

TOWN OF MEDLEY
POLICE OFFICERS' RETIREMENT SYSTEM

ACTUARIAL VALUATION
AS OF OCTOBER 1, 2017

CONTRIBUTIONS APPLICABLE TO THE TOWN'S
PLAN/FISCAL YEAR ENDED SEPTEMBER 30, 2019

January 31, 2018

Board of Trustees
Town of Medley
Police Officers' Retirement System
7331 NW 74th St.
Medley, FL 33166

Re: Town of Medley Police Officers' Retirement System

Dear Board:

We are pleased to present to the Board this report of the annual actuarial valuation of the Town of Medley Police Officers' Retirement System. 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.

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

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

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

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

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

Respectfully submitted,

Foster & Foster, Inc.



By: _____

Patrick T. Donlan, ASA, MAAA
Enrolled Actuary #17-6595

PTD/tb
Enclosures

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INTRODUCTORY DISCUSSION

The regular annual actuarial valuation of the Town of Medley Police Officers' Retirement System, performed as of October 1, 2017, has been completed, and the results are presented in this Report. The results of this valuation are applicable to the Town's fiscal year ended September 30, 2019.

The contribution requirements developed in this valuation, compared with the amounts developed in the October 1, 2016 valuation are as follows:

Valuation Date	10/1/2017	10/1/2016
Applicable Plan/Fiscal Year End	<u>9/30/2019</u>	<u>9/30/2018</u>
Sponsor Required Contribution		
% of Pensionable Payroll	31.1%	30.6%
Estimated State Contribution ¹		
% of Pensionable Payroll	113,953 3.7%	113,953 3.7%
Balance From Town ²		
% of Pensionable Payroll	27.4%	26.9%

¹ The estimated State Contribution of \$113,953 represents the amount of State Monies that would have normally been received by the Plan in fiscal 2017, but was instead received in fiscal 2018. The amount of State Monies available to offset the Town's requirement will depend upon whether a Mutual Consent Agreement is reached. Regardless, it is likely that the Town will have access to two State distributions in fiscal 2018 and one distribution in fiscal 2019. The Town may use contributions of up to \$703,459 for fiscal 2018, if received, in determining their requirement, based on "traditional" interpretation of Chapter 99-1, Florida Statutes.

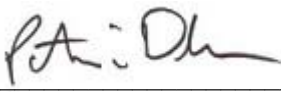
² For budgeting purposes, the required Sponsor Contribution is 31.1% of Pensionable Earnings for the fiscal year ending September 30, 2019. The precise Town requirement for the year is this amount, less actual State Contributions (up to the maximum \$703,459). Please note, however, that it is our understanding that the current Union Contract expires September 30, 2017. When a new contract is entered, then either Mutual Consent or the default methodology will determine the amount of State Monies available to offset Town funding requirements. Additionally, please note that there is a prepaid Town contribution of \$1,322,807.22 (see Page 23) which may be used to help offset the above stated requirement for fiscal 2018.

As can be seen, the Sponsor Required Contribution has increased when expressed as a percentage of Pensionable Payroll. The increase results from lower payroll due to changes in the active population. The plan experienced net favorable actuarial experience during the past year. The primary components of favorable experience included an 7.86% investment return (Actuarial Asset Basis) that exceeded the 7.50% assumption and lower than expected salary increases for some higher service members. These gains were offset by no inactive mortality experience and earlier than expected termination experience.

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

Respectfully submitted,

FOSTER & FOSTER, INC.

By: 
Patrick T. Donlan, ASA, MAAA

By: 
Julie E. Franken, EA, MAAA

CHANGES SINCE PRIOR VALUATION

Plan Changes

The plan was amended to add a Deferred Retirement Option Plan, pursuant to Ordinance C-420.

Actuarial Assumption/Method Changes

The mortality tables were changed to use the same rates as used by the Florida Retirement System (FRS) in their July 1, 2016 valuation as required by State Law.

COMPARATIVE SUMMARY OF PRINCIPAL VALUATION RESULTS

	<u>10/1/2017</u>	<u>10/1/2016</u>
A. Participant Data		
Actives	37	38
Service Retirees	15	14
DROP Retirees	1	0
Beneficiaries	1	1
Disability Retirees	0	0
Terminated Vested	<u>2</u>	<u>2</u>
 Total	 56	 55
 Total Annual Payroll	 \$3,056,751	 \$3,158,981
Payroll Under Assumed Ret. Age	3,056,751	3,158,981
 Annual Rate of Payments to:		
Service Retirees	1,060,822	921,506
DROP Retirees	100,511	0
Beneficiaries	52,072	52,072
Disability Retirees	0	0
Terminated Vested	55,943	55,943
 B. Assets		
Actuarial Value (AVA) ¹	21,361,577	19,850,369
Market Value (MVA) ¹	23,888,980	20,890,026
 C. Liabilities		
Present Value of Benefits		
Actives		
Retirement Benefits	14,294,708	15,869,070
Disability Benefits	709,958	696,974
Death Benefits	72,956	142,768
Vested Benefits	582,877	581,206
Refund of Contributions	54,951	59,346
Service Retirees	12,303,704	10,631,160
DROP Retirees ¹	1,229,274	0
Beneficiaries	552,610	560,833
Disability Retirees	0	0
Terminated Vested	632,312	587,875
Excess State Monies Reserve	<u>0</u>	<u>0</u>
 Total	 30,433,350	 29,129,232

C. Liabilities - (Continued)	<u>10/1/2017</u>	<u>10/1/2016</u>
Present Value of Future Salaries	22,868,276	22,755,063
Present Value of Future Member Contributions	1,143,414	1,137,753
FIL Normal Cost (Sponsor)	278,252	261,106
Present Value of Future Normal Costs (EAN)	4,761,857	4,622,962
Accrued Liability (Retirement)	10,342,960	12,080,923
Accrued Liability (Disability)	283,552	290,972
Accrued Liability (Death)	44,109	84,092
Accrued Liability (Vesting)	269,050	256,565
Accrued Liability (Refunds)	13,924	13,850
Accrued Liability (Inactives) ¹	14,717,900	11,779,868
Excess State Monies Reserve	<u>0</u>	<u>0</u>
Total Actuarial Accrued Liability (EAN AL)	25,671,495	24,506,270
Total Actuarial Accrued Liability (FIL)	27,208,266	26,110,656
Unfunded Actuarial Accrued Liability (UAAL)	5,846,689	6,260,287
Funded Ratio (AVA / EAN AL)	83.2%	81.0%
Funded Ratio (AVA / FIL AL)	78.5%	76.0%

