumed to continue employment for one additional year.

The above rates are considered reasonable based on Plan provisions.

Early Retirement Age

Attainment of age 50 with 6 years of Credited Service. Members are assumed to retire with an immediate subsidized benefit at the same rate assumed for termination of service.

The above rates are considered reasonable based on Plan provisions.

Termination Rates

<u>Years of Service</u>	<u>Probability</u>
Less than 6	4.5%
6-9	1.5
10 and Higher	0.0

The above rates are based on results of the August 4, 2014 Experience Study.

Disability Rates

See sample rates that follow. 75% of disabilities are assumed to be service-incurred. These rates are consistent with those utilized by other Florida public safety Plans.

<u>Age</u>	<u>Probability of Becoming Disabled in Next Year</u>
20	0.14%
25	0.15
30	0.18
35	0.23
40	0.30
45	0.51
50	1.00
55	1.55

Post Retirement COLA

3.00% per year for all categories of retirement.

Funding Method

Individual Entry Age Normal Actuarial Cost Method
(level percent of pay).

Actuarial Asset Method

Fair Market Value, net of investment-related expenses.

GLOSSARY

Total Annual Payroll is the projected annual rate of pay for the fiscal year beginning as of 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.

Entry Age Normal Cost Method - Under this method, the normal cost is the sum of the individual normal costs for all active participants. For an active participant, the normal cost is the participant's normal cost accrual rate, multiplied by the participant's current compensation.

(a) The normal cost accrual rate equals:

- (i) the present value of future benefits for the participant, determined as of the participant's entry age, divided by
- (ii) the present value of the compensation expected to be paid to the participant for each year of the participant's anticipated future service, determined as of the participant's entry age.

(b) In calculating the present value of future compensation, the salary scale is applied both retrospectively and prospectively to estimate compensation in years prior to and subsequent to the valuation year based on the compensation used for the valuation.

(c) 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 future benefits less the present value at the participant's attained age of the individual normal costs payable in the future. 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.

- (d) Under this method, the entry age used for each active participant is the participant's age at the time he or she would have commenced participation if the plan had always been in existence under current terms, or the age as of which he or she first earns service credits for purposes of benefit accrual under the current terms of the plan.

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.

PARTIAL HISTORY OF PREMIUM TAX REFUNDS

Received During <u>Fiscal Year</u>	<u>Amount</u>	Increase from <u>Previous Year</u>
1998	71,067.18	_____%
1999	83,418.13	17.4%
2000	80,991.59	-2.9%
2001	101,629.30	25.5%
2002	143,973.40	41.7%
2003	199,828.06	38.8%
2004	253,386.19	26.8%
2005	293,128.37	15.7%
2006	321,600.23	9.7%
2007	303,292.38	-5.7%
2008	1,025,499.07	238.1%
2009	538,040.00	-47.5%
2010	484,325.00	-10.0%
2011	590,824.19	22.0%
2012	614,157.99	3.9%
2013	679,098.83	10.6%
2014	720,073.51	6.0%
2015	661,599.57	-8.1%
2016	531,384.41	-19.7%
2017	699,304.89	31.6%
2018	788,147.66	12.7%

STATEMENT OF FIDUCIARY NET POSITION
SEPTEMBER 30, 2018

<u>ASSETS</u>	COST VALUE	MARKET VALUE
Cash and Cash Equivalents:		
Short Term Investments	947,489.13	947,489.13
Prepaid Expenses	1,167.36	1,167.36
Money Market	0.27	0.27
Total Cash and Equivalents	948,656.76	948,656.76
Receivables:		
State Contributions	31,246.00	31,246.00
Investment Income	26,705.94	26,705.94
Total Receivable	57,951.94	57,951.94
Investments:		
Stocks	3,947,924.06	5,909,312.40
Mutual Funds:		
Fixed Income	11,293,891.62	11,279,583.68
Equity	7,511,301.90	10,154,319.24
Pooled/Common/Commingled Funds:		
Master Limited Partnership	445,062.25	360,170.13
Real Estate	1,304,489.19	1,479,364.40
Total Investments	24,502,669.02	29,182,749.85
Total Assets	25,509,277.72	30,189,358.55
<u>LIABILITIES</u>		
Payables:		
Investment Expenses	18,916.26	18,916.26
Administrative Expenses	26,217.74	26,217.74
Prepaid District Contribution	147,713.36	147,713.36
Total Liabilities	192,847.36	192,847.36
NET POSITION RESTRICTED FOR PENSIONS	25,316,430.36	29,996,511.19

STATEMENT OF CHANGES IN FIDUCIARY NET POSITION
FOR THE YEAR ENDED SEPTEMBER 30, 2018
Market Value Basis

ADDITIONS

Contributions:

Member	116,307.50
District	545,619.15
State	788,147.66

Total Contributions	1,450,074.31
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Investment Income:

Net Realized Gain (Loss)	125,297.63	
Unrealized Gain (Loss)	1,035,270.79	
Net Increase in Fair Value of Investments		1,160,568.42
Interest & Dividends		905,255.18
Less Investment Expense ¹		(91,446.07)

Net Investment Income	1,974,377.53
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Total Additions	3,424,451.84
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DEDUCTIONS

Distributions to Members:

Benefit Payments	106,320.48
Lump Sum Share Distributions	0.00
Refunds of Member Contributions	7,048.62

Total Distributions	113,369.10
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Administrative Expense	181,342.31
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Total Deductions	294,711.41
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Net Increase in Net Position	3,129,740.43
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NET POSITION RESTRICTED FOR PENSIONS

Beginning of the Year	26,866,770.76
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End of the Year	29,996,511.19
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Actuarial Asset Rate of Return	7.24%
Actuarial Gain/(Loss) due to Investment Return	(139,079.08)

¹Investment related expenses include investment advisory, custodial and performance monitoring fees.

SUPPLEMENTAL CHAPTER 175 SHARE PLAN ACTIVITY
October 1, 2017 through September 30, 2018

9/30/2017 Balance	984,198.13
Plus Additions	109,048.83
Investment Return Earned (est.)	0.00
Administrative Fees (est.)	0.00
Less Distributions	0.00
9/30/2018 Balance (est.)	1,093,246.96

RECONCILIATION OF DISTRICT'S SHORTFALL/(PREPAID) CONTRIBUTION
FOR THE FISCAL YEAR ENDED (FYE) SEPTEMBER 30, 2018

(1) Total Required Contribution Rate ¹	34.59%
(2) Pensionable Payroll Derived from Member Contributions	\$3,876,916.67
(3) Total Required Contribution (1) x (2)	1,341,025.48
(4) Less Actual Member Contributions	(116,307.50)
(5) Less Allowable State Contribution	<u>(679,098.83)</u>
(6) Equals Required District Contribution for Fiscal 2018	545,619.15
(7) Less 2017 Prepaid Contribution	(167,918.44)
(8) Less Actual District Contributions	<u>(525,414.07)</u>
(9) Equals District's Shortfall/(Prepaid) Contribution as of September 30, 2018	(\$147,713.36)

¹ Contribution requirements based on Normal Cost minimum requirement.

