

TOWN OF MEDLEY
DEFINED BENEFIT PLAN
ACTUARIAL VALUATION
AS OF OCTOBER 1, 2019
CONTRIBUTIONS APPLICABLE TO THE
PLAN/FISCAL YEAR ENDING SEPTEMBER 30, 2020
GASB 67/68 DISCLOSURE INFORMATION
AS OF SEPTEMBER 30, 2019



FOSTER & FOSTER
ACTUARIES AND CONSULTANTS

December 5, 2019

Board of Trustees
Town of Medley
General Employees' Pension Board

Re: Town of Medley Defined Benefit Plan

Dear Board:

We are pleased to present to the Board this report of the annual actuarial valuation of the Town of Medley Defined Benefit 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 Chapter 112, 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 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, 2018. The total pension liability was rolled-forward from the valuation date to the plan's fiscal year ending September 30, 2019 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 Town of Medley, nor does anyone at Foster & Foster, Inc. act as a member of the Board of Trustees of the Defined Benefit Plan. Thus, there is no relationship existing that might affect our capacity to prepare and certify this actuarial report.

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

Respectfully submitted,

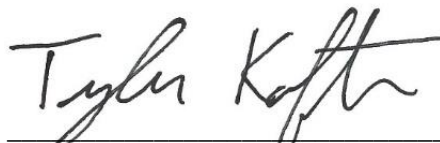
Foster & Foster, Inc.

By:



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

By:



Tyler A. Koftan, EA, MAAA
Enrolled Actuary #17-8685

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Enclosures

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SUMMARY OF REPORT

The regular annual actuarial valuation of the Town of Medley Defined Benefit Plan, performed as of October 1, 2019, 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, 2018 actuarial valuation report, are as follows:

Valuation Date	10/1/2019	10/1/2018
Applicable to Fiscal Year Ending	<u>9/30/2020</u>	<u>9/30/2019</u>
Minimum Required Contribution	\$931,502	\$878,609

As you can see, the Minimum Required Contribution shows an increase when compared to the results determined in the October 1, 2018 actuarial valuation report. The increase is attributable to net unfavorable experience realized by the plan during the year and a natural rise in the plan's normal cost due to salary increases. The increase was offset in part by Town contributions that were greater than the Minimum Recommended Contribution.

Plan experience was unfavorable overall on the basis of the plan's actuarial assumptions. Sources of actuarial loss included an average salary increase of 6.87% which exceeded the 3.50% assumption, unfavorable retirement experience, and inactive mortality experience. These losses were offset in part by a gain associated with more turnover than expected.

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.

COMPARATIVE SUMMARY OF PRINCIPAL VALUATION RESULTS

	<u>10/1/2019</u>	<u>10/1/2018</u>
A. Participant Data		
Actives	103	111
Service Retirees	34	31
DROP Retirees	2	1
Beneficiaries	2	2
Disability Retirees	1	1
Terminated Vested	<u>13</u>	<u>12</u>
Total	155	158
Total Annual Payroll	\$3,539,872	\$3,521,906
Payroll Under Assumed Ret. Age	2,623,277	2,613,761
Annual Rate of Payments to:		
Service Retirees	1,032,862	916,010
DROP Retirees	39,063	14,206
Beneficiaries	21,877	21,533
Disability Retirees	1,275	1,255
Terminated Vested	109,491	88,561
B. Assets		
Actuarial Value (AVA) ¹	22,614,280	21,277,154
Market Value (MVA) ¹	22,314,006	21,685,310
C. Liabilities		
Present Value of Benefits		
Actives		
Retirement Benefits	15,602,579	15,573,856
Disability Benefits	437,116	414,009
Death Benefits	149,924	143,236
Vested Benefits	431,052	427,330
Refund of Contributions	0	0
Service Retirees	11,441,470	10,416,939
DROP Retirees ¹	622,403	205,032
Beneficiaries	227,099	236,050
Disability Retirees	20,558	20,604
Terminated Vested	<u>924,372</u>	<u>788,779</u>
Total	29,856,573	28,225,835

C. Liabilities - (Continued)	<u>10/1/2019</u>	<u>10/1/2018</u>
Present Value of Future Salaries	23,639,713	23,219,623
Present Value of Future Member Contributions	0	0
Normal Cost (Retirement)	512,166	486,980
Normal Cost (Disability)	26,707	25,419
Normal Cost (Death)	8,788	8,681
Normal Cost (Vesting)	28,036	27,266
Normal Cost (Refunds)	<u>0</u>	<u>0</u>
Total Normal Cost	575,697	548,346
Present Value of Future Normal Costs	4,105,053	3,941,661
Accrued Liability (Retirement)	12,002,269	12,123,940
Accrued Liability (