

CITY OF EDGEWATER  
POLICE RETIREMENT 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

March 7, 2019

Board of Trustees  
City of Edgewater  
Police Officers' Pension Board  
P.O. Box 100  
Edgewater, FL 33617

Re: City of Edgewater Police Retirement Plan

Dear Board:

We are pleased to present to the Board this report of the annual actuarial valuation of the City of Edgewater Police Retirement 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 185, 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 City of Edgewater, 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 meet the Qualification Standards of the American Academy of Actuaries necessary to render the actuarial opinions contained herein. All of the sections of this report are considered an integral part of the actuarial opinions.

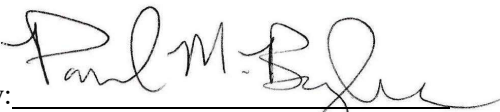
To our knowledge, no associate of Foster & Foster, Inc. working on valuations of the program has any direct financial interest or indirect material interest in the City of Edgewater, nor does anyone at Foster & Foster, Inc. act as a member of the Board of Trustees of the Police Retirement Plan. Thus, 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:   
Douglas H. Lozen, EA, MAAA

By:   
Paul M. Baugher, FSA, EA, MAAA

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SUMMARY OF REPORT

The regular annual actuarial valuation of the City of Edgewater Police Retirement 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 Applicable to Fiscal Year Ending	10/1/2018 <u>9/30/2020</u>	10/1/2017 <u>9/30/2019</u>
Minimum Required Contribution % of Projected Annual Payroll	60.1%	57.7%
Member Contributions (Est.) % of Projected Annual Payroll	6.0%	6.0%
City And State Required Contribution % of Projected Annual Payroll	54.1%	51.7%
State Contribution (Est.) <sup>1</sup> % of Projected Annual Payroll	\$0 0.0%	\$0 0.0%
City Required Contribution % of Projected Annual Payroll	54.1%	51.7%

<sup>1</sup> Per agreement between the Membership and City, all State Monies are allocated to the Share Plan established with Ordinance 2016-O-34.

As you can see, the Minimum Required Contribution shows an increase when compared to the results determined in the October 1, 2017 actuarial valuation report. The increase is primarily attributable to unfavorable plan experience realized by the plan during the year. Plan experience was unfavorable overall on the basis of the plan's actuarial assumptions. Sources of unfavorable experience included more retirements than expected, an investment return of 6.68% (Actuarial Asset Basis) which fell short of the 7.50% assumption, and less inactive mortality than expected. These losses were offset in part by gains associated with favorable turnover experience and an average salary increase of 5.43% which fell short of the 6.81% assumption.

## CHANGES SINCE PRIOR VALUATION

### Plan Changes

There have been no changes in benefits since the prior valuation.

### 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	51.7%
(2) Summary of Contribution Impact by component:	
Change in State Contribution Percentage	0.0%
Change in Normal Cost Rate	0.1%
Change in Administrative Expense Percentage	-0.3%
Payroll Change Effect on UAAL Amortization	1.2%
Investment Return (Actuarial Asset Basis)	0.7%
Salary Increases	-0.6%
Active Decrements	1.3%
Inactive Mortality	0.4%
Assumption Change	0.0%
Other	<u>-0.4%</u>
Total Change in Contribution	2.4%
(3) Contribution Determined as of October 1, 2018	54.1%

COMPARATIVE SUMMARY OF PRINCIPAL VALUATION RESULTS

	<u>10/1/2018</u>	<u>10/1/2017</u>
<b>A. Participant Data</b>		
Actives	28	28
Service Retirees	24	23
Beneficiaries	1	1
Disability Retirees	4	4
Terminated Vested	<u>14</u>	<u>10</u>
 Total	 71	 66
 Total Annual Payroll	 \$1,526,739	 \$1,578,352
Payroll Under Assumed Ret. Age	1,526,739	1,578,352
 Annual Rate of Payments to:		
Service Retirees	761,513	686,317
Beneficiaries	20,793	20,793
Disability Retirees	95,498	95,498
Terminated Vested	96,325	96,325
 <b>B. Assets</b>		
Actuarial Value (AVA) <sup>1</sup>	10,150,404	9,405,638
Market Value (MVA) <sup>1</sup>	10,313,580	9,463,990
 <b>C. Liabilities</b>		
Present Value of Benefits		
Actives		
Retirement Benefits	4,428,607	4,816,715
Disability Benefits	258,236	266,603
Death Benefits	21,925	24,166
Vested Benefits	221,263	244,051
Refund of Contributions	43,247	41,753
Accumulated Leave	155,001	168,585
Service Retirees	8,780,188	7,903,503
Beneficiaries	252,659	254,488
Disability Retirees	1,207,915	1,214,655
Terminated Vested	956,199	884,928
Share Plan Balances <sup>1</sup>	<u>449,675</u>	<u>299,469</u>
 Total	 16,774,915	 16,118,916



C. Liabilities - (Continued)	<u>10/1/2018</u>	<u>10/1/2017</u>
Present Value of Future Salaries	12,418,118	12,239,035
Present Value of Future Member Contributions	745,087	734,342
Normal Cost (Retirement)	199,044	203,577
Normal Cost (Disability)	17,218	18,305
Normal Cost (Death)	1,086	1,191
Normal Cost (Vesting)	24,810	27,955
Normal Cost (Refunds)	<u>13,953</u>	<u>11,433</u>
Total Normal Cost	256,111	262,461
Present Value of Future Normal Costs	2,052,591	2,038,944
Accrued Liability (Retirement)	2,803,027	3,225,565
Accrued Liability (Disability)	118,462	125,435
Accrued Liability (Death)	13,390	15,202
Accrued Liability (Vesting)	127,009	143,946
Accrued Liability (Refunds)	13,800	12,781
Accrued Liability (Inactives)	11,196,961	10,257,574
Share Plan Balances <sup>1</sup>	<u>449,675</u>	<u>299,469</u>
Total Actuarial Accrued Liability (EAN AL)	14,722,324	14,079,972
Unfunded Actuarial Accrued Liability (UAAL)	4,571,920	4,674,334
Funded Ratio (AVA / EAN AL)	68.9%	66.8%

D. Actuarial Present Value of Accrued Benefits	<u>10/1/2018</u>	<u>10/1/2017</u>
Vested Accrued Benefits		
Inactives + Share Plan Balances <sup>1</sup>	11,646,636	10,557,043
Actives	459,351	776,382
Member Contributions	<u>457,003</u>	<u>486,817</u>
Total	12,562,990	11,820,242
Non-vested Accrued Benefits	<u>706,296</u>	<u>852,958</u>
Total Present Value Accrued Benefits (PVAB)	13,269,286	12,673,200
Funded Ratio (MVA / PVAB)	77.7%	74.7%
Increase (Decrease) in Present Value of Accrued Benefits Attributable to:		
Plan Amendments	0	
Assumption Changes	0	
New Accrued Benefits	545,343	
Benefits Paid	(867,226)	
Interest	917,969	
Other	<u>0</u>	
Total	596,086	