STATISTICAL DATA

	<u>10/1/2015</u>	<u>10/1/2016</u>	<u>10/1/2017</u>	<u>10/1/2018</u>
<u>Actives</u>				
Number	45	43	42	42
Vested	40	40	40	41
Non-Vested	5	3	2	1
Average Current Age	40.1	40.6	41.9	42.9
Average Age at Employment	29.5	28.7	28.8	28.8
Average Past Service	10.6	11.9	13.1	14.1
Average Annual Salary	\$83,691	\$84,846	\$94,022	\$98,063
<u>Service Retirees</u>				
Number	1	1	1	1
Average Current Age	55.1	56.1	57.1	58.1
Average Annual Benefit	\$49,877	\$51,344	\$52,855	\$54,411
<u>Beneficiaries</u>				
Number	0	0	0	0
Average Current Age	N/A	N/A	N/A	N/A
Average Annual Benefit	N/A	N/A	N/A	N/A
<u>Disability Retirees</u>				
Number	2	2	2	2
Average Current Age	45.8	46.8	47.8	48.8
Average Annual Benefit	\$25,227	\$25,969	\$26,733	\$27,520
<u>Terminated Vested</u>				
Number	10	9	9	8
Average Current Age ¹	43.9	42.8	43.8	43.7
Average Annual Benefit ²	\$25,879	\$24,637	\$24,637	\$24,637

¹ Effective 10/1/2018, the Average Current Age excludes participants awaiting a refund of contributions.

² 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	0	0	0	0	0	0	0	0	0	0	0	0
25 - 29	0	0	0	0	0	1	0	0	0	0	0	1
30 - 34	0	0	0	0	0	1	5	0	0	0	0	6
35 - 39	0	0	0	0	0	0	3	4	0	0	0	7
40 - 44	0	0	0	0	0	2	5	2	1	0	0	10
45 - 49	0	0	0	0	0	0	5	4	0	0	0	9
50 - 54	0	0	0	0	0	1	2	3	0	0	0	6
55 - 59	0	0	0	0	0	1	1	0	1	0	0	3
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	0	0	0	0	0	6	21	13	2	0	0	42

VALUATION PARTICIPANT RECONCILIATION

1. Active lives

a. Number in prior valuation 10/1/2017	42
b. Terminations	
i. Vested (partial or full) with deferred benefits	0
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. Continuing participants	42
g. New entrants	<u>0</u>
h. Total active life participants in valuation	42

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

	Service Retirees, Vested Receiving <u>Benefits</u>	Receiving Death <u>Benefits</u>	Receiving Disability <u>Benefits</u>	Vested Deferred	<u>Total</u>
a. Number prior valuation	1	0	2	9	12
Retired	0	0	0	0	0
Vested Deferred	0	0	0	0	0
Death, With Survivor	0	0	0	0	0
Death, No Survivor	0	0	0	0	0
Disabled	0	0	0	0	0
Refund of Contributions	0	0	0	(1)	(1)
Rehires	0	0	0	0	0
Expired Annuities	0	0	0	0	0
Data Corrections	0	0	0	0	0
b. Number current valuation	1	0	2	8	11

SUMMARY OF CURRENT PLAN

<u>Eligibility</u>	Full-time employees hired after December 31, 1995 by the East Naples Fire Control and Rescue District who are classified as certified Firefighters participate in the Plan as a condition of employment.
<u>Credited Service</u>	Total years and fractional parts of years of service with the District as a Firefighter.
<u>Compensation</u>	Monthly compensation, including up to 300 hours of overtime annually, but excluding lump sum payments of unused leave.
<u>Average Final Compensation</u>	Average Compensation for the best five (5) years of Credited Service.
<u>Member Contributions</u>	3.0% of Compensation.
<u>District and State Contributions</u>	Remaining amount required in order to pay current costs and amortize unfunded past service cost, if any, over 30 years.
<u>Normal Retirement</u>	
Date	Earlier of 1) age 55 and the completion of 6 years of Credited Service, or 2) the completion of 25 years of credited service, regardless of age.
Benefit Amount	3.00% of Average Final Compensation (AFC) <u>times</u> Credited Service, limited to 100% of AFC. In addition, a monthly supplemental benefit of \$5 times Credited Service is payable, with a minimum of \$50 per month and a maximum of \$150 per month.
Form of Benefit	Ten Year Certain and Life Annuity (options available).
<u>Early Retirement</u>	
Date	Age 50 and the completion of 6 years of Credited Service.
Benefit Amount	Accrued benefit, reduced 3% per year retirement precedes the earlier of age 55 and 6 years of service or the date when 25 years of service would have been completed.

Vesting

Schedule	100% after 6 years of Credited Service.
Benefit Amount	Member will receive the vested portion of his (her) accrued benefit payable at age 55 (unreduced), or age 50, reduced as for Early Retirement.
	Non-vested members receive a refund of member contributions.

Disability

Eligibility	Total and permanent as determined by the Board of Trustees. Members are covered from Date of Employment (Service Incurred), or after 8 years of Credited Service (Non-Service Incurred).
Benefit Amount	Accrued benefit, but not less than 42% of Average Final Compensation (Service Incurred), or 25% of Average Final Compensation (Non-Service Incurred).
Duration	Payable for life with 10 years certain or until recovery (as determined by the Board).

Death Benefits

Pre-Retirement	
Vested	Accrued benefit, actuarially reduced for commencement prior to age 50. The benefit is determined as if the participant had retired immediately prior to death and had chosen the 10 Year Certain and Life Annuity.
Non-Vested	Refund of member contributions.
Post-Retirement	Benefits payable to beneficiary in accordance with option selected at retirement.

Cost of Living Adjustment

Eligibility	Normal and Early service Retirees and Beneficiaries, Disability Retirees and Vested, Terminated Retirees.
Amount	3.0% increase at the beginning of each fiscal plan year.