D. Actuarial Present Value of Accrued Benefits	<u>10/1/2017</u>	<u>10/1/2016</u>
Vested Accrued Benefits		
Inactives ¹	14,717,900	11,779,868
Actives	6,217,399	8,140,124
Member Contributions	<u>1,009,438</u>	<u>979,188</u>
Total	21,944,737	20,899,180
Non-vested Accrued Benefits	<u>1,325,304</u>	<u>1,125,090</u>
Total Present Value Accrued Benefits (PVAB)	23,270,041	22,024,270
Funded Ratio (MVA / PVAB)	102.7%	94.9%
Increase (Decrease) in Present Value of Accrued Benefits Attributable to:		
Plan Amendments	0	
Assumption Changes	0	
New Accrued Benefits	757,030	
Benefits Paid	(1,121,040)	
Interest	1,609,781	
Other	<u>0</u>	
Total	1,245,771	

Valuation Date	10/1/2017	10/1/2016
Applicable to Fiscal Year Ending	<u>9/30/2019</u>	<u>9/30/2018</u>

E. Pension Cost

Sponsor Normal Cost (with interest) % of Total Annual Payroll ²	9.4	8.6
Administrative Expenses (with interest) % of Total Annual Payroll ²	0.8	1.1
Payment Required to Amortize Unfunded Actuarial Accrued Liability over 29 years (as of 10/1/2017, with interest) % of Total Annual Payroll ²	20.9	20.9
Required Town and State Contribution % of Total Annual Payroll ²	31.1	30.6

F. Past Contributions

Plan Years Ending:	<u>9/30/2017</u>
Town and State Requirement	946,798
Actual Contributions Made:	
Members (excluding buyback)	152,218
Town	946,798
State	<u>0</u>
Total	1,099,016

G. Net Actuarial (Gain)/Loss N/A

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

² Contributions developed as of 10/1/2017 are expressed as a percentage of total annual payroll at 10/1/2017 of \$3,056,751.

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

<u>Year</u>	<u>Projected Unfunded Actuarial Accrued Liability</u>
2017	5,846,689
2018	5,623,403
2019	5,383,371
2026	3,115,941
2033	1,024,549
2039	532,686
2046	0

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

		<u>Actual</u>	<u>Assumed</u>
Year Ended	9/30/2017	4.38%	5.27%
Year Ended	9/30/2016	7.56%	5.26%
Year Ended	9/30/2015	4.03%	5.22%

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

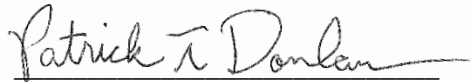
		<u>Actual</u>	<u>Assumed</u>
Year Ended	9/30/2017	7.86%	7.50%
Year Ended	9/30/2016	8.23%	7.50%
Year Ended	9/30/2015	10.33%	7.50%

(iii) Average Annual Payroll Growth

(a) Payroll as of:	10/1/2017	\$3,056,751
	10/1/2007	2,380,123
(b) Total Increase		28.43%
(c) Number of Years		10.00
(d) Average Annual Rate		2.53%

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.



Patrick T. Donlan, EA, ASA, MAAA
Enrolled Actuary #17-6595

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

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

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

RECONCILIATION OF UNFUNDED ACTUARIAL ACCRUED LIABILITIES

(1) Unfunded Actuarial Accrued Liability as of October 1, 2016	\$6,260,287
(2) Sponsor Normal Cost developed as of October 1, 2016	103,157
(3) Expected administrative expenses for the year ended September 30, 2017	34,180
(4) Expected interest on (1), (2) and (3)	478,540
(5) Sponsor contributions to the System during the year ended September 30, 2017	946,798
(6) Expected interest on (5)	82,677
(7) Unfunded Actuarial Accrued Liability as of September 30, 2017 (1)+(2)+(3)+(4)-(5)-(6)	5,846,689
(8) Change to UAAL due to Assumption Change	0
(9) Unfunded Actuarial Accrued Liability as of October 1, 2017	5,846,689

Type of <u>Base</u>	Date <u>Established</u>	Years <u>Remaining</u>	10/1/2017 <u>Amount</u>	Amortization <u>Amount</u>
	10/1/2010	13	4,201,441	480,974
	10/1/2011	24	524,525	44,426
	10/1/2013	26	387,082	31,867
	10/1/2016	29	<u>733,641</u>	<u>58,349</u>
			5,846,689	615,616

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 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, 2016 FRS actuarial valuation report for special risk employees. We feel this assumption sufficiently accommodates future mortality improvements.

Previously, the special risk rates from the July 1, 2015 FRS actuarial valuation report were used.

75% of active deaths are assumed to happen in the line of duty.

Interest Rate

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

Retirement Age

Earlier of Age 55 and 10 years of service or Age 52 and 25 years of service. Also, any member who has reached the above criteria is assumed to continue employment for one additional year. We feel that this assumption is reasonable based on Plan provisions.

Early Retirement

Commencing with the earliest Early Retirement Age (50), members are assumed to retire with an immediate subsidized benefit at the rate of 5% per year. We feel that this assumption is reasonable based on Plan provisions.

Disability Rates

See table below. It is assumed that 75% of disablements and active Member deaths are service related. This assumption was developed from those used by other plans containing Florida municipal Police Officers.

Termination Rate

See table below. This assumption was developed based on an experience study performed September 1, 2016.

Salary Increases

APH Table S-5 + 2.5%; see table below. Projected salary in the year of retirement is increased 20% to account for non-regular compensation. This assumption is consistent with long term Plan experience.

Administrative Expenses

\$24,940 annually. This is equal to the non-investment-related expenses from the prior year.

Payroll Increase

N/A (UAAL amortized as level dollar).

Funding Method

Frozen Initial Liability Cost Method.

Actuarial Asset Method

Each year, the prior Actuarial Value of Assets is brought forward utilizing the historical geometric 4-year average Market Value return (net-of-fees). It is possible that over time this technique will produce an insignificant bias above or below Market Value.

<u>Age</u>	<u>% Becoming Disabled During the Year</u>	<u>% Terminating During the Year</u>	<u>% of Salary Increase</u>
20	0.14%	6.60%	6.68% (age 25)
30	0.18%	5.50%	6.07%
40	0.30%	2.86%	5.22%
50	1.00%	0.88%	4.62%

GLOSSARY

Total Annual Payroll is the projected rate of pay 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 the current year's cost for benefits yet to be funded.

Total Required Contribution is equal to the Normal Cost plus administrative expenses adjusted for interest according to the timing of contributions during the year.