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 <sup>2</sup>	17.4	17.3
Administrative Expenses (with interest) % of Total Annual Payroll <sup>2</sup>	3.5	3.8
Payment Required to Amortize Unfunded Actuarial Accrued Liability over 20 years (as of 10/1/2018, with interest) % of Total Annual Payroll <sup>2</sup>	39.2	36.6
Minimum Required Contribution % of Total Annual Payroll <sup>2</sup>	60.1	57.7
Expected Member Contributions % of Total Annual Payroll <sup>2</sup>	6.0	6.0
Expected City and State Contribution % of Total Annual Payroll <sup>2</sup>	54.1	51.7

F. Past Contributions

Plan Years Ending:	<u>9/30/2018</u>
Total Required Contribution	867,577
City and State Requirement	777,361
Actual Contributions Made:	
Members (excluding buyback)	90,216
City	777,360
State	<u>0</u>
Total	867,576

G. Net Actuarial (Gain)/Loss 112,573

<sup>1</sup> The asset values and liabilities include accumulated Share Plan Balances as of 9/30/2018 and 9/30/2017.

<sup>2</sup> Contributions developed as of 10/1/2018 are expressed as a percentage of total annual payroll at 10/1/2018 of \$1,526,739.

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	4,571,920
2019	4,294,639
2020	4,005,514
2024	2,713,221
2028	1,138,929
2032	98,134
2036	0

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

	<u>Actual</u>	<u>Assumed</u>
Year Ended 9/30/2018	5.43%	6.81%
Year Ended 9/30/2017	5.66%	6.80%
Year Ended 9/30/2016	6.57%	6.74%
Year Ended 9/30/2015	9.44%	6.77%
Year Ended 9/30/2014	6.58%	6.40%

(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	7.78%	6.68%	7.50%
Year Ended 9/30/2017	11.26%	6.85%	7.50%
Year Ended 9/30/2016	7.05%	6.71%	7.50%
Year Ended 9/30/2015	-0.19%	9.90%	7.50%
Year Ended 9/30/2014	10.40%	10.32%	7.50%

(iii) Average Annual Payroll Growth

(a) Payroll as of:	10/1/2018	\$1,526,739
	10/1/2008	1,032,166
(b) Total Increase		47.92%
(c) Number of Years		10.00
(d) Average Annual Rate		3.99%

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.



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Douglas H. Lozen, EA, MAAA  
Enrolled Actuary #17-7778

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	\$4,674,334
(2) Sponsor Normal Cost developed as of October 1, 2017	167,760
(3) Expected administrative expenses for the year ended September 30, 2018	58,416
(4) Expected interest on (1), (2) and (3)	365,348
(5) Sponsor contributions to the System during the year ended September 30, 2018	777,360
(6) Expected interest on (5)	29,151
(7) Expected Unfunded Actuarial Accrued Liability as of September 30, 2018 (1)+(2)+(3)+(4)-(5)-(6)	4,459,347
(8) Change to UAAL due to Assumption Change	0
(9) Change to UAAL due to Actuarial (Gain)/Loss	112,573
(10) Unfunded Actuarial Accrued Liability as of October 1, 2018	4,571,920

Type of <u>Base</u>	Date <u>Established</u>	Years <u>Remaining</u>	10/1/2018 <u>Amount</u>	Amortization <u>Amount</u>
Benefit Change	10/1/1989	1	2,934	2,934
Benefit Change	10/1/1989	1	5,393	5,393
Benefit Change	10/1/1990	2	26,353	13,653
Benefit Change	10/1/1999	11	844,732	107,416
Benefit Change	10/1/2003	15	129,807	13,680
Method Change	10/1/2011	13	2,484,277	284,396
Assump Change	10/1/2011	13	91,399	10,463
Experience Loss	10/1/2012	4	26,130	7,257
Experience Loss	10/1/2013	5	65,151	14,980
Experience Gain	10/1/2014	6	(87,147)	(17,271)
Experience Loss	10/1/2015	7	73,327	12,878
Experience Loss	10/1/2016	8	145,089	23,042
Assump Change	10/1/2016	18	244,771	23,459
Experience Loss	10/1/2017	9	407,131	59,372
Experience Loss	10/1/2018	10	<u>112,573</u>	<u>15,256</u>
			4,571,920	576,908

DETAILED ACTUARIAL (GAIN)/LOSS ANALYSIS

(1) Unfunded Actuarial Accrued Liability (UAAL) as of October 1, 2017	\$4,674,334
(2) Expected UAAL as of October 1, 2018	4,459,347
(3) Summary of Actuarial (Gain)/Loss, by component:	
Investment Return (Actuarial Asset Basis)	77,639
Salary Increases	(61,495)
Active Decrements	139,083
Inactive Mortality	46,411
Other	<u>(89,065)</u>
Increase in UAAL due to (Gain)/Loss	112,573
Assumption Changes	<u>0</u>
(4) Actual UAAL as of October 1, 2018	\$4,571,920

## 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

7.50% 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

<b>Credited Service</b>	<b>Assumption</b>
Less than 10 Years	7.50%
10 Years and Greater	4.20%

This assumption was adopted based on the September 12, 2013 experience study.

### Administrative Expenses

\$50,878 annually, based on actual expenses incurred in the prior fiscal year.



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.

Normal Retirement

<b>Years Eligible for Normal Retirement</b>	<b>Retirement Probability</b>
0	50%
1	0%
2	33%
3	60%
4	60%
5	60%
6 and greater	100%

It is assumed that no one works past age 58 if they are eligible to retire. The retirement assumptions were adopted based on the September 12, 2013 experience study.

Early Retirement

None assumed. This assumption is based on results of the September 12, 2013 experience study.

Termination Rates

<b>Credited Service</b>	<b>Assumption</b>
Less than 5 Years	18%
5-9 Years	14%
10 Years and Greater	0%

This assumption was adopted based on the September 12, 2013 experience study.

Disability Rates

<b>Age</b>	<b>Assumption</b>
40	0.33%
45	0.57%
50	1.09 %
55	1.69%

80% of disablements are assumed to be service-related. This assumption is based on results of the September 12, 2013 experience study.

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 four-year period.

## 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 a liability which arises when a pension plan is initially established or improved and such establishment or improvement is applicable to all years of past service. Under the Entry Age Normal Actuarial Cost Method, there is also a new UAAL created each year equal to the actuarial gain or loss for that year.