Chapter 175 Share Accounts

Allocation

Effective October 1, 2009, the initial accumulated Excess State Monies Reserve of \$1,217,569 shall be allocated to all active members who were employed on or before September 30, 2008 in a pro-rata fashion according to months of Credited Service. For subsequent years after the frozen State contribution is reduced to \$659,404, premium tax monies received pursuant to Chapter 175, Florida Statutes in excess of \$659,404 will be allocated to individual Member Share accounts based on months of Credited Service, determined as of September 30.

Notwithstanding the above, per a Memorandum of Understanding between the Membership and the District effective June 28, 2018, State Monies in excess of \$679,098.83 will be used to fund the Share Plan.

Investment Earnings

Net rate of investment return realized by the Plan for the preceding Plan Year. Members within 5 years of the Normal Retirement Date have a one-time option of changing the interest crediting as realized by a money market mutual fund selected by the Board. Investment earnings will not begin to accrue until the frozen State contribution is reduced to the \$659,404 level.

Vesting Schedule

Same as for other benefits.

Distribution

Lump sum payment at retirement, termination, disability, or death.

Board of Trustees

Two Trustees appointed by the Board of Fire Commissioners, two Members of the Plan elected by the membership, and a fifth Member elected by other 4 and appointed by the Board of Fire Commissioners as a ministerial duty.

STATEMENT OF FIDUCIARY NET POSITION
SEPTEMBER 30, 2018

<u>ASSETS</u>	MARKET VALUE
Cash and Cash Equivalents:	
Short Term Investments	947,489
Prepaid Expenses	1,168
Total Cash and Equivalents	948,657
Receivables:	
State Contributions	31,246
Investment Income	26,706
Total Receivable	57,952
Investments:	
Stocks	5,909,313
Mutual Funds:	
Fixed Income	11,279,584
Equity	10,154,319
Pooled/Common/Commingled Funds:	
Master Limited Partnership	360,170
Real Estate	1,479,364
Total Investments	29,182,750
Total Assets	30,189,359
<u>LIABILITIES</u>	
Payables:	
Investment Expenses	18,916
Administrative Expenses	26,218
Total Liabilities	45,134
NET POSITION RESTRICTED FOR PENSIONS	30,144,225

STATEMENT OF CHANGES IN FIDUCIARY NET POSITION
FOR THE YEAR ENDED SEPTEMBER 30, 2018
Market Value Basis

ADDITIONS

Contributions:

Member	116,307	
District	525,414	
State	788,148	
Total Contributions		1,429,869
Investment Income:		
Net Increase in Fair Value of Investments	1,160,569	
Interest & Dividends	905,255	
Less Investment Expense ¹	(91,446)	
Net Investment Income		1,974,378
Total Additions		3,404,247

DEDUCTIONS

Distributions to Members:

Benefit Payments	106,320	
Lump Sum Share Distributions	0	
Refunds of Member Contributions	7,049	
Total Distributions		113,369
Administrative Expense		181,342
Total Deductions		294,711
Net Increase in Net Position		3,109,536
NET POSITION RESTRICTED FOR PENSIONS		
Beginning of the Year		27,034,689
End of the Year		30,144,225

¹Investment related expenses include investment advisory, custodial and performance monitoring fees.

NOTES TO THE FINANCIAL STATEMENTS

(For the Year Ended September 30, 2018)

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 Trustees appointed by the Board of Fire Commissioners, two Members of the Plan elected by the membership, and a fifth Member elected by other 4 and appointed by the Board of Fire Commissioners as a ministerial duty.

Plan Membership as of October 1, 2017:

Inactive Plan Members or Beneficiaries Currently Receiving Benefits	3
Inactive Plan Members Entitled to But Not Yet Receiving Benefits	9
Active Plan Members	42
	54

Benefits Provided

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

Normal Retirement:

Date: Earlier of 1) age 55 and the completion of 6 years of Credited Service, or 2) the completion of 25 years of credited service, regardless of age.

Benefit Amount: 3.00% of Average Final Compensation (AFC) times Credited Service, limited to 100% of AFC.

In addition, a monthly supplemental benefit of \$5 times Credited Service is payable, with a minimum of \$50 per month and a maximum of \$150 per month.

Early Retirement:

Date: Age 50 and the completion of 6 years of Credited Service.

Benefit Amount: Accrued benefit, reduced 3% per year retirement precedes the earlier of age 55 and 6 years of service or the date when 25 years of service would have been completed.

Vesting:

Schedule: 100% after 6 years of Credited Service.

Benefit Amount: Member will receive the vested portion of his (her) accrued benefit payable at age 55 (unreduced), or age 50, reduced as for Early Retirement.

Non-vested members receive a refund of member contributions.

Disability:

Eligibility: Total and permanent as determined by the Board of Trustees. Members are covered from Date of Employment (Service Incurred), or after 8 years of Credited Service (Non-Service Incurred).

Benefit Amount: Accrued benefit, but not less than 42% of Average Final Compensation (Service Incurred), or 25% of Average Final Compensation (Non-Service Incurred).

Pre-Retirement Death Benefits:

Vested: Accrued benefit, actuarially reduced for commencement prior to age 50. The benefit is determined as if the participant had retired immediately prior to death and had chosen the 10 Year Certain and Life Annuity.

Non-Vested: Refund of member contributions.

Cost-of-Living Adjustment:

Eligibility: Normal and Early service Retirees and Beneficiaries, Disability Retirees and Vested, Terminated Retirees.

Amount: 3.0% increase at the beginning of each fiscal plan year.

Chapter 175 Share Accounts

Allocation: Effective October 1, 2009, the initial accumulated Excess State Monies Reserve of \$1,217,569 shall be allocated to all active members who were employed on or before September 30, 2008 in a pro-rata fashion according to months of Credited Service. For subsequent years after the frozen State contribution is reduced to \$659,404, premium tax monies received pursuant to Chapter 175, Florida Statutes in excess of \$659,404 will be allocated to individual Member Share accounts based on months of Credited Service, determined as of September 30.

Investment Earnings: Net rate of investment return realized by the Plan for the preceding Plan Year. Members within 5 years of the Normal Retirement Date have a one-time option of changing the interest crediting as realized by a money market mutual fund selected by the Board. Investment earnings will not begin to accrue until the frozen State contribution is reduced to the \$659,404 level.

Vesting Schedule: Same as for other benefits.

Contributions

Member Contributions: 3.0% of Compensation.

District and State Contributions: Remaining amount required in order to pay current costs and amortize unfunded past service cost, if any, over 30 years.