Frozen Initial Liability Funding Method (Level Percent of Compensation) is the method used to determine required contributions under the Plan. The use of this method involves the systematic funding of the Normal Cost (described above) and the Unfunded Actuarial Accrued Liability (UAAL). The UAAL is reconciled each valuation with charges and credits as follows:

- (a) Charges: the Normal Cost for the prior year, in addition to interest (at the valuation assumption of 7.5%) on the Normal Cost and prior year's UAAL balance.
- (b) Credits: Sponsor contributions with interest at the valuation assumption of 7.5%.

New UAAL bases will be created only for changes in methods, assumptions, or benefits. Actuarial gains and losses are funded as part of the Normal Cost.

PARTIAL HISTORY OF PREMIUM TAX REFUNDS

Received During <u>Fiscal Year</u>	<u>Amount</u>	<u>Increase from Previous Year</u>
1998	-	_____ %
1999	-	N/A
2000	-	N/A
2001	-	N/A
2002	-	N/A
2003	-	N/A
2004	-	N/A
2005	-	N/A
2006	50,461.55	N/A
2007	58,214.43	15.4%
2008	44,764.83	-23.1%
2009	73,584.94	64.4%
2010	64,298.13	-12.6%
2011	56,266.95	-12.5%
2012	72,718.45	29.2%
2013	73,866.06	1.6%
2014	109,520.58	48.3%
2015	120,320.93	9.9%
2016	110,856.60	-7.9%
2017	-	-100.0%

STATEMENT OF FIDUCIARY NET POSITION
SEPTEMBER 30, 2017

<u>ASSETS</u>	MARKET VALUE
Investments:	
Mutual Funds:	
Fixed Income	7,219,616.60
Equity	17,992,170.69
Total Investments	25,211,787.29
Total Assets	25,211,787.29
 <u>LIABILITIES</u>	
Prepaid Town Contribution	1,322,807.20
Total Liabilities	1,322,807.20
 NET POSITION RESTRICTED FOR PENSIONS	 23,888,980.09

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

ADDITIONS

Contributions:		
Member	152,218.36	
Town	946,798.20	
Total Contributions		1,099,016.56
Investment Income:		
Net Increase in Fair Value of Investments	3,047,917.13	
Less Investment Expense ¹	(2,000.00)	
Net Investment Income		3,045,917.13
Total Additions		4,144,933.69
<u>DEDUCTIONS</u>		
Distributions to Members:		
Benefit Payments	1,113,936.06	
Refunds of Member Contributions	7,103.67	
Total Distributions		1,121,039.73
Administrative Expense		24,940.26
Total Deductions		1,145,979.99
Net Increase in Net Position		2,998,953.70
NET POSITION RESTRICTED FOR PENSIONS		
Beginning of the Year		20,890,026.39
End of the Year		23,888,980.09

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

ACTUARIAL ASSET VALUATION
SEPTEMBER 30, 2017

Actuarial Assets for funding purposes are developed by increasing the Actuarial Assets used in the most recent actuarial valuation of the Fund by the average annual market value rate of return (net of investment related expenses) for the past four years. Actuarial Assets shall not be less than 80% nor greater than 120% of Market Value of Assets.

Details of the derivation are set forth as follows:

Plan Year End	Rate of Return ¹	
09/30/2014	9.09%	
09/30/2015	-0.25%	
09/30/2016	9.31%	
09/30/2017	13.78%	
Annualized Rate of Return for prior four (4) years:		7.86%
(A) 10/01/2016 Actuarial Assets:		\$19,850,368.75
(I) Net Investment Income:		
1. Earnings and Investment Gains	3,047,917.13	
2. Change in Actuarial Value	(1,487,745.32)	
3. Investment Related Expenses	(2,000.00)	
Total		1,558,171.81
(B) 10/01/2017 Actuarial Assets:		\$21,361,577.13
Actuarial Asset Rate of Return = 2I/(A+B-I):		7.86%
10/01/2017 Limited Actuarial Assets:		\$21,361,577.13
10/01/2017 Market Value of Assets:		\$23,888,980.09
Actuarial Gain/(Loss) due to Investment Return (Actuarial Asset Basis)		\$71,366.65

¹Market Value Basis, net of investment related expenses.

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

REVENUES

Contributions:		
Member	152,218.36	
Town	946,798.20	
 Total Contributions		 1,099,016.56
 Total Earnings and Investment Gains		 1,560,171.81

EXPENDITURES

Distributions to Members:		
Benefit Payments	1,113,936.06	
Refunds of Member Contributions	7,103.67	
 Total Distributions		 1,121,039.73
 Expenses:		
Investment related ¹	2,000.00	
Administrative	24,940.26	
 Total Expenses		 26,940.26
 Change in Net Assets for the Year		 1,511,208.38
 Net Assets Beginning of the Year		 19,850,368.75
 Net Assets End of the Year ²		 21,361,577.13

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

²Net Assets may be limited for actuarial consideration.

RECONCILIATION OF TOWN'S SHORTFALL/(PREPAID) CONTRIBUTION
FOR THE FISCAL YEAR ENDED (FYE) SEPTEMBER 30, 2017

(1)	Total Required Contribution Rate	36.10%
(2)	Pensionable Payroll Derived from Member Contributions	\$3,044,367.20
(3)	Total Required Contribution (1) x (2)	1,099,016.56
(4)	Less Actual Member Contributions	(152,218.36)
(5)	Less Allowable State Contribution	<u>0.00</u>
(6)	Equals Required Town Contribution for Fiscal 2017	946,798.20
(7)	Less 2016 Prepaid Contribution	(1,257,925.54)
(8)	Less Actual Town Contributions	<u>(1,011,679.86)</u>
(9)	Equals Town's Shortfall/(Prepaid) Contribution as of September 30, 2017	(\$1,322,807.20)

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

Beginning of the Year Balance	0.00
Plus Additions	0.00
Investment Return Earned	0.00
Less Distributions	0.00
End of the Year Balance	0.00

Note: Election option assumption for one new DROP participant is the Normal Form.
Therefore, Investment Return Earned is not included.