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

<u>Received During Fiscal Year</u>	<u>Amount</u>	<u>Increase from Previous Year</u>
1998	62,640.03	_____%
1999	73,930.98	18.0%
2000	66,743.47	-9.7%
2001	70,794.89	6.1%
2002	83,308.98	17.7%
2003	94,334.37	13.2%
2004	108,374.65	14.9%
2005	114,652.41	5.8%
2006	119,224.68	4.0%
2007	126,824.09	6.4%
2008	126,189.05	-0.5%
2009	131,228.05	4.0%
2010	125,155.52	-4.6%
2011	125,638.65	0.4%
2012	122,039.14	-2.9%
2013	121,374.86	-0.5%
2014	125,386.65	3.3%
2015	127,668.11	1.8%
2016	138,244.76	8.3%
2017	147,326.57	6.6%
2018	163,282.12	10.8%

STATEMENT OF FIDUCIARY NET POSITION  
SEPTEMBER 30, 2018

<u>ASSETS</u>	COST VALUE	MARKET VALUE
Cash and Cash Equivalents:		
Short Term Investments	359,009.26	359,009.26
Total Cash and Equivalents	359,009.26	359,009.26
Receivables:		
Investment Income	27,949.30	27,949.30
Total Receivable	27,949.30	27,949.30
Investments:		
U. S. Bonds and Bills	304,587.31	299,333.60
Federal Agency Guaranteed Securities	716,677.61	701,328.41
Corporate Bonds	1,829,838.09	1,759,427.91
Municipal Obligations	60,000.00	59,591.40
Mutual Funds:		
Equity	4,675,909.55	6,097,826.83
Pooled/Common/Commingled Funds:		
Real Estate	1,012,189.21	1,019,111.66
Total Investments	8,599,201.77	9,936,619.81
Total Assets	8,986,160.33	10,323,578.37
 <u>LIABILITIES</u>		
Payables:		
Investment Expenses	8,047.28	8,047.28
Administrative Expenses	1,950.87	1,950.87
Total Liabilities	9,998.15	9,998.15
NET POSITION RESTRICTED FOR PENSIONS	8,976,162.18	10,313,580.22

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

ADDITIONS

Contributions:		
Member		90,216.01
City		777,360.26
State		163,282.12
Total Contributions		1,030,858.39
Investment Income:		
Net Realized Gain (Loss)	(94,755.76)	
Unrealized Gain (Loss)	512,137.23	
Net Increase in Fair Value of Investments		417,381.47
Interest & Dividends		358,272.84
Less Investment Expense <sup>1</sup>		(38,818.39)
Net Investment Income		736,835.92
Total Additions		1,767,694.31

DEDUCTIONS

Distributions to Members:		
Benefit Payments		821,471.90
Lump Sum DROP Distributions		0.00
Lump Sum Share Distributions		43,725.42
Refunds of Member Contributions		2,028.75
Total Distributions		867,226.07
Administrative Expense		50,878.27
Total Deductions		918,104.34
Net Increase in Net Position		849,589.97
NET POSITION RESTRICTED FOR PENSIONS		
Beginning of the Year		9,463,990.25
End of the Year		10,313,580.22

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

ACTUARIAL ASSET VALUATION  
September 30, 2018

Actuarial Assets for funding purposes are developed by recognizing the total actuarial investment gain or loss for each Plan Year over a four year period. In the first year, 25% of the gain or loss is recognized. In the second year 50%, in the third year 75%, and in the fourth 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			
		2018	2019	2020	2021
09/30/2015	(624,785)	0	0	0	0
09/30/2016	(36,452)	(9,113)	0	0	0
09/30/2017	310,367	155,183	77,591	0	0
09/30/2018	22,808	17,106	11,404	5,702	0
<b>Total</b>		<b>163,176</b>	<b>88,995</b>	<b>5,702</b>	<b>0</b>

<u>Development of Investment Gain/Loss</u>	
Actual Return Net of Investment Expenses	736,836
Expected Investment Earnings*	714,028
2018 Actuarial Investment Gain/(Loss)	<u>22,808</u>

\*Expected Investment Earnings = 0.075 \* (9,463,990 + 0.5 \* 112,754)

<u>Development of Actuarial Value of Assets</u>	
(1) Market Value of Assets, 09/30/2018	10,313,580
(2) Gains/(Losses) Not Yet Recognized	163,176
(3) Actuarial Value of Assets, 09/30/2018, (1) - (2)	<u>10,150,404</u>
(A) 09/30/2017 Actuarial Assets:	9,405,638
(I) Net Investment Income:	
1. Interest and Dividends	358,272.84
2. Realized Gains (Losses)	(94,755.76)
2. Change in Actuarial Value	407,313.23
3. Investment Expenses	(38,818.39)
Total	<u>632,011.92</u>
(B) 09/30/2018 Actuarial Assets:	10,150,404
Actuarial Assets Rate of Return = 2I/(A+B-I)	6.68%
Market Value of Assets Rate of Return:	7.78%
Actuarial Gain/(Loss) due to Investment Return (Actuarial Asset Basis)	(77,639)
10/01/2018 Limited Actuarial Assets:	10,150,404

CHANGES IN NET ASSETS AVAILABLE FOR BENEFITS  
 SEPTEMBER 30, 2018  
 Actuarial Asset Basis

REVENUES

Contributions:		
Member	90,216.01	
City	777,360.26	
State	163,282.12	
<b>Total Contributions</b>		<b>1,030,858.39</b>
Earnings from Investments:		
Interest & Dividends	358,272.84	
Miscellaneous Income	0.00	
Net Realized Gain (Loss)	(94,755.76)	
Change in Actuarial Value	407,313.23	
<b>Total Earnings and Investment Gains</b>		<b>670,830.31</b>

EXPENDITURES

Distributions to Members:		
Benefit Payments	821,471.90	
Lump Sum DROP Distributions	0.00	
Lump Sum Share Distributions	43,725.42	
Refunds of Member Contributions	2,028.75	
<b>Total Distributions</b>		<b>867,226.07</b>
Expenses:		
Investment related <sup>1</sup>	38,818.39	
Administrative	50,878.27	
<b>Total Expenses</b>		<b>89,696.66</b>
<b>Change in Net Assets for the Year</b>		<b>744,765.97</b>
<b>Net Assets Beginning of the Year</b>		<b>9,405,638.25</b>
<b>Net Assets End of the Year<sup>2</sup></b>		<b>10,150,404.22</b>

<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.