*Investments**Investment Policy:*

The following was the Board's adopted asset allocation policy as of September 30, 2018:

<u>Asset Class</u>	<u>Target Allocation</u>
Domestic Equity	35.0%
International Equity	12.0%
Bonds	28.0%
High Yield Bonds	5.0%
Convertibles	8.0%
Private Real Estate	5.0%
Infrastructure	5.0%
Cash	2.0%
<u>Total</u>	<u>100.0%</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, 2018, the annual money-weighted rate of return on Pension Plan investments, net of Pension Plan investment expense, was 7.24 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 September 30, 2018 were as follows:

Total Pension Liability	\$ 26,662,304
Plan Fiduciary Net Position	\$ (30,144,225)
Sponsor's Net Pension Liability	<u>\$ (3,481,921)</u>
Plan Fiduciary Net Position as a percentage of Total Pension Liability	113.06%

Actuarial Assumptions:

The Total Pension Liability was determined by an actuarial valuation as of October 1, 2017 updated to September 30, 2018 using the following actuarial assumptions.

Inflation	2.70%
Salary Increases	Service based
Discount Rate	7.75%
Investment Rate of Return	7.75%

Mortality Rate Healthy Active Lives:

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.

Mortality Rate Healthy Inactive 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 4, 2014.

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 2018 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, 2018 are summarized in the following table:

Asset Class	Long Term Expected Real Rate of Return
Domestic Equity	8.1%
International Equity	3.4%
Bonds	3.6%
High Yield Bonds	5.6%
Convertibles	6.7%
Private Real Estate	4.9%
Infrastructure	9.1%
Cash	0.7%

Discount Rate:
The Discount Rate used to measure the Total Pension Liability was 7.75 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
	6.75%	Discount Rate	8.75%
		7.75%	
Sponsor's Net Pension Liability	\$ 1,041,608	\$ (3,481,921)	\$ (7,113,594)

SCHEDULE OF CHANGES IN NET PENSION LIABILITY AND RELATED RATIOS

Last 10 Fiscal Years

	09/30/2018	09/30/2017	09/30/2016
Total Pension Liability			
Service Cost	1,342,939	1,227,285	1,229,729
Interest	1,857,351	1,734,319	1,538,231
Share Plan Allocation	109,049	-	-
Changes of benefit terms	-	-	-
Differences between Expected and Actual Experience	786,769	(1,417,628)	(686,689)
Changes of assumptions	-	-	587,813
Contributions - Buy Back	-	43,503	-
Benefit Payments, including Refunds of Employee Contributions	(113,369)	(117,882)	(155,063)
Net Change in Total Pension Liability	3,982,739	1,469,597	2,514,021
Total Pension Liability - Beginning	22,679,565	21,209,968	18,695,947
Total Pension Liability - Ending (a)	<u>\$ 26,662,304</u>	<u>\$ 22,679,565</u>	<u>\$ 21,209,968</u>
Plan Fiduciary Net Position			
Contributions - Employer	525,414	617,583	575,788
Contributions - State	788,148	699,305	531,384
Contributions - Employee	116,307	112,022	107,493
Contributions - Buy Back	-	43,503	-
Net Investment Income	1,974,378	2,520,285	1,918,305
Benefit Payments, including Refunds of Employee Contributions	(113,369)	(117,882)	(155,063)
Administrative Expense	(181,342)	(157,893)	(160,474)
Net Change in Plan Fiduciary Net Position	3,109,536	3,716,923	2,817,433
Plan Fiduciary Net Position - Beginning	27,034,689	23,317,766	20,500,333
Plan Fiduciary Net Position - Ending (b)	<u>\$ 30,144,225</u>	<u>\$ 27,034,689</u>	<u>\$ 23,317,766</u>
Net Pension Liability - Ending (a) - (b)	<u>\$ (3,481,921)</u>	<u>\$ (4,355,124)</u>	<u>\$ (2,107,798)</u>
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	113.06%	119.20%	109.94%
Covered Employee Payroll ¹	\$ 3,876,917	\$ 3,734,059	\$ 3,583,083
Net Pension Liability as a percentage of Covered Employee Payroll	-89.81%	-116.63%	-58.83%

Notes to Schedule:

¹ The Covered Employee Payroll numbers shown are in compliance with GASB 82.

Changes of assumptions:

For measurement date 09/30/2016, as a result of Chapter 2015-157, Laws of Florida, the assumed rates of mortality were changed to the assumptions used by the Florida Retirement System for special risk employees.

The inflation assumption rate was lowered from 3.00% to 2.70%, matching the long-term inflation assumption utilized by the Plan's investment consultant.

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

	09/30/2015	09/30/2014
Total Pension Liability		
Service Cost	1,309,059	1,076,925
Interest	1,249,582	1,073,926
Share Plan Allocation	-	-
Changes of benefit terms	-	-
Differences between Expected and Actual Experience	1,408,146	-
Changes of assumptions	-	-
Contributions - Buy Back	-	-
Benefit Payments, including Refunds of Employee Contributions	(170,839)	(62,080)
Net Change in Total Pension Liability	3,795,948	2,088,771
Total Pension Liability - Beginning	14,899,999	12,811,228
Total Pension Liability - Ending (a)	<u>\$ 18,695,947</u>	<u>\$ 14,899,999</u>
Plan Fiduciary Net Position		
Contributions - Employer	517,177	506,016
Contributions - State	661,600	720,074
Contributions - Employee	113,635	110,558
Contributions - Buy Back	-	-
Net Investment Income	(143,909)	1,574,687
Benefit Payments, including Refunds of Employee Contributions	(170,839)	(62,080)
Administrative Expense	(163,984)	(164,656)
Net Change in Plan Fiduciary Net Position	813,680	2,684,599
Plan Fiduciary Net Position - Beginning	19,686,653	17,002,054
Plan Fiduciary Net Position - Ending (b)	<u>\$ 20,500,333</u>	<u>\$ 19,686,653</u>
Net Pension Liability - Ending (a) - (b)	<u>\$ (1,804,386)</u>	<u>\$ (4,786,654)</u>
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	109.65%	132.13%
Covered Employee Payroll ¹	\$ 3,787,836	\$ 3,685,271
Net Pension Liability as a percentage of Covered Employee Payroll	-47.64%	-129.89%

Notes to Schedule:

¹ The Covered Employee Payroll numbers shown are in compliance with GASB 82.