STATISTICAL DATA

	<u>10/1/2014</u>	<u>10/1/2015</u>	<u>10/1/2016</u>	<u>10/1/2017</u>
<u>Actives</u>				
Number	37	37	38	37
Average Current Age	41.4	41.4	41.8	42.4
Average Age at Employment	30.8	31.0	30.6	31.7
Average Past Service	10.6	10.4	11.2	10.7
Average Annual Salary	\$77,880	\$77,984	\$83,131	\$82,615
<u>Service Retirees</u>				
Number	13	14	14	15
Average Current Age	59.9	60.1	61.1	61.6
Average Annual Benefit	\$64,974	\$65,773	\$65,822	\$70,721
<u>DROP Retirees</u>				
Number	0	0	0	1
Average Current Age	N/A	N/A	N/A	54.9
Average Annual Benefit	N/A	N/A	N/A	\$100,511
<u>Beneficiaries</u>				
Number	0	1	1	1
Average Current Age	N/A	63.3	64.3	65.3
Average Annual Benefit	N/A	\$52,072	\$52,072	\$52,072
<u>Disability Retirees</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>Terminated Vested</u>				
Number	3	2	2	2
Average Current Age	47.8	36.3	37.3	39.2
Average Annual Benefit ¹	\$50,306	\$55,943	\$55,943	\$55,943

¹ 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	1	0	0	0	0	0	0	0	0	0	1
25 - 29	0	0	1	1	0	1	0	0	0	0	0	3
30 - 34	1	0	1	0	0	2	0	0	0	0	0	4
35 - 39	0	0	0	1	2	2	1	0	0	0	0	6
40 - 44	0	0	1	1	0	3	1	0	0	0	0	6
45 - 49	1	0	0	0	0	3	1	1	3	0	0	9
50 - 54	0	0	0	0	1	1	0	0	2	1	0	5
55 - 59	0	0	0	0	0	0	0	0	1	0	0	1
60 - 64	0	0	0	0	0	0	0	0	1	0	1	2
65+	0	0	0	0	0	0	0	0	0	0	0	0
Total	2	1	3	3	3	12	3	1	7	1	1	37

VALUATION PARTICIPANT RECONCILIATION

1. Active lives

a. Number in prior valuation 10/1/2016	38
b. Terminations	
i. Vested (partial or full) with deferred benefits	(1)
ii. Non-vested or full lump sum distribution received	0
c. Deaths	
i. Beneficiary receiving benefits	0
ii. No future benefits payable	0
d. Disabled	0
e. Retired	(1)
f. DROP	<u>(1)</u>
g. Continuing participants	35
h. New entrants	<u>2</u>
i. Total active life participants in valuation	37

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

	Service Retirees, Vested Receiving	DROP Benefits	Receiving Death Benefits	Receiving Disability Benefits	Vested Deferred	Total
	<u>Benefits</u>	<u>Benefits</u>	<u>Benefits</u>	<u>Benefits</u>	<u>Benefits</u>	<u>Benefits</u>
a. Number prior valuation	14	0	1	0	2	17
Retired	1	0	0	0	0	1
DROP	0	1	0	0	0	1
Vested Deferred	0	0	0	0	1	1
Death, With Survivor	0	0	0	0	0	0
Death, No Survivor	0	0	0	0	0	0
Disabled	0	0	0	0	0	0
Refund of Contributions	0	0	0	0	(1)	(1)
Rehires	0	0	0	0	0	0
Expired Annuities	0	0	0	0	0	0
Data Corrections	0	0	0	0	0	0
b. Number current valuation	15	1	1	0	2	19

POLICE OFFICERS'
RETIREMENT SYSTEM

<u>Eligibility</u>	Employees who are classified as full-time sworn police officers shall participate in the System as a condition of employment.
<u>Credited Service</u>	Total years and fractional parts of years of employment with the Town as a Police Officer.
<u>Salary</u>	Total W-2 compensation plus tax exempt, tax sheltered, and tax deferred items of income (including overtime payments up to 300 hours per calendar year, but not including payments for extra duty or special detail work for second party employer). Additionally, Salary shall exclude payments for unused, accrued sick and annual leave hours earned on or after December 5, 2011.
<u>Average Final Compensation</u>	Average Salary for the best 5 years during the 10 years immediately preceding retirement or termination.
<u>Member Contributions</u>	5.0% of Salary.
<u>Town and State Contributions</u>	Remaining amount required in order to pay current costs and amortize any unfunded past service cost over 30 years.
<u>Normal Retirement</u>	
Date	Earlier of: 1) age 55 and 10 years of Credited Service, or 2) age 52 and 25 years of Credited Service.
Benefit	3.0% of Average Final Compensation <u>times</u> Credited Service (maximum 75% for those hired on and after October 1, 2008).
Form of Benefit	Ten Year Certain and Life Annuity (options available).
<u>Early Retirement</u>	
Eligibility	Age 50 and 10 Years of Credited Service.
Benefit	Accrued benefit, reduced 3% for each year prior to Normal Retirement.
<u>Vesting</u>	
Schedule	100% after 10 years of Credited Service.
Benefit Amount	Member will receive the vested portion of his (her) accrued benefit payable at the otherwise Normal Retirement Date (no imputing).
<u>Disability</u>	

Eligibility

Service Incurred

Covered from Date of Employment.

Non-Service Incurred

10 years of Credited Service.

Exclusions

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

Benefit

Benefit accrued to date of disability under 2.5% benefit accrual rate but not less than 42% of Average Final Compensation (if Service Incurred) or 25% of Average Final Compensation (if not in-line-of-duty).

Duration

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

Death Benefits

Pre-Retirement

Vested

Monthly accrued benefit payable to designated beneficiary for 10 years at otherwise Normal Retirement Date or Early Retirement Date (reduced).

Non-Vested

Refund of accumulated contributions without interest.

Post-Retirement

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

Cost-of-Living Adjustment (COLA)

Effective January 1, 2015, all future retirees, including terminated vested members, disability retirees and pre-retirement death beneficiaries are entitled to a 1.0% annual COLA from benefit commencement date until the date the member attains or would have attained age 62.

Deferred Retirement Option Plan

Eligibility

Satisfaction of Normal Retirement requirements.

Participation

Not to exceed 36 months.

Rate of Return

Actual Net Investment Return for Plan assets.

Distribution

Cash lump sum at termination of employment.