SUPPLEMENTAL CHAPTER 185 SHARE PLAN ACTIVITY  
October 1, 2017 through September 30, 2018

9/30/2017 Balance	299,469
Prior Year Adjustment	6,820
Plus Additions	163,282
Investment Return Earned (est.)	23,829
Administrative Fees	0
Less Distributions	(43,725)
9/30/2018 Balance (est.)	449,675

## 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	27	27	28	28
Average Current Age	34.0	32.7	33.4	32.5
Average Age at Employment	28.1	27.1	27.1	26.6
Average Past Service	5.9	5.6	6.3	5.9
Average Annual Salary	\$53,895	\$54,177	\$56,370	\$54,526
<u>Service Retirees</u>				
Number	22	23	23	24
Average Current Age	58.9	59.5	60.5	61.2
Average Annual Benefit	\$29,348	\$29,840	\$29,840	\$31,730
<u>Beneficiaries</u>				
Number	1	1	1	1
Average Current Age	50.6	51.6	52.6	53.6
Average Annual Benefit	\$20,793	\$20,793	\$20,793	\$20,793
<u>Disability Retirees</u>				
Number	1	2	4	4
Average Current Age	53.1	44.2	45.5	46.5
Average Annual Benefit	\$28,580	\$25,691	\$23,875	\$23,875
<u>Terminated Vested</u>				
Number	9	12	10	14
Average Current Age <sup>1</sup>	45.8	46.8	48.2	49.2
Average Annual Benefit <sup>2</sup>	\$9,446	\$10,445	\$9,633	\$9,633

<sup>1</sup> The Average Current Age excludes participants awaiting a refund of contributions.

<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	3	0	1	0	0	0	0	0	0	0	0	4
25 - 29	0	1	2	2	1	1	0	0	0	0	0	7
30 - 34	0	0	0	2	2	0	1	0	0	0	0	5
35 - 39	0	0	0	0	0	2	2	1	0	0	0	5
40 - 44	1	0	1	0	0	2	2	0	0	0	0	6
45 - 49	0	0	0	0	0	0	0	0	1	0	0	1
50 - 54	0	0	0	0	0	0	0	0	0	0	0	0
55 - 59	0	0	0	0	0	0	0	0	0	0	0	0
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	4	1	4	4	3	5	5	1	1	0	0	28

## VALUATION PARTICIPANT RECONCILIATION

### 1. Active lives

a. Number in prior valuation 10/1/2017	28
b. Terminations	
i. Vested (partial or full) with deferred benefits	(3)
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	(1)
f. Continuing participants	24
g. New entrants	<u>4</u>
h. Total active life participants in valuation	28

### 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>	<u>Vested Deferred</u>	<u>Total</u>
a. Number prior valuation	23	1	4	10	38
Retired	1	0	0	0	1
Vested Deferred	0	0	0	4	4
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	0	0
Rehires	0	0	0	0	0
Expired Annuities	0	0	0	0	0
Data Corrections	0	0	0	0	0
b. Number current valuation	24	1	4	14	43

SUMMARY OF CURRENT PLAN  
(Through Ordinance 2017-O-21)

<u>Eligibility</u>	Full-time police officers shall participate in the system as a condition of employment.
<u>Salary</u>	Total Compensation.
<u>Average Final Compensation (AFC)</u>	Average Salary for the highest 3 years during the 5 years immediately preceding retirement or termination.
<u>Credited Service</u>	Total years and fractional parts of years of service with the City as a Police Officer.
<u>Member Contributions</u>	6.00% of Salary.
<u>City and State Contributions</u>	Remaining amount necessary to pay current costs and amortize past service cost, if any, as provided in Part VII of Florida Statutes, Chapter 112.
<u>Normal Retirement</u>	
Date	The earlier of: 1) age 55 and the completion of 5 years of Credited Service, or 2) the completion of 20 years of Credited Service, regardless of age.
Benefit	2.00% of Average Final Compensation times Credited Service as of 10/1/1987 plus 3.00% of Average Final Compensation times Credited Service after 10/1/1987.
Form of Benefit	Ten Year Certain and Life Annuity (options available).
<u>Early Retirement</u>	
Date	Age 50 and 5 years of Credited Service.
Benefit	Determined as for Normal Retirement and reduced 3.00% for each year that Early Retirement precedes Normal Retirement.
<u>Disability Benefit</u>	
Eligibility	
Service Incurred	Covered from Date of Employment.
Non-Service Incurred	5 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. Minimum benefit for Service Incurred is 42% of AFC, for Non-Service Incurred is 25% of AFC.
Duration	Payable for life (with 120 monthly payments guaranteed), or until recovery (as determined by the Board).

Death Benefits

Pre-Retirement

Vested	A monthly benefit determined assuming the participant terminated employment on his date of death, survived to his earliest retirement date, elected a 100% qualified joint and survivor annuity and then died the next day.
--------	---

Not Vested	Refund of accumulated contributions without interest.
------------	---

Post-Retirement	According to optional form of benefit selected.
-----------------	---

Termination of Employment

Benefit

Less than 5 years	Refund of accumulated contributions without interest.
-------------------	---

5 or more	Refund of Contributions or Accrued benefit payable at retirement age.
-----------	---

Board of Trustees

- a. Two Council appointees,
- b. Two Members of the Department elected by the membership, and
- c. Fifth Member elected by the other 4 and appointed by Council.

Deferred Retirement Option Plan

Eligibility	Eligibility for Normal Retirement.
-------------	------------------------------------

Participation	Not to exceed 60 months.
---------------	--------------------------

Rate of Return	Actual net rate of investment return (total return net of brokerage commissions, management fees and transaction costs) credited each fiscal quarter.
----------------	---

Form of Distribution	Cash lump sum at termination of employment.
----------------------	---

Chapter 185 Share Plan

Established with Ordinance 2016-11-14. By way of Mutual Consent under Chapter 2015-39, Laws of Florida, all Chapter 185 Premium Tax Monies are allocated to a Share Plan for the active Membership, beginning with the fiscal year ended September 30, 2016.

STATEMENT OF FIDUCIARY NET POSITION  
SEPTEMBER 30, 2018

<u>ASSETS</u>	MARKET VALUE
Cash and Cash Equivalents:	
Short Term Investments	359,009
Total Cash and Equivalents	359,009
Receivables:	
Investment Income	27,949
Total Receivable	27,949
Investments:	
U. S. Bonds and Bills	299,334
Federal Agency Guaranteed Securities	701,328
Corporate Bonds	1,759,428
Municipal Obligations	59,591
Mutual Funds:	
Equity	6,097,827
Real Estate	1,019,112
Total Investments	9,936,620
Total Assets	10,323,578
<u>LIABILITIES</u>	
Payables:	
Investment Expenses	8,047
Administrative Expenses	1,951
Total Liabilities	9,998
NET POSITION RESTRICTED FOR PENSIONS	10,313,580



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

ADDITIONS

## Contributions:

Member	86,174	
City	777,360	
State	163,282	
 Total Contributions		 1,026,816
 Investment Income:		
Net Increase in Fair Value of Investments	417,381	
Interest & Dividends	358,273	
Less Investment Expense <sup>1</sup>	(38,818)	
 Net Investment Income		 736,836
 Total Additions		 1,763,652

DEDUCTIONS

## Distributions to Members:

Benefit Payments	821,472	
Lump Sum DROP Distributions	0	
Lump Sum Share Distributions	43,725	
Refunds of Member Contributions	2,029	
 Total Distributions		 867,226
 Administrative Expense		 50,878
 Total Deductions		 918,104
 Net Increase in Net Position		 845,548

## NET POSITION RESTRICTED FOR PENSIONS

Beginning of the Year		9,468,032
 End of the Year		 10,313,580

<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, 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:

- a. Two Council appointees,
- b. Two Members of the Department elected by the membership, and
- c. Fifth Member elected by the other 4 and appointed by Council.