SCHEDULE OF CONTRIBUTIONS

Last 10 Fiscal Years

Fiscal Year Ended	Actuarially Determined Contribution	Contributions in relation to the Actuarially Determined Contributions	Contribution Deficiency (Excess)	Covered Employee Payroll ¹	Contributions as a percentage of Covered Employee Payroll
09/30/2018	\$ 1,224,718	\$ 1,204,513	\$ 20,205	\$ 3,876,917	31.07%
09/30/2017	\$ 1,148,970	\$ 1,316,888	\$ (167,918)	\$ 3,734,059	35.27%
09/30/2016	\$ 1,107,172	\$ 1,107,172	\$ -	\$ 3,583,083	30.90%
09/30/2015	\$ 1,178,777	\$ 1,178,777	\$ -	\$ 3,787,836	31.12%
09/30/2014	\$ 1,226,090	\$ 1,226,090	\$ -	\$ 3,685,271	33.27%

¹ The Covered Employee Payroll numbers shown are in compliance with GASB 82.

Notes to Schedule

Valuation Date: 10/01/2016

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

Methods and assumptions used to determine contribution rates:

Mortality:

Healthy Lives:

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

Male: RP2000 Generational, 10% Annuitant White Collar / 90% Annuitant 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 assumed rates of mortality 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 the July 1, 2015 FRS actuarial valuation report for special risk employees. We feel this assumption sufficiently accommodates future mortality improvements.

Termination Rates:

Years of Service	Probability
Less than 6	4.5%
6-9	1.5%
10 and Higher	0.0%

The above rates are based on results of the August 4, 2014 Experience Study.

Disability Rates: See sample rates that follow. 75% of disabilities are assumed to be service-incurred. These rates are consistent with those utilized by other Florida public safety Plans.

Age	Probability of Becoming Disabled in Next Year
20	0.14%
25	0.15%
30	0.18%
35	0.23%
40	0.30%
45	0.51%
50	1.00%
55	1.55%

Normal Retirement Age: Earlier of 1) Age 55 with 6 years of Credited Service or 2) the completion of 25 years of Credited Service, regardless of age. Also, any Member who has reached Normal Retirement is assumed to continue employment for one additional year. The above rates are considered reasonable based on Plan provisions.

Early Retirement Age: Attainment of age 50 with 6 years of Credited Service. Members are assumed to retire with an immediate subsidized benefit at the same rate assumed for termination of service.

Interest Rate: The above rates are considered reasonable based on Plan provisions. 7.75% per year, compounded annually, net of investment related expenses. This assumption is reasonable, based on the Plan's target asset allocation and long-term expected returns by asset class.

Years of Service	% Increase in Salary
Less than 2	15.0%
2 -9	7.0%
10-14	6.5%
15-19	6.0%
20 and Higher	5.5%

Post Retirement COLA: The above rates are based on results of the August 4, 2014 Experience Study. 3.00% per year for all categories of retirement.

Payroll Growth: None.

Funding Method: Individual Entry Age Normal Actuarial Cost Method (level percent of pay).

Amortization Method: Level Dollar, Closed.

Remaining Amortization Period: 26 Years (as of 10/01/2016).

Asset Method: Fair Market Value, net of investment-related expenses.

SCHEDULE OF INVESTMENT RETURNS
Last 10 Fiscal Years

Fiscal Year Ended	Annual Money-Weighted Rate of Return Net of Investment Expense
09/30/2018	7.24%
09/30/2017	10.74%
09/30/2016	9.34%
09/30/2015	-0.72%
09/30/2014	8.97%

NOTES TO THE FINANCIAL STATEMENTS

(For the Year Ended September 30, 2019)

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 Trustees appointed by the Board of Fire Commissioners, two Members of the Plan elected by the membership, and a fifth Member elected by other 4 and appointed by the Board of Fire Commissioners as a ministerial duty.

Full-time employees hired after December 31, 1995 who are classified as certified Firefighters participate in the Plan as a condition of employment.

Plan Membership as of October 1, 2017:

Inactive Plan Members or Beneficiaries Currently Receiving Benefits	3
Inactive Plan Members Entitled to But Not Yet Receiving Benefits	9
Active Plan Members	42
	<hr/>
	54
	<hr/>

Benefits Provided

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

Normal Retirement:

Date: Earlier of 1) age 55 and the completion of 6 years of Credited Service, or 2) the completion of 25 years of credited service, regardless of age.

Benefit Amount: 3.00% of Average Final Compensation (AFC) times Credited Service, limited to 100% of AFC.

In addition, a monthly supplemental benefit of \$5 times Credited Service is payable, with a minimum of \$50 per month and a maximum of \$150 per month.

Early Retirement:

Date: Age 50 and the completion of 6 years of Credited Service.

Benefit Amount: Accrued benefit, reduced 3% per year retirement precedes the earlier of age 55 and 6 years of service or the date when 25 years of service would have been completed.

Vesting:

Schedule: 100% after 6 years of Credited Service.

Benefit Amount: Member will receive the vested portion of his (her) accrued benefit payable at age 55 (unreduced), or age 50, reduced as for Early Retirement.

Non-vested members receive a refund of member contributions.

Disability:

Eligibility: Total and permanent as determined by the Board of Trustees. Members are covered from Date of Employment (Service Incurred), or after 8 years of Credited Service (Non-Service Incurred).

Benefit Amount: Accrued benefit, but not less than 42% of Average Final Compensation (Service Incurred), or 25% of Average Final Compensation (Non-Service Incurred).

Pre-Retirement Death Benefits:

Vested: Accrued benefit, actuarially reduced for commencement prior to age 50. The benefit is determined as if the participant had retired immediately prior to death and had chosen the 10 Year Certain and Life Annuity.

Non-Vested: Refund of member contributions.

Cost-of-Living Adjustment:

Eligibility: Normal and Early service Retirees and Beneficiaries, Disability Retirees and Vested, Terminated Retirees.

Amount: 3.0% increase at the beginning of each fiscal plan year.

Chapter 175 Share Accounts

Allocation: Effective October 1, 2009, the initial accumulated Excess State Monies Reserve of \$1,217,569 shall be allocated to all active members who were employed on or before September 30, 2008 in a pro-rata fashion according to months of Credited Service. For subsequent years after the frozen State contribution is reduced to \$659,404, premium tax monies received pursuant to Chapter 175, Florida Statutes in excess of \$659,404 will be allocated to individual Member Share accounts based on months of Credited Service, determined as of September 30.