STATEMENT OF FIDUCIARY NET POSITION
SEPTEMBER 30, 2017

<u>ASSETS</u>	MARKET VALUE
Total Cash and Equivalents	0
Total Receivable	0
Investments:	
Mutual Funds:	
Fixed Income	7,219,616
Equity	17,992,171
Total Investments	25,211,787
Total Assets	25,211,787
Total Liabilities	0
NET POSITION RESTRICTED FOR PENSIONS	25,211,787

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

ADDITIONS

Contributions:

Member	152,218	
Town	1,011,680	

Total Contributions		1,163,898
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Investment Income:

Net Increase in Fair Value of Investments	3,047,917	
Less Investment Expense ¹	(2,000)	

Net Investment Income		3,045,917
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Total Additions		4,209,815
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DEDUCTIONS

Distributions to Members:

Benefit Payments	1,113,936	
Refunds of Member Contributions	7,104	

Total Distributions		1,121,040
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Administrative Expense		24,940
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Total Deductions		1,145,980
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Net Increase in Net Position		3,063,835
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NET POSITION RESTRICTED FOR PENSIONS

Beginning of the Year		22,147,952
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End of the Year		25,211,787
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¹Investment related expenses include investment advisory, custodial and performance monitoring fees.

NOTES TO THE FINANCIAL STATEMENTS
(For the Year Ended September 30, 2017)

Plan Description

Plan Administration

The Plan is a single-employer defined benefit pension plan administered by the Board of Trustees of the Town of Medley Police Officers' Retirement System. The Plan Administrator is responsible for the overall administration of the Plan. It has discretionary authority to construe the terms of the Plan and make determinations on questions that may affect eligibility for benefits. The Plan Administrator may also retain the services of attorneys, accountants, actuaries, investment advisors and other professionals.

Plan Membership as of October 1, 2016:

Inactive Plan Members or Beneficiaries Currently Receiving Benefits	15
Inactive Plan Members Entitled to But Not Yet Receiving Benefits	2
Active Plan Members	38
	55
	55

Benefits Provided

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

Normal Retirement:

Date: Earlier of: 1) age 55 and 10 years of Credited Service, or 2) age 52 and 25 years of Credited Service.

Benefit: 3.0% of Average Final Compensation times Credited Service (maximum 75% for those hired on and after October 1, 2008).

Early Retirement:

Eligibility: Age 50 and 10 Years of Credited Service.

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

Vesting:

Schedule: 100% after 10 years of Credited Service.

Benefit Amount: Member will receive the vested portion of his (her) accrued benefit payable at the otherwise Normal Retirement Date (no imputing).

Disability:

Eligibility: Service Incurred: Covered from Date of Employment. Non-Service Incurred: 10 years of Credited Service.

Benefit accrued to date of disability under 2.5% benefit accrual rate but not less than 42% of Average Final Compensation (if Service Incurred) or 25% of Average Final Compensation (if not in-line-of-duty).

Pre-Retirement Death Benefits:

Vested: Monthly accrued benefit payable to designated beneficiary for 10 years at otherwise Normal Retirement Date or Early Retirement Date (reduced).

Non-Vested: Refund of accumulated contributions without interest.

Cost-of-Living Adjustment (COLA):

Effective January 1, 2015, all future retirees, including terminated vested members, disability retirees and pre-retirement death beneficiaries are entitled to a 1.0% annual COLA from benefit commencement date until the date the member attains or would have attained age 62.

Contributions

Member Contributions: 5.0% of Salary.

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

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Investments

Investment Policy:

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

<u>Asset Class</u>	<u>Target Allocation</u>
Domestic Equity	54%
International Equity	10%
Fixed Income	15%
Cash	15%
Real Estate Equity	6%
<u>Total</u>	<u>100%</u>

Concentrations:

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

Rate of Return:

For the year ended September 30, 2017, the annual money-weighted rate of return on Pension Plan investments, net of Pension Plan investment expense, was 13.78 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, 2017 were as follows:

Total Pension Liability	\$ 25,771,614
Plan Fiduciary Net Position	<u>\$ (25,211,787)</u>
Sponsor's Net Pension Liability	<u>\$ 559,827</u>
Plan Fiduciary Net Position as a percentage of Total Pension Liability	97.83%

Actuarial Assumptions:

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

Inflation	2.50%
Salary Increases	4.62% - 6.68%
Discount Rate	7.50%
Investment Rate of Return	7.50%

Mortality Rate Healthy Lives:

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

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

Mortality Rate Disabled Lives:

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

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

The most recent actuarial experience study used to review the other significant assumptions was dated September 1, 2016.

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

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

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

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

Asset Class	Long Term Expected Real Rate of Return
Domestic Equity	5.75%
International Equity	5.75%
Fixed Income	0.75%
Cash	0.00%
Real Estate Equity	5.75%

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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 6.50%	Current Discount Rate 7.50%	1% Increase 8.50%
Sponsor's Net Pension Liability	\$ 3,554,026	\$ 559,827	\$ (1,947,755)

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

	09/30/2017	09/30/2016
Total Pension Liability		
Service Cost	658,122	618,350
Interest	1,828,417	1,704,592
Changes of benefit terms	-	-
Differences between Expected and Actual Experience	124,820	(362,464)
Changes of assumptions	-	697,984
Benefit Payments, including Refunds of Employee Contributions	(1,121,040)	(973,409)
Net Change in Total Pension Liability	1,490,319	1,685,053
Total Pension Liability - Beginning	24,281,295	22,596,242
Total Pension Liability - Ending (a)	\$ 25,771,614	\$ 24,281,295
Plan Fiduciary Net Position		
Contributions - Employer	1,011,680	1,050,000
Contributions - State	-	110,857
Contributions - Employee	152,218	147,834
Net Investment Income	3,045,917	1,892,371
Benefit Payments, including Refunds of Employee Contributions	(1,121,040)	(973,409)
Administrative Expense	(24,940)	(34,179)
Net Change in Plan Fiduciary Net Position	3,063,835	2,193,474
Plan Fiduciary Net Position - Beginning	22,147,952	19,954,478
Plan Fiduciary Net Position - Ending (b)	\$ 25,211,787	\$ 22,147,952
Net Pension Liability - Ending (a) - (b)	\$ 559,827	\$ 2,133,343
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	97.83%	91.21%
Covered Employee Payroll ¹	\$ 3,044,367	\$ 2,956,688
Net Pension Liability as a percentage of Covered Employee Payroll	18.39%	72.15%

Notes to Schedule:

¹ The Covered Employee 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, amounts reported as changes of assumptions resulted from the following changes:

- The assumed rates of mortality were changed to match those used by the FRS for special risk employees in their July 1, 2015 valuation report.
- The withdrawal rates were increased 10%, based on results of the September 1, 2016 experience study.