*Plan Membership as of October 1, 2017:*

Inactive Plan Members or Beneficiaries Currently Receiving Benefits	28
Inactive Plan Members Entitled to But Not Yet Receiving Benefits	10
Active Plan Members	28
	66
	66

*Benefits Provided*

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

Normal Retirement:

Date: The earlier of: 1) age 55 and the completion of 5 years of Credited Service, or 2) the completion of 20 years of Credited Service, regardless of age.

Benefit: 2.00% of Average Final Compensation times Credited Service as of 10/1/1987 plus 3.00% of Average Final Compensation times Credited Service after 10/1/1987.

Early Retirement:

Date: Age 50 and 5 years of Credited Service.

Benefit: Determined as for Normal Retirement and reduced 3.00% for each year that Early Retirement precedes Normal Retirement.

Disability:

Eligibility: Service Incurred: Covered from Date of Employment.

Non-Service Incurred: 5 years of Credited Service.

Benefit: Benefit accrued to date of disability. Minimum benefit for Service Incurred is 42% of AFC, for Non-Service Incurred is 25% of AFC.

Pre-Retirement Death Benefits:

Vested: A monthly benefit determined assuming the participant terminated employment on his date of death, survived to his earliest retirement date, elected a 100% qualified joint and survivor annuity and then died the next day.

Not Vested: Refund of accumulated contributions without interest.

Termination of Employment:

Benefit Less than 5 years: Refund of accumulated contributions without interest.

5 or more: Refund of Contributions or Accrued benefit payable at retirement age.

Chapter 185 Share Plan:

Established with Ordinance 2016-11-14. By way of Mutual Consent under Chapter 2015-39, Laws of Florida, all Chapter 185 Premium Tax Monies are allocated to a Share Plan for the active Membership, beginning with the fiscal year ended September 30, 2016.

*Contributions*

Member Contributions: 6.00% of Salary.

City and State Contributions: Remaining amount necessary for payment of Normal (current year's) Cost and amortization of the accrued past service liability as provided for in Part VII in Chapter 112, Florida Statutes.

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	45.0%
International Equity	15.0%
Domestic Fixed Income	25.0%
Global Fixed Income	5.0%
Real Estate	10.0%
Total	100.0%

*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 7.78 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: Eligibility for Normal Retirement.

Participation: Not to exceed 60 months.

Rate of Return: Actual net rate of investment return (total return net of brokerage commissions, management fees and transaction costs) credited each fiscal quarter.

The DROP balance as September 30, 2018 is \$0.

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	\$ 14,479,950
Plan Fiduciary Net Position	\$ (10,313,580)
Sponsor's Net Pension Liability	<u>\$ 4,166,370</u>
Plan Fiduciary Net Position as a percentage of Total Pension Liability	<u>71.23%</u>

*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	2.50%
Salary Increases	4.20% - 7.50%
Discount Rate	7.50%
Investment Rate of Return	7.50%

*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 September 13, 2013.

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:

<u>Asset Class</u>	<u>Long Term Expected Real Rate of Return</u>
Domestic Equity	7.5%
International Equity	8.5%
Domestic Fixed Income	2.5%
Global Fixed Income	3.5%
Real Estate	4.5%

## GASB 67

### 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 Discount Rate	1% Increase
	6.50%	7.50%	8.50%
Sponsor's Net Pension Liability	\$ 5,886,603	\$ 4,166,370	\$ 2,744,634

**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			
Prior Period Adjustment	-	-	-
Service Cost	264,098	241,471	248,453
Interest	989,631	939,389	874,946
Share Plan Allocation	163,282	147,327	138,245
Changes of benefit terms	-	-	-
Differences between Expected and Actual Experience	565,564	148,378	230,533
Changes of assumptions	-	-	244,939
Benefit Payments, including Refunds of Employee Contributions	(867,226)	(791,362)	(950,417)
Net Change in Total Pension Liability	1,115,349	685,203	786,699
Total Pension Liability - Beginning	13,364,601	12,679,398	11,892,699
Total Pension Liability - Ending (a)	<u>\$ 14,479,950</u>	<u>\$ 13,364,601</u>	<u>\$ 12,679,398</u>
Plan Fiduciary Net Position			
Contributions - Employer	777,360	578,155	621,470
Contributions - State	163,282	147,327	138,245
Contributions - Employee	86,174	96,436	84,939
Net Investment Income	736,836	950,106	568,335
Benefit Payments, including Refunds of Employee Contributions	(867,226)	(791,362)	(950,417)
Administrative Expense	(50,878)	(58,416)	(67,029)
Net Change in Plan Fiduciary Net Position	845,548	922,246	395,543
Plan Fiduciary Net Position - Beginning	9,468,032	8,545,786	8,150,243
Plan Fiduciary Net Position - Ending (b)	<u>\$ 10,313,580</u>	<u>\$ 9,468,032</u>	<u>\$ 8,545,786</u>
Net Pension Liability - Ending (a) - (b)	<u>\$ 4,166,370</u>	<u>\$ 3,896,569</u>	<u>\$ 4,133,612</u>
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	71.23%	70.84%	67.40%
Covered Payroll <sup>1</sup>	\$ 1,503,600	\$ 1,539,919	\$ 1,415,650
Net Pension Liability as a percentage of Covered Payroll	277.09%	253.04%	291.99%

**Notes to Schedule:**

<sup>1</sup> The Covered Payroll numbers shown are in compliance with GASB 82, except for the 09/30/2015 measurement period which includes DROP payroll.