Investment Earnings: Net rate of investment return realized by the Plan for the preceding Plan Year. Members within 5 years of the Normal Retirement Date have a one-time option of changing the interest crediting as realized by a money market mutual fund selected by the Board. Investment earnings will not begin to accrue until the frozen State contribution is reduced to the \$659,404 level.

Vesting Schedule: Same as for other benefits.

Contributions

Member Contributions: 3.0% of Compensation.

District and State Contributions: Remaining amount required in order to pay current costs and amortize unfunded past service cost, if any, over 30 years.

Net Pension Liability

The measurement date is September 30, 2018.

The measurement period for the pension expense was October 1, 2017 to September 30, 2018.

The reporting period is October 1, 2018 through September 30, 2019.

The Sponsor's Net Pension Liability was measured as of September 30, 2018.

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, 2017 updated to September 30, 2018 using the following actuarial assumptions.

Inflation	2.70%
Salary Increases	Service based
Discount Rate	7.75%
Investment Rate of Return	7.75%

Mortality Rate Healthy Active Lives:

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.

Mortality Rate Healthy Inactive 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 4, 2014.

GASB 68

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 2018 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, 2018 are summarized in the following table:

Asset Class	Target Allocation	Long Term Expected Real Rate of Return
Domestic Equity	35.0%	8.1%
International Equity	12.0%	3.4%
Bonds	28.0%	3.6%
High Yield Bonds	5.0%	5.6%
Convertibles	8.0%	6.7%
Private Real Estate	5.0%	4.9%
Infrastructure	5.0%	9.1%
Cash	2.0%	0.7%
Total	100.0%	

Discount Rate:

The Discount Rate used to measure the Total Pension Liability was 7.75 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 September 30, 2018	\$ 22,679,565	\$ 27,034,689	\$ (4,355,124)
Changes for a Year:			
Service Cost	1,342,939	-	1,342,939
Interest	1,857,351	-	1,857,351
Share Plan Allocation	109,049	-	109,049
Differences between Expected and Actual Experience	786,769	-	786,769
Changes of assumptions	-	-	-
Changes of benefit terms	-	-	-
Contributions - Employer	-	525,414	(525,414)
Contributions - State	-	788,148	(788,148)
Contributions - Employee	-	116,307	(116,307)
Net Investment Income	-	1,974,378	(1,974,378)
Benefit Payments, including Refunds of Employee Contributions	(113,369)	(113,369)	-
Administrative Expense	-	(181,342)	181,342
Net Changes	3,982,739	3,109,536	873,203
Reporting Period Ending September 30, 2019	\$ 26,662,304	\$ 30,144,225	\$ (3,481,921)

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

	Current Discount		
	1% Decrease	Rate	1% Increase
	6.75%	7.75%	8.75%
Sponsor's Net Pension Liability	\$ 1,041,608	\$ (3,481,921)	\$ (7,113,594)

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, 2018

For the year ended September 30, 2018, the Sponsor has recognized a Pension Expense of \$1,219,739.

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	1,024,104	1,794,205
Changes of assumptions	457,189	-
Net difference between Projected and Actual Earnings on Pension Plan investments	-	70,358
Employer and State contributions subsequent to the measurement date	1,313,562	-
Total	<u>\$ 2,794,855</u>	<u>\$ 1,864,563</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	\$ 65,758
2020	\$ 108,562
2021	\$ (232,783)
2022	\$ (173,845)
2023	\$ (40,487)
Thereafter	\$ (110,475)

**PRELIMINARY PENSION EXPENSE AND DEFERRED OUTFLOWS OF RESOURCES AND
DEFERRED INFLOWS OF RESOURCES RELATED TO PENSIONS
FISCAL YEAR SEPTEMBER 30, 2019**

For the year ended September 30, 2019, the Sponsor will recognize a Pension Expense of \$1,432,261.

On September 30, 2019, 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	1,584,513	1,560,392
Changes of assumptions	391,877	-
Net difference between Projected and Actual Earnings on Pension Plan investments	-	44,764
Employer and State contributions subsequent to the measurement date	TBD	-
Total	<u>TBD</u>	<u>\$ 1,605,156</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, 2019.

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:	
2020	\$ 239,868
2021	\$ (101,477)
2022	\$ (42,539)
2023	\$ 90,819
2024	\$ 57,859
Thereafter	\$ 126,704

SCHEDULE OF CHANGES IN NET PENSION LIABILITY AND RELATED RATIOS

Last 10 Fiscal Years

Reporting Period Ending Measurement Date	09/30/2019 09/30/2018	09/30/2018 09/30/2017	09/30/2017 09/30/2016
Total Pension Liability			
Service Cost	1,342,939	1,227,285	1,229,729
Interest	1,857,351	1,734,319	1,538,231
Share Plan Allocation	109,049	-	-
Changes of benefit terms	-	-	-
Differences between Expected and Actual Experience	786,769	(1,417,628)	(686,689)
Changes of assumptions	-	-	587,813
Contributions - Buy Back	-	43,503	-
Benefit Payments, including Refunds of Employee Contributions	(113,369)	(117,882)	(155,063)
Net Change in Total Pension Liability	3,982,739	1,469,597	2,514,021
Total Pension Liability - Beginning	22,679,565	21,209,968	18,695,947
Total Pension Liability - Ending (a)	<u>\$ 26,662,304</u>	<u>\$ 22,679,565</u>	<u>\$ 21,209,968</u>
Plan Fiduciary Net Position			
Contributions - Employer	525,414	617,583	575,788
Contributions - State	788,148	699,305	531,384
Contributions - Employee	116,307	112,022	107,493
Contributions - Buy Back	-	43,503	-
Net Investment Income	1,974,378	2,520,285	1,918,305
Benefit Payments, including Refunds of Employee Contributions	(113,369)	(117,882)	(155,063)
Administrative Expense	(181,342)	(157,893)	(160,474)
Net Change in Plan Fiduciary Net Position	3,109,536	3,716,923	2,817,433
Plan Fiduciary Net Position - Beginning	27,034,689	23,317,766	20,500,333
Plan Fiduciary Net Position - Ending (b)	<u>\$ 30,144,225</u>	<u>\$ 27,034,689</u>	<u>\$ 23,317,766</u>
Net Pension Liability - Ending (a) - (b)	<u>\$ (3,481,921)</u>	<u>\$ (4,355,124)</u>	<u>\$ (2,107,798)</u>
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	113.06%	119.20%	109.94%
Covered Employee Payroll ¹	\$ 3,876,917	\$ 3,734,059	\$ 3,583,083
Net Pension Liability as a percentage of Covered Employee Payroll	-89.81%	-116.63%	-58.83%

Notes to Schedule:

¹ The Covered Employee Payroll numbers shown are in compliance with GASB 82.