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	610,822	616,903
Interest	1,638,723	1,541,234
Changes of benefit terms	-	-
Differences between Expected and Actual Experience	(413,419)	-
Changes of assumptions	-	-
Benefit Payments, including Refunds of Employee Contributions	(957,396)	(747,028)
Net Change in Total Pension Liability	878,730	1,411,109
Total Pension Liability - Beginning	21,717,512	20,306,403
Total Pension Liability - Ending (a)	\$ 22,596,242	\$ 21,717,512
Plan Fiduciary Net Position		
Contributions - Employer	2,067,552	1,165,048
Contributions - State	120,321	109,521
Contributions - Employee	141,697	141,619
Net Investment Income	(50,344)	1,596,653
Benefit Payments, including Refunds of Employee Contributions	(957,396)	(747,028)
Administrative Expense	(35,551)	(28,220)
Net Change in Plan Fiduciary Net Position	1,286,279	2,237,592
Plan Fiduciary Net Position - Beginning	18,668,199	16,430,607
Plan Fiduciary Net Position - Ending (b)	\$ 19,954,478	\$ 18,668,199
Net Pension Liability - Ending (a) - (b)	\$ 2,641,764	\$ 3,049,313
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	88.31%	85.96%
Covered Employee Payroll ¹	\$ 2,943,855	\$ 2,832,374
Net Pension Liability as a percentage of Covered Employee Payroll	89.74%	107.66%

Notes to Schedule:

¹ The Covered Employee 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

	09/30/2017	09/30/2016	09/30/2015	09/30/2014
Actuarially Determined Contribution	946,798	1,014,144	1,076,688	1,274,568
Contributions in relation to the Actuarially Determined Contributions	1,011,680	1,160,857	2,187,873	1,274,568
Contribution Deficiency (Excess)	\$ (64,882)	\$ (146,713)	\$ (1,111,185)	\$ -
Covered Employee Payroll ¹	\$ 3,044,367	\$ 2,956,688	\$ 2,943,855	\$ 2,832,374
Contributions as a percentage of Covered Employee Payroll	33.23%	39.26%	74.32%	45.00%

¹ The Covered Employee 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: 10/01/2015
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:

Funding Method: Frozen Initial Liability Cost Method.
 Amortization Method: Level Dollar.
 Remaining Amortization Period: 28 Years (as of 10/01/2015).
 Mortality: RP-2000 Table with no projection. Based on a study of over 650 public safety funds, this table reflects a 10% margin for future mortality improvements.
 Interest Rate: 7.5% per year compounded annually, net of investment related expenses. This is supported by the target asset class allocation of the trust and the expected long-term return by asset class.
 Retirement Age: Earlier of Age 55 and 10 years of service or Age 52 and 25 years of service. Also, any member who has reached the above criteria is assumed to continue employment for one additional year. We feel that this assumption is reasonable based on Plan provisions.
 Early Retirement: Commencing with the earliest Early Retirement Age (50), members are assumed to retire with an immediate subsidized benefit at the rate of 5% per year. We feel that this assumption is reasonable based on Plan provisions.
 Disability Rates: See table on following page. It is assumed that 75% of disablements and active Member deaths are service related. This assumption was developed from those used by other plans containing Florida municipal Police Officers.
 Termination Rates: See table on following page (1302). This assumption was developed from those used by other plans containing Florida municipal Police Officers.
 Salary Increases: APH Table S-5 + 2.5%; see table below. Projected salary in the year of retirement is increased based on individual accruals to account for non-regular compensation. This assumption is consistent with long term Plan experience.
 Payroll Increase: N/A (UAAL amortized as level dollar).
 Actuarial Asset Method: Each year, the prior Actuarial Value of Assets is brought forward utilizing the historical geometric 4-year average Market Value return (net-of-fees). It is possible that over time this technique will produce an insignificant bias above or below Market Value.

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Termination and Disability Rate Table:

Age	% Becoming Disabled During the	% Terminating During the Year
20	0.14%	6.00%
30	0.18%	5.00%
40	0.30%	2.60%
50	1.00%	0.80%

SCHEDULE OF INVESTMENT RETURNS
Last 10 Fiscal Years

	<u>09/30/2017</u>	<u>09/30/2016</u>	<u>09/30/2015</u>	<u>09/30/2014</u>
Annual Money-Weighted Rate of Return Net of Investment Expense	13.78%	9.31%	-0.25%	9.09%

NOTES TO THE FINANCIAL STATEMENTS
(For the Year Ended September 30, 2017)

General Information about the Pension Plan

Plan Description

The Plan is a single-employer defined benefit pension plan administered by the Board of Trustees of the Town of Medley Police Officers' Retirement System. The Plan Administrator is responsible for the overall administration of the Plan. It has discretionary authority to construe the terms of the Plan and make determinations on questions that may affect eligibility for benefits. The Plan Administrator may also retain the services of attorneys, accountants, actuaries, investment advisors and other professionals. Employees who are classified as full-time sworn police officers shall participate in the System as a condition of employment.

Plan Membership as of October 1, 2016:

Inactive Plan Members or Beneficiaries Currently Receiving Benefits	15
Inactive Plan Members Entitled to But Not Yet Receiving Benefits	2
Active Plan Members	38
	55
	55

Benefits Provided

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

Normal Retirement:

Date: Earlier of: 1) age 55 and 10 years of Credited Service, or 2) age 52 and 25 years of Credited Service.

Benefit: 3.0% of Average Final Compensation times Credited Service (maximum 75% for those hired on and after October 1, 2008).

Early Retirement:

Eligibility: Age 50 and 10 Years of Credited Service.

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

Vesting:

Schedule: 100% after 10 years of Credited Service.

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

Date (no imputing).

Disability:

Eligibility: Service Incurred: Covered from Date of Employment. Non-Service Incurred: 10 years of Credited Service.

Benefit accrued to date of disability under 2.5% benefit accrual rate but not less than 42% of Average Final Compensation (if Service Incurred) or 25% of Average Final Compensation (if not in-line-of-duty).

Pre-Retirement Death Benefits:

Vested: Monthly accrued benefit payable to designated beneficiary for 10 years at otherwise Normal Retirement Date or Early Retirement Date (reduced).

Non-Vested: Refund of accumulated contributions without interest.

Cost-of-Living Adjustment (COLA):

Effective January 1, 2015, all future retirees, including terminated vested members, disability retirees and pre-retirement death beneficiaries are entitled to a 1.0% annual COLA from benefit commencement date until the date the member attains or would have attained age 62.

Contributions

Member Contributions: 5.0% of Salary.

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

Net Pension Liability

The measurement date is September 30, 2017.

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

The reporting period is October 1, 2016 through September 30, 2017.

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

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

Actuarial Assumptions:

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

Inflation	2.50%
Salary Increases	4.62% - 6.68%
Discount Rate	7.50%
Investment Rate of Return	7.50%

Mortality Rate Healthy Lives:

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

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

Mortality Rate Disabled Lives:

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

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

The most recent actuarial experience study used to review the other significant assumptions was dated September 1, 2016.

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

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

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

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

<u>Asset Class</u>	<u>Target Allocation</u>	<u>Long Term Expected Real Rate of Return</u>
Domestic Equity	54%	5.75%
International Equity	10%	5.75%
Fixed Income	15%	0.75%
Cash	15%	0.00%
Real Estate Equity	6%	5.75%
<u>Total</u>	<u>100%</u>	

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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)
Balances as September 30, 2016	\$ 24,281,295	\$ 22,147,952	\$ 2,133,343
Changes for a Year:			
Service Cost	658,122	-	658,122
Interest	1,828,417	-	1,828,417
Differences between Expected and Actual Experience	124,820	-	124,820
Changes of assumptions	-	-	-
Changes of benefit terms	-	-	-
Contributions - Employer	-	1,011,680	(1,011,680)
Contributions - State	-	-	-
Contributions - Employee	-	152,218	(152,218)
Net Investment Income	-	3,045,917	(3,045,917)
Benefit Payments, including Refunds of Employee Contributions	(1,121,040)	(1,121,040)	-
Administrative Expense	-	(24,940)	24,940
Net Changes	1,490,319	3,063,835	(1,573,516)
Balances as September 30, 2017	<u>\$ 25,771,614</u>	<u>\$ 25,211,787</u>	<u>\$ 559,827</u>

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	\$ 3,554,026	\$ 559,827	\$ (1,947,755)

Pension Plan Fiduciary Net Position.

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

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

For the year ended September 30, 2017, the Sponsor will recognize a Pension Expense of \$582,523.

On September 30, 2017, the Sponsor reported Deferred Outflows of Resources and Deferred Inflows of Resources related to pensions from the following sources:

	<u>Deferred Outflows of Resources</u>	<u>Deferred Inflows of Resources</u>
Differences between Expected and Actual Experience	106,986	495,144
Changes of assumptions	498,560	-
Net difference between Projected and Actual Earnings on Pension Plan investments	-	805,849
Total	<u>\$ 605,546</u>	<u>\$ 1,300,993</u>

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

Year ended September 30:	
2018	\$ (114,974)
2019	\$ (46,911)
2020	\$ (347,027)
2021	\$ (270,128)
2022	\$ 65,762
Thereafter	\$ 17,831

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

Measurement Date	09/30/2017	09/30/2016
Total Pension Liability		
Service Cost	658,122	618,350
Interest	1,828,417	1,704,592
Changes of benefit terms	-	-
Differences between Expected and Actual Experience	124,820	(362,464)
Changes of assumptions	-	697,984
Contributions - Buy Back	-	-
Benefit Payments, including Refunds of Employee Contributions	(1,121,040)	(973,409)
Net Change in Total Pension Liability	1,490,319	1,685,053
Total Pension Liability - Beginning	24,281,295	22,596,242
Total Pension Liability - Ending (a)	\$ 25,771,614	\$ 24,281,295
Plan Fiduciary Net Position		
Contributions - Employer	1,011,680	1,050,000
Contributions - State	-	110,857
Contributions - Employee	152,218	147,834
Net Investment Income	3,045,917	1,892,371
Benefit Payments, including Refunds of Employee Contributions	(1,121,040)	(973,409)
Administrative Expense	(24,940)	(34,179)
Net Change in Plan Fiduciary Net Position	3,063,835	2,193,474
Plan Fiduciary Net Position - Beginning	22,147,952	19,954,478
Plan Fiduciary Net Position - Ending (b)	\$ 25,211,787	\$ 22,147,952
Net Pension Liability - Ending (a) - (b)	\$ 559,827	\$ 2,133,343
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	97.83%	91.21%
Covered Employee Payroll ¹	\$ 3,044,367	\$ 2,956,688
Net Pension Liability as a percentage of Covered Employee Payroll	18.39%	72.15%

Notes to Schedule:

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

² Effective for the City's fiscal year ending 09/30/2017, the GASB 68 measurement date of the Pension Expense was changed from 09/30/2016 to 09/30/2017.

Changes of assumptions:

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

- The assumed rates of mortality were changed to match those used by the FRS for special risk employees in their July 1, 2015 valuation report.
- The withdrawal rates were increased 10%, based on results of the September 1, 2016 experience study.

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

Measurement Date	09/30/2015	09/30/2014
Total Pension Liability		
Service Cost	610,822	616,903
Interest	1,638,723	1,541,234
Changes of benefit terms	-	-
Differences between Expected and Actual Experience	(413,419)	-
Changes of assumptions	-	-
Contributions - Buy Back	-	-
Benefit Payments, including Refunds of Employee Contributions	(957,396)	(747,028)
Net Change in Total Pension Liability	878,730	1,411,109
Total Pension Liability - Beginning	21,717,512	20,306,403
Total Pension Liability - Ending (a)	\$ 22,596,242	\$ 21,717,512
Plan Fiduciary Net Position		
Contributions - Employer	2,067,552	1,165,048
Contributions - State	120,321	109,521
Contributions - Employee	141,697	141,619
Net Investment Income	(50,344)	1,596,653
Benefit Payments, including Refunds of Employee Contributions	(957,396)	(747,028)
Administrative Expense	(35,551)	(28,220)
Net Change in Plan Fiduciary Net Position	1,286,279	2,237,592
Plan Fiduciary Net Position - Beginning	18,668,199	16,430,607
Plan Fiduciary Net Position - Ending (b)	\$ 19,954,478	\$ 18,668,199
Net Pension Liability - Ending (a) - (b)	\$ 2,641,764	\$ 3,049,313
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	88.31%	85.96%
Covered Employee Payroll ¹	\$ 2,943,855	\$ 2,832,374
Net Pension Liability as a percentage of Covered Employee Payroll	89.74%	107.66%

Notes to Schedule:

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

² Effective for the City's fiscal year ending 09/30/2017, the GASB 68 measurement date of the Pension Expense was changed from 09/30/2016 to 09/30/2017.