*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 2.50%, 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	09/30/2013
Total Pension Liability			
Prior Period Adjustment	-	(386,259)	-
Service Cost	209,572	206,976	192,536
Interest	855,433	859,397	836,080
Share Plan Allocation	-	-	-
Changes of benefit terms	-	-	-
Differences between Expected and Actual Experience	(19,907)	-	-
Changes of assumptions	-	-	-
Benefit Payments, including Refunds of Employee Contributions	(697,208)	(773,904)	(690,444)
Net Change in Total Pension Liability	347,890	(93,790)	338,172
Total Pension Liability - Beginning	11,544,809	11,638,599	11,300,427
Total Pension Liability - Ending (a)	<u>\$ 11,892,699</u>	<u>\$ 11,544,809</u>	<u>\$ 11,638,599</u>
Plan Fiduciary Net Position			
Contributions - Employer	618,054	534,795	768,448
Contributions - State	127,668	125,387	121,375
Contributions - Employee	79,610	76,054	70,431
Net Investment Income	(15,324)	759,444	769,004
Benefit Payments, including Refunds of Employee Contributions	(697,208)	(773,904)	(690,444)
Administrative Expense	(49,324)	(36,404)	(82,988)
Net Change in Plan Fiduciary Net Position	63,476	685,372	955,826
Plan Fiduciary Net Position - Beginning	8,086,767	7,401,395	6,445,569
Plan Fiduciary Net Position - Ending (b)	<u>\$ 8,150,243</u>	<u>\$ 8,086,767</u>	<u>\$ 7,401,395</u>
Net Pension Liability - Ending (a) - (b)	<u>\$ 3,742,456</u>	<u>\$ 3,458,042</u>	<u>\$ 4,237,204</u>
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	68.53%	70.05%	63.59%
Covered Payroll <sup>1</sup>	\$ 1,396,624	\$ 1,267,568	\$ 1,173,844
Net Pension Liability as a percentage of Covered Payroll	267.96%	272.81%	360.97%

**Notes to Schedule:**

<sup>1</sup> The Covered Payroll numbers shown are in compliance with GASB 82, except for the 09/30/2015 measurement period which includes DROP payroll.

**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 Payroll <sup>1</sup>	Contributions as a percentage of Covered Payroll
09/30/2018	\$ 777,361	\$ 777,360	\$ 1	\$ 1,503,600	51.70%
09/30/2017	\$ 742,241	\$ 578,155	\$ 164,086	\$ 1,539,919	37.54%
09/30/2016	\$ 746,047	\$ 621,470	\$ 124,577	\$ 1,415,650	43.90%
09/30/2015	\$ 768,235	\$ 745,722	\$ 22,513	\$ 1,396,624	53.39%
09/30/2014	\$ 766,878	\$ 660,182	\$ 106,696	\$ 1,267,568	52.08%
09/30/2013	\$ 874,513	\$ 768,448	\$ 106,065	\$ 1,173,844	65.46%

<sup>1</sup> The Covered Payroll numbers shown are in compliance with GASB 82, except for the 09/30/2015 measurement period which includes DROP payroll.

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 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.

*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 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.

Interest Rate:

7.50% per year compounded annually, net of investment related expenses. This assumption is supported by the Plan's investment policy and long-term expected returns by asset class.



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Retirement Age:

Years Eligible for Normal Retirement	Retirement Probability
0	50%
1	0%
2	33%
3	60%
4	60%
5	60%
6 and greater	100%

It is assumed that no one works past age 58 if they are eligible to retire. This assumption was adopted based on the September 12, 2013 experiences study.

Early Retirement:

None assumed.

Salary Increases:

Credited Service	Assumption
Less than 10 Years	7.50%
10 Years or Greater	4.20%

This assumption was adopted based on the September 12, 2013 experience study. Level dollar.

Amortization Method:

Funding Method:

Actuarial Asset Method:

Entry Age Normal Actuarial Cost 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 four-year period.

Termination Rates:

Credited Service	Assumption
Less than 5 Years	18%
5-9 Years	14%
10 Years and Greater	0%

This assumption was adopted based on the September 12, 2013 experience study. See sample rates below; 80% of disablements are assumed to be service-related.

Disability Rates:

Age	% Becoming Disabled During the Year
40	0.33%
45	0.56%
50	1.09%
55	1.69%

**SCHEDULE OF INVESTMENT RETURNS**  
Last 10 Fiscal Years

Fiscal Year Ended	Annual Money-Weighted Rate of Return Net of Investment Expense
09/30/2018	7.78%
09/30/2017	11.26%
09/30/2016	7.05%
09/30/2015	-0.19%
09/30/2014	10.40%
09/30/2013	10.40%

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:

- a. Two Council appointees,
- b. Two Members of the Department elected by the membership, and
- c. Fifth Member elected by the other 4 and appointed by Council.

Full-time police officers shall participate in the system as a condition of employment.

*Plan Membership as of October 1, 2017:*

Inactive Plan Members or Beneficiaries Currently Receiving Benefits	28
Inactive Plan Members Entitled to But Not Yet Receiving Benefits	10
Active Plan Members	28
	66
	66

*Benefits Provided*

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

Normal Retirement:

Date: The earlier of: 1) age 55 and the completion of 5 years of Credited Service, or 2) the completion of 20 years of Credited Service, regardless of age.

Benefit: 2.00% of Average Final Compensation times Credited Service as of 10/1/1987 plus 3.00% of Average Final Compensation times Credited Service after 10/1/1987.

Early Retirement:

Date: Age 50 and 5 years of Credited Service.

Benefit: Determined as for Normal Retirement and reduced 3.00% for each year that Early Retirement precedes Normal Retirement.

Disability:

Eligibility: Service Incurred: Covered from Date of Employment.

Benefit: Benefit accrued to date of disability. Minimum benefit for Service Incurred is 42% of AFC, for Non-Service Incurred is 25% of AFC.

Pre-Retirement Death Benefits:

Vested: A monthly benefit determined assuming the participant terminated employment on his date of death, survived to his earliest retirement date, elected a 100% qualified joint and survivor annuity and then died the next day.

Not Vested: Refund of accumulated contributions without interest.

Termination of Employment:

Benefit Less than 5 years: Refund of accumulated contributions without interest.

5 or more: Refund of Contributions or Accrued benefit payable at retirement age.

Chapter 185 Share Plan:

Established with Ordinance 2016-11-14. By way of Mutual Consent under Chapter 2015-39, Laws of Florida, all Chapter 185 Premium Tax Monies are allocated to a Share Plan for the active Membership, beginning with the fiscal year ended September 30, 2016.

*Contributions*

Member Contributions: 6.00% of Salary.

City and State Contributions: Remaining amount necessary for payment of Normal (current year's) Cost and amortization of the accrued past service liability as provided for in Part VII in Chapter 112, Florida Statutes.

## GASB 68

### 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	2.50%
Salary Increases	4.20% - 7.50%
Discount Rate	7.50%
Investment Rate of Return	7.50%

#### *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 September 13, 2013.

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:

<u>Asset Class</u>	<u>Target Allocation</u>	<u>Long Term Expected Real Rate of Return</u>
Domestic Equity	45.0%	7.5%
International Equity	15.0%	8.5%
Domestic Fixed Income	25.0%	2.5%
Global Fixed Income	5.0%	3.5%
Real Estate	10.0%	4.5%
<u>Total</u>	<u>100.0%</u>	

## GASB 68

### 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 September 30, 2018	\$ 13,364,601	\$ 9,468,032	\$ 3,896,569
Changes for a Year:			
Service Cost	264,098	-	264,098
Interest	989,631	-	989,631
Share Plan Allocation	163,282	-	163,282
Differences between Expected and Actual Experience	565,564	-	565,564
Changes of assumptions	-	-	-
Changes of benefit terms	-	-	-
Contributions - Employer	-	777,360	(777,360)
Contributions - State	-	163,282	(163,282)
Contributions - Employee	-	86,174	(86,174)
Net Investment Income	-	736,836	(736,836)
Benefit Payments, including Refunds of Employee Contributions	(867,226)	(867,226)	-
Administrative Expense	-	(50,878)	50,878
Net Changes	1,115,349	845,548	269,801
Reporting Period Ending September 30, 2019	\$ 14,479,950	\$ 10,313,580	\$ 4,166,370

*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	\$ 5,886,603	\$ 4,166,370	\$ 2,744,634

*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 \$774,326.