Changes of assumptions:

For measurement date 09/30/2016, as a result of Chapter 2015-157, Laws of Florida, the assumed rates of mortality were changed to the assumptions used by the Florida Retirement System for special risk employees.

The inflation assumption rate was lowered from 3.00% to 2.70%, matching the long-term inflation assumption utilized by the Plan's investment consultant.

SCHEDULE OF CHANGES IN NET PENSION LIABILITY AND RELATED RATIOS

Last 10 Fiscal Years

Reporting Period Ending	09/30/2016	09/30/2015
Measurement Date	09/30/2015	09/30/2014
Total Pension Liability		
Service Cost	1,309,059	1,076,925
Interest	1,249,582	1,073,926
Share Plan Allocation	-	-
Changes of benefit terms	-	-
Differences between Expected and Actual Experience	1,408,146	-
Changes of assumptions	-	-
Contributions - Buy Back	-	-
Benefit Payments, including Refunds of Employee Contributions	(170,839)	(62,080)
Net Change in Total Pension Liability	3,795,948	2,088,771
Total Pension Liability - Beginning	14,899,999	12,811,228
Total Pension Liability - Ending (a)	<u>\$ 18,695,947</u>	<u>\$ 14,899,999</u>
Plan Fiduciary Net Position		
Contributions - Employer	517,177	506,016
Contributions - State	661,600	720,074
Contributions - Employee	113,635	110,558
Contributions - Buy Back	-	-
Net Investment Income	(143,909)	1,574,687
Benefit Payments, including Refunds of Employee Contributions	(170,839)	(62,080)
Administrative Expense	(163,984)	(164,656)
Net Change in Plan Fiduciary Net Position	813,680	2,684,599
Plan Fiduciary Net Position - Beginning	19,686,653	17,002,054
Plan Fiduciary Net Position - Ending (b)	<u>\$ 20,500,333</u>	<u>\$ 19,686,653</u>
Net Pension Liability - Ending (a) - (b)	<u>\$ (1,804,386)</u>	<u>\$ (4,786,654)</u>
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	109.65%	132.13%
Covered Employee Payroll ¹	\$ 3,787,836	\$ 3,685,271
Net Pension Liability as a percentage of Covered Employee Payroll	-47.64%	-129.89%

Notes to Schedule:

¹ The Covered Employee Payroll numbers shown are in compliance with GASB 82.

SCHEDULE OF CONTRIBUTIONS

Last 10 Fiscal Years

Fiscal Year Ended	Actuarially Determined Contribution	Contributions in relation to the Actuarially Determined Contributions	Contribution Deficiency (Excess)	Covered Employee Payroll ¹	Contributions as a percentage of Covered Employee Payroll
09/30/2018	\$ 1,224,718	\$ 1,204,513	\$ 20,205	\$ 3,876,917	31.07%
09/30/2017	\$ 1,148,970	\$ 1,316,888	\$ (167,918)	\$ 3,734,059	35.27%
09/30/2016	\$ 1,107,172	\$ 1,107,172	\$ -	\$ 3,583,083	30.90%
09/30/2015	\$ 1,178,777	\$ 1,178,777	\$ -	\$ 3,787,836	31.12%
09/30/2014	\$ 1,226,090	\$ 1,226,090	\$ -	\$ 3,685,271	33.27%

¹ The Covered Employee Payroll numbers shown are in compliance with GASB 82.

Notes to Schedule

Valuation Date: 10/01/2016

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

Methods and assumptions used to determine contribution rates:

Mortality:

Healthy Lives:

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

Male: RP2000 Generational, 10% Annuitant White Collar / 90% Annuitant 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 assumed rates of mortality 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 the July 1, 2015 FRS actuarial valuation report for special risk employees. We feel this assumption sufficiently accommodates future mortality improvements.

Termination Rates:

Years of Service	Probability
Less than 6	4.5%
6-9	1.5%
10 and Higher	0.0%

The above rates are based on results of the August 4, 2014 Experience Study.

Disability Rates:

See sample rates that follow. 75% of disabilities are assumed to be service-incurred. These rates are consistent with those utilized by other Florida public safety Plans.

Age	Probability of Becoming Disabled in Next Year
20	0.14%
25	0.15%
30	0.18%
35	0.23%
40	0.30%
45	0.51%
50	1.00%
55	1.55%

Normal Retirement Age:

Earlier of 1) Age 55 with 6 years of Credited Service or 2) the completion of 25 years of Credited Service, regardless of age. Also, any Member who has reached Normal Retirement is assumed to continue employment for one additional year.

Early Retirement Age:

Attainment of age 50 with 6 years of Credited Service. Members are assumed to retire with an immediate subsidized benefit at the same rate assumed for termination of service.

Interest Rate:

The above rates are considered reasonable based on Plan provisions.
7.75% per year, compounded annually, net of investment related expenses. This assumption is reasonable, based on the Plan's target asset allocation and long-term expected returns by asset class.

Salary Increases:

Years of Service	% Increase in Salary
Less than 2	15.0%
2 -9	7.0%
10-14	6.5%
15-19	6.0%
20 and Higher	5.5%

Post Retirement COLA:

The above rates are based on results of the August 4, 2014 Experience Study.
3.00% per year for all categories of retirement.

Payroll Growth:

None.

Funding Method:

Individual Entry Age Normal Actuarial Cost

Amortization Method:

Level Dollar, Closed.

Remaining Amortization Period:

26 Years (as of 10/01/2016).

Asset Method:

Fair Market Value, net of investment-related expenses.

EXPENSE DEVELOPMENT AND AMORTIZATION SCHEDULES

The following information is not required to be disclosed but is provided for informational purposes.