SCHEDULE OF CONTRIBUTIONS
Last 10 Fiscal Years

	09/30/2017	09/30/2016	09/30/2015	09/30/2014
Actuarially Determined Contribution	946,798	1,014,144	1,076,688	1,274,568
Contributions in relation to the Actuarially Determined Contributions	1,011,680	1,160,857	2,187,873	1,274,568
Contribution Deficiency (Excess)	\$ (64,882)	\$ (146,713)	\$ (1,111,185)	\$ -
Covered Employee Payroll ¹	\$ 3,044,367	\$ 2,956,688	\$ 2,943,855	\$ 2,832,374
Contributions as a percentage of Covered Employee Payroll	33.23%	39.26%	74.32%	45.00%

¹ The Covered Employee 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: 10/01/2015

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:

- Funding Method: Frozen Initial Liability Cost Method.
- Amortization Method: Level Dollar.
- Remaining Amortization Period: 28 Years (as of 10/01/2015).
- Mortality: RP-2000 Table with no projection. Based on a study of over 650 public safety funds, this table reflects a 10% margin for future mortality improvements.
- Interest Rate: 7.5% per year compounded annually, net of investment related expenses. This is supported by the target asset class allocation of the trust and the expected long-term return by asset class.
- Retirement Age: Earlier of Age 55 and 10 years of service or Age 52 and 25 years of service. Also, any member who has reached the above criteria is assumed to continue employment for one additional year. We feel that this assumption is reasonable based on Plan provisions.
- Early Retirement: Commencing with the earliest Early Retirement Age (50), members are assumed to retire with an immediate subsidized benefit at the rate of 5% per year. We feel that this assumption is reasonable based on Plan provisions.
- Disability Rates: See table on following page. It is assumed that 75% of disablements and active Member deaths are service related. This assumption was developed from those used by other plans containing Florida municipal Police Officers.
- Termination Rates: See table on following page (1302). This assumption was developed from those used by other plans containing Florida municipal Police Officers.
- Salary Increases: APH Table S-5 + 2.5%; see table below. Projected salary in the year of retirement is increased based on individual accruals to account for non-regular compensation. This assumption is consistent with long term Plan experience.
- Payroll Increase: N/A (UAAL amortized as level dollar).
- Actuarial Asset Method: Each year, the prior Actuarial Value of Assets is brought forward utilizing the historical geometric 4-year average Market Value return (net-of-fees). It is possible that over time this technique will produce an insignificant bias above or below Market Value.

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Termination and Disability Rate Table:

Age	% Becoming Disabled During the Year	% Terminating During the Year
20	0.14%	6.00%
30	0.18%	5.00%
40	0.30%	2.60%
50	1.00%	0.80%

FINAL COMPONENTS OF PENSION EXPENSE
FISCAL YEAR SEPTEMBER 30, 2017

	Net Pension Liability	Deferred Inflows	Deferred Outflows	Pension Expense
Beginning balance	\$ 2,133,343	\$ 1,049,708	\$ 1,498,620	\$ -
Total Pension Liability Factors:				
Service Cost	658,122	-	-	658,122
Interest	1,828,417	-	-	1,828,417
Changes in benefit terms	-	-	-	-
Differences between Expected and Actual Experience with regard to economic or demographic assumptions	124,820	-	124,820	-
Current year amortization of experience difference	-	(110,840)	(17,834)	(93,006)
Change in assumptions about future economic or demographic factors or other inputs	-	-	-	-
Current year amortization of change in assumptions	-	-	(99,712)	99,712
Benefit Payments	(1,121,040)	-	-	(1,121,040)
Net change	<u>1,490,319</u>	<u>(110,840)</u>	<u>7,274</u>	<u>1,372,205</u>
Plan Fiduciary Net Position:				
Contributions - Employer	1,011,680	-	-	-
Contributions - State	-	-	-	-
Contributions - Employee	152,218	-	-	(152,218)
Projected Net Investment Income	1,661,768	-	-	(1,661,768)
Difference between projected and actual earnings on Pension Plan investments	1,384,149	1,384,149	-	-
Current year amortization	-	(421,792)	(300,116)	(121,676)
Benefit Payments	(1,121,040)	-	-	1,121,040
Administrative Expenses	(24,940)	-	-	24,940
Net change	<u>3,063,835</u>	<u>962,357</u>	<u>(300,116)</u>	<u>(789,682)</u>
Ending Balance	<u>\$ 559,827</u>	<u>\$ 1,901,225</u>	<u>\$ 1,205,778</u>	<u>\$ 582,523</u>

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)	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
2014	\$ (340,322)	5	\$ (68,064)	\$ (68,064)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2015	\$ 1,500,582	5	\$ 300,116	\$ 300,116	\$ 300,116	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2016	\$ (384,494)	5	\$ (76,899)	\$ (76,899)	\$ (76,899)	\$ (76,899)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2017	\$ (1,384,149)	5	\$ (276,829)	\$ (276,830)	\$ (276,830)	\$ (276,830)	\$ (276,830)	\$ -	\$ -	\$ -	\$ -	\$ -
Net Increase (Decrease) in Pension Expense			\$ (121,676)	\$ (121,677)	\$ (53,613)	\$ (353,729)	\$ (276,830)	\$ -	\$ -	\$ -	\$ -	\$ -

AMORTIZATION SCHEDULE - CHANGES OF ASSUMPTIONS

Increase (Decrease) in Pension Expense Arising from the Recognition of the Effects of Changes of Assumptions

Plan Year Ending	Changes of Assumptions	Recognition Period (Years)	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
2016	\$ 697,984	7	\$ 99,712	\$ 99,712	\$ 99,712	\$ 99,712	\$ 99,712	\$ 99,712	\$ -	\$ -	\$ -	\$ -
Net Increase (Decrease) in Pension Expense			\$ 99,712	\$ 99,712	\$ 99,712	\$ 99,712	\$ 99,712	\$ 99,712	\$ -	\$ -	\$ -	\$ -

AMORTIZATION SCHEDULE - EXPERIENCE

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

Plan Year Ending	Differences Between Expected and Actual Experience	Recognition Period (Years)	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
2015	\$ (413,419)	7	\$ (59,060)	\$ (59,060)	\$ (59,060)	\$ (59,060)	\$ (59,060)	\$ -	\$ -	\$ -	\$ -	\$ -
2016	\$ (362,464)	7	\$ (51,780)	\$ (51,780)	\$ (51,781)	\$ (51,781)	\$ (51,781)	\$ (51,781)	\$ -	\$ -	\$ -	\$ -
2017	\$ 124,820	7	\$ 17,834	\$ 17,831	\$ 17,831	\$ 17,831	\$ 17,831	\$ 17,831	\$ 17,831	\$ -	\$ -	\$ -
Net Increase (Decrease) in Pension Expense			\$ (93,006)	\$ (93,009)	\$ (93,010)	\$ (93,010)	\$ (93,010)	\$ (33,950)	\$ 17,831	\$ -	\$ -	\$ -