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	226,551	4,977
Changes of assumptions	122,470	-
Net difference between Projected and Actual Earnings on Pension Plan investments	-	17,808
Employer and State contributions subsequent to the measurement date	940,642	-
<b>Total</b>	<b>\$ 1,289,663</b>	<b>\$ 22,785</b>

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, 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	\$	179,768
2020	\$	226,168
2021	\$	(17,657)
2022	\$	(62,043)
2023	\$	-
Thereafter	\$	-

**Payable to the Pension Plan**

On September 30, 2017, the Sponsor reported a payable of \$21,934 for the outstanding amount of contributions of the Pension Plan required for the year ended September 30, 2017.

**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 \$984,162.

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	555,996	-
Changes of assumptions	61,235	-
Net difference between Projected and Actual Earnings on Pension Plan investments	-	64,714
Employer and State contributions subsequent to the measurement date	TBD	-
<b>Total</b>	<b>TBD</b>	<b>\$ 64,714</b>

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	\$	363,028
2021	\$	119,203
2022	\$	74,817
2023	\$	(4,531)
2024	\$	-
Thereafter	\$	-



**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			
Prior Period Adjustment	-	-	-
Service Cost	264,098	241,471	248,453
Interest	989,631	939,389	874,946
Share Plan Allocation	163,282	147,327	138,245
Changes of benefit terms	-	-	-
Differences between Expected and Actual Experience	565,564	148,378	230,533
Changes of assumptions	-	-	244,939
Benefit Payments, including Refunds of Employee Contributions	(867,226)	(791,362)	(950,417)
Net Change in Total Pension Liability	1,115,349	685,203	786,699
Total Pension Liability - Beginning	13,364,601	12,679,398	11,892,699
Total Pension Liability - Ending (a)	<u>\$ 14,479,950</u>	<u>\$ 13,364,601</u>	<u>\$ 12,679,398</u>
Plan Fiduciary Net Position			
Contributions - Employer	777,360	578,155	621,470
Contributions - State	163,282	147,327	138,245
Contributions - Employee	86,174	96,436	84,939
Net Investment Income	736,836	950,106	568,335
Benefit Payments, including Refunds of Employee Contributions	(867,226)	(791,362)	(950,417)
Administrative Expense	(50,878)	(58,416)	(67,029)
Net Change in Plan Fiduciary Net Position	845,548	922,246	395,543
Plan Fiduciary Net Position - Beginning	9,468,032	8,545,786	8,150,243
Plan Fiduciary Net Position - Ending (b)	<u>\$ 10,313,580</u>	<u>\$ 9,468,032</u>	<u>\$ 8,545,786</u>
Net Pension Liability - Ending (a) - (b)	<u>\$ 4,166,370</u>	<u>\$ 3,896,569</u>	<u>\$ 4,133,612</u>
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	71.23%	70.84%	67.40%
Covered Payroll <sup>1</sup>	\$ 1,503,600	\$ 1,539,919	\$ 1,415,650
Net Pension Liability as a percentage of Covered Payroll	277.09%	253.04%	291.99%

**Notes to Schedule:**

<sup>1</sup> The Covered Payroll numbers shown are in compliance with GASB 82, except for the 09/30/2015 measurement period which includes DROP payroll.

*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 2.50%, 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 Measurement Date	09/30/2016 09/30/2015	09/30/2015 09/30/2014	09/30/2014 09/30/2013
Total Pension Liability			
Prior Period Adjustment	-	(386,259)	-
Service Cost	209,572	206,976	192,536
Interest	855,433	859,397	836,080
Share Plan Allocation	-	-	-
Changes of benefit terms	-	-	-
Differences between Expected and Actual Experience	(19,907)	-	-
Changes of assumptions	-	-	-
Benefit Payments, including Refunds of Employee Contributions	(697,208)	(773,904)	(690,444)
Net Change in Total Pension Liability	347,890	(93,790)	338,172
Total Pension Liability - Beginning	11,544,809	11,638,599	11,300,427
Total Pension Liability - Ending (a)	<u>\$ 11,892,699</u>	<u>\$ 11,544,809</u>	<u>\$ 11,638,599</u>
Plan Fiduciary Net Position			
Contributions - Employer	618,054	534,795	768,448
Contributions - State	127,668	125,387	121,375
Contributions - Employee	79,610	76,054	70,431
Net Investment Income	(15,324)	759,444	769,004
Benefit Payments, including Refunds of Employee Contributions	(697,208)	(773,904)	(690,444)
Administrative Expense	(49,324)	(36,404)	(82,988)
Net Change in Plan Fiduciary Net Position	63,476	685,372	955,826
Plan Fiduciary Net Position - Beginning	8,086,767	7,401,395	6,445,569
Plan Fiduciary Net Position - Ending (b)	<u>\$ 8,150,243</u>	<u>\$ 8,086,767</u>	<u>\$ 7,401,395</u>
Net Pension Liability - Ending (a) - (b)	<u>\$ 3,742,456</u>	<u>\$ 3,458,042</u>	<u>\$ 4,237,204</u>
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	68.53%	70.05%	63.59%
Covered Payroll <sup>1</sup>	\$ 1,396,624	\$ 1,267,568	\$ 1,173,844
Net Pension Liability as a percentage of Covered Payroll	267.96%	272.81%	360.97%

**Notes to Schedule:**

<sup>1</sup> The Covered Payroll numbers shown are in compliance with GASB 82, except for the 09/30/2015 measurement period which includes DROP payroll.

**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 Payroll <sup>1</sup>	Contributions as a percentage of Covered Payroll
09/30/2018	\$ 777,361	\$ 777,360	\$ 1	\$ 1,503,600	51.70%
09/30/2017	\$ 742,241	\$ 578,155	\$ 164,086	\$ 1,539,919	37.54%
09/30/2016	\$ 746,047	\$ 621,470	\$ 124,577	\$ 1,415,650	43.90%
09/30/2015	\$ 768,235	\$ 745,722	\$ 22,513	\$ 1,396,624	53.39%
09/30/2014	\$ 766,878	\$ 660,182	\$ 106,696	\$ 1,267,568	52.08%
09/30/2013	\$ 874,513	\$ 768,448	\$ 106,065	\$ 1,173,844	65.46%

<sup>1</sup> The Covered Payroll numbers shown are in compliance with GASB 82, except for the 09/30/2015 measurement period which includes DROP payroll.