FINAL COMPONENTS OF PENSION EXPENSE
FISCAL YEAR SEPTEMBER 30, 2018

	Net Pension Liability	Deferred Inflows	Deferred Outflows	Pension Expense
Beginning balance	\$ (2,107,798)	\$ 931,750	\$ 4,015,545	\$ -
Employer and State Contributions made after 09/30/2017	-	-	1,313,562	-
Total Pension Liability Factors:				
Service Cost	1,227,285	-	-	1,227,285
Interest	1,734,319	-	-	1,734,319
Changes in benefit terms	-	-	-	-
Contributions - Buy Back	43,503	-	-	43,503
Differences between Expected and Actual Experience with regard to economic or demographic assumptions	(1,417,628)	1,417,628	-	-
Current year amortization of experience difference	-	(233,814)	(128,014)	(105,800)
Change in assumptions about future economic or demographic factors or other inputs	-	-	-	-
Current year amortization of change in assumptions	-	-	(65,312)	65,312
Benefit Payments, including Refunds of Employee Contributions	(117,882)	-	-	-
Net change	<u>1,469,597</u>	<u>1,183,814</u>	<u>1,120,236</u>	<u>2,964,619</u>
Plan Fiduciary Net Position:				
Contributions - Employer	617,583	-	(617,583)	-
Contributions - State	699,305	-	(699,305)	-
Contributions - Employee	112,022	-	-	(112,022)
Contributions - Buy Back	43,503	-	-	(43,503)
Projected Net Investment Income	1,853,497	-	-	(1,853,497)
Difference between projected and actual earnings on Pension Plan investments	666,788	666,788	-	-
Current year amortization	-	(235,097)	(341,346)	106,249
Benefit Payments, including Refunds of Employee Contributions	(117,882)	-	-	-
Administrative Expenses	(157,893)	-	-	157,893
Net change	<u>3,716,923</u>	<u>431,691</u>	<u>(1,658,234)</u>	<u>(1,744,880)</u>
Ending Balance	<u><u>\$ (4,355,124)</u></u>	<u><u>\$ 2,547,255</u></u>	<u><u>\$ 3,477,547</u></u>	<u><u>\$ 1,219,739</u></u>

PRELIMINARY COMPONENTS OF PENSION EXPENSE
FISCAL YEAR SEPTEMBER 30, 2019

	Net Pension Liability	Deferred Inflows	Deferred Outflows	Pension Expense
Beginning balance	\$ (4,355,124)	\$ 2,547,255	\$ 3,477,547	\$ -
Employer and State Contributions made after 09/30/2018	-	-	TBD*	-
Total Pension Liability Factors:				
Service Cost	1,342,939	-	-	1,342,939
Interest	1,857,351	-	-	1,857,351
Share Plan Allocation	109,049	-	-	109,049
Changes in benefit terms	-	-	-	-
Differences between Expected and Actual Experience with regard to economic or demographic assumptions	786,769	-	786,769	-
Current year amortization of experience difference	-	(233,813)	(226,360)	(7,453)
Change in assumptions about future economic or demographic factors or other inputs	-	-	-	-
Current year amortization of change in assumptions	-	-	(65,312)	65,312
Benefit Payments, including Refunds of Employee Contributions	(113,369)	-	-	-
Net change	<u>3,982,739</u>	<u>(233,813)</u>	<u>495,097</u>	<u>3,367,198</u>
Plan Fiduciary Net Position:				
Contributions - Employer	525,414	-	(525,414)	-
Contributions - State	788,148	-	(788,148)	-
Contributions - Employee	116,307	-	-	(116,307)
Projected Net Investment Income	2,139,176	-	-	(2,139,176)
Difference between projected and actual earnings on Pension Plan investments	(164,798)	-	164,798	-
Current year amortization	-	(235,100)	(374,304)	139,204
Benefit Payments, including Refunds of Employee Contributions	(113,369)	-	-	-
Administrative Expenses	(181,342)	-	-	181,342
Net change	<u>3,109,536</u>	<u>(235,100)</u>	<u>(1,523,068)</u>	<u>(1,934,937)</u>
Ending Balance	<u><u>\$ (3,481,921)</u></u>	<u><u>\$ 2,078,342</u></u>	<u><u>TBD</u></u>	<u><u>\$ 1,432,261</u></u>

* Employer and State Contributions subsequent to the measurement date made after September 30, 2018 but made on or before September 30, 2019 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 Ending	Differences Between Projected and Actual Earnings	Recognition Period (Years)	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
2014	\$ (214,019)	5	\$ (42,804)	\$ (42,804)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2015	\$ 1,706,731	5	\$ 341,346	\$ 341,346	\$ 341,346	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2016	\$ (294,688)	5	\$ (58,937)	\$ (58,938)	\$ (58,938)	\$ (58,938)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2017	\$ (666,788)	5	\$ (133,356)	\$ (133,358)	\$ (133,358)	\$ (133,358)	\$ (133,358)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2018	\$ 164,798	5	\$ -	\$ 32,958	\$ 32,960	\$ 32,960	\$ 32,960	\$ 32,960	\$ -	\$ -	\$ -	\$ -	\$ -
Net Increase (Decrease) in Pension Expense			<u>\$ 106,249</u>	<u>\$ 139,204</u>	<u>\$ 182,010</u>	<u>\$ (159,336)</u>	<u>\$ (100,398)</u>	<u>\$ 32,960</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>

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)	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	
2016	\$ 587,813	9	\$ 65,312	\$ 65,312	\$ 65,312	\$ 65,313	\$ 65,313	\$ 65,313	\$ 65,313	\$ 65,313	\$ -	\$ -	\$ -	
Net Increase (Decrease) in Pension Expense			\$ 65,312	\$ 65,312	\$ 65,312	\$ 65,313	\$ 65,313	\$ 65,313	\$ 65,313	\$ 65,313	\$ -	\$ -	\$ -	

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)	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
2015	\$ 1,408,146	11	\$ 128,014	\$ 128,013	\$ 128,013	\$ 128,013	\$ 128,013	\$ 128,013	\$ 128,013	\$ 128,013	\$ 128,013	\$ -	\$ -
2016	\$ (686,689)	9	\$ (76,298)	\$ (76,299)	\$ (76,299)	\$ (76,299)	\$ (76,299)	\$ (76,299)	\$ (76,299)	\$ (76,299)	\$ -	\$ -	\$ -
2017	\$ (1,417,628)	9	\$ (157,516)	\$ (157,514)	\$ (157,514)	\$ (157,514)	\$ (157,514)	\$ (157,514)	\$ (157,514)	\$ (157,514)	\$ (157,514)	\$ -	\$ -
2018	\$ 786,769	8	\$ -	\$ 98,347	\$ 98,346	\$ 98,346	\$ 98,346	\$ 98,346	\$ 98,346	\$ 98,346	\$ 98,346	\$ -	\$ -
Net Increase (Decrease) in Pension Expense			\$ (105,800)	\$ (7,453)	\$ (7,454)	\$ (7,454)	\$ (7,454)	\$ (7,454)	\$ (7,454)	\$ (7,454)	\$ 68,845	\$ -	\$ -