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 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.

*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 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.

Interest Rate:

7.50% per year compounded annually, net of investment related expenses. This assumption is supported by the Plan's investment policy and long-term expected returns by asset class.

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Retirement Age:

Years Eligible for Normal Retirement	Retirement Probability
0	50%
1	0%
2	33%
3	60%
4	60%
5	60%
6 and greater	100%

It is assumed that no one works past age 58 if they are eligible to retire. This assumption was adopted based on the September 12, 2013 experiences study.

Early Retirement:

None assumed.

Salary Increases:

Credited Service	Assumption
Less than 10 Years	7.50%
10 Years or Greater	4.20%

This assumption was adopted based on the September 12, 2013 experience study. Level dollar.

Amortization Method:

Funding Method:

Actuarial Asset Method:

Entry Age Normal Actuarial Cost 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 four-year period.

Termination Rates:

Credited Service	Assumption
Less than 5 Years	18%
5-9 Years	14%
10 Years and Greater	0%

This assumption was adopted based on the September 12, 2013 experience study. See sample rates below; 80% of disablements are assumed to be service-related.

Disability Rates:

Age	% Becoming Disabled During the Year
40	0.33%
45	0.56%
50	1.09%
55	1.69%

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	\$ 4,133,612	\$ 148,516	\$ 1,486,121	\$ -
Employer and State contributions made after 09/30/2017	-	-	940,642	-
Total Pension Liability Factors:				
Service Cost	241,471	-	-	241,471
Interest	939,389	-	-	939,389
Share Plan Allocation	147,327	-	-	147,327
Changes in benefit terms	-	-	-	-
Differences between Expected and Actual Experience with regard to economic or demographic assumptions	148,378	-	148,378	-
Current year amortization of experience difference	-	(4,977)	(94,726)	89,749
Change in assumptions about future economic or demographic factors or other inputs	-	-	-	-
Current year amortization of change in assumptions	-	-	(61,235)	61,235
Benefit Payments, including Refunds of Employee Contributions	(791,362)	-	-	-
Net change	685,203	(4,977)	933,059	1,479,171
Plan Fiduciary Net Position:				
Contributions - Employer	578,155	-	(578,155)	-
Contributions - State	147,327	-	(147,327)	-
Contributions - Employee	96,436	-	-	(96,436)
Projected Net Investment Income	639,889	-	-	(639,889)
Difference between projected and actual earnings on Pension Plan investments	310,217	310,217	-	-
Current year amortization	-	(159,184)	(132,248)	(26,936)
Benefit Payments, including Refunds of Employee Contributions	(791,362)	-	-	-
Administrative Expenses	(58,416)	-	-	58,416
Net change	922,246	151,033	(857,730)	(704,845)
Ending Balance	\$ 3,896,569	\$ 294,572	\$ 1,561,450	\$ 774,326

**PRELIMINARY COMPONENTS OF PENSION EXPENSE**  
**FISCAL YEAR SEPTEMBER 30, 2019**

	Net Pension Liability	Deferred Inflows	Deferred Outflows	Pension Expense
Beginning balance	\$ 3,896,569	\$ 294,572	\$ 1,561,450	\$ -
Employer and State Contributions made after 09/30/2018	-	-	TBD*	-
Total Pension Liability Factors:				
Service Cost	264,098	-	-	264,098
Interest	989,631	-	-	989,631
Share Plan Allocation	163,282	-	-	163,282
Changes in benefit terms	-	-	-	-
Differences between Expected and Actual Experience with regard to economic or demographic assumptions	565,564	-	565,564	-
Current year amortization of experience difference	-	(4,977)	(236,119)	231,142
Change in assumptions about future economic or demographic factors or other inputs	-	-	-	-
Current year amortization of change in assumptions	-	-	(61,235)	61,235
Benefit Payments, including Refunds of Employee Contributions	(867,226)	-	-	-
Net change	<u>1,115,349</u>	<u>(4,977)</u>	<u>268,210</u>	<u>1,709,388</u>
Plan Fiduciary Net Position:				
Contributions - Employer	777,360	-	(777,360)	-
Contributions - State	163,282	-	(163,282)	-
Contributions - Employee	86,174	-	-	(86,174)
Projected Net Investment Income	714,179	-	-	(714,179)
Difference between projected and actual earnings on Pension Plan investments	22,657	22,657	-	-
Current year amortization	-	(107,999)	(132,248)	24,249
Benefit Payments, including Refunds of Employee Contributions	(867,226)	-	-	-
Administrative Expenses	(50,878)	-	-	50,878
Net change	<u>845,548</u>	<u>(85,342)</u>	<u>(1,072,890)</u>	<u>(725,226)</u>
Ending Balance	<u>\$ 4,166,370</u>	<u>\$ 204,253</u>	<u>TBD</u>	<u>\$ 984,162</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 Expected and Actual Experience*	Recognition Period (Years)	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
2013	\$ (278,581)	5	\$ (55,716)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2014	\$ (207,117)	5	\$ (41,423)	\$ (41,423)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2015	\$ 624,787	5	\$ 124,957	\$ 124,957	\$ 124,957	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2016	\$ 36,454	5	\$ 7,291	\$ 7,291	\$ 7,291	\$ 7,291	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2017	\$ (310,217)	5	\$ (62,045)	\$ (62,043)	\$ (62,043)	\$ (62,043)	\$ (62,043)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2018	\$ (22,657)	5	\$ -	\$ (4,533)	\$ (4,531)	\$ (4,531)	\$ (4,531)	\$ (4,531)	\$ -	\$ -	\$ -	\$ -	\$ -
Net Increase (Decrease) in Pension Expense			\$ (26,936)	\$ 24,249	\$ 65,674	\$ (59,283)	\$ (66,574)	\$ (4,531)	\$ -	\$ -	\$ -	\$ -	\$ -



AMORTIZATION SCHEUDLE - 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	\$ 244,939	4	\$ 61,235	\$ 61,235	\$ 61,235	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Net Increase (Decrease) in Pension Expense			\$ 61,235	\$ 61,235	\$ 61,235	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

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	\$ (19,907)	4	\$ (4,977)	\$ (4,977)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2016	\$ 230,533	4	\$ 57,633	\$ 57,633	\$ 57,633	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2017	\$ 148,378	4	\$ 37,093	\$ 37,095	\$ 37,095	\$ 37,095	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2018	\$ 565,564	4	\$ -	\$ 141,391	\$ 141,391	\$ 141,391	\$ 141,391	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Net Increase (Decrease) in Pension Expense			\$ 89,749	\$ 231,142	\$ 236,119	\$ 178,486	\$ 141,391	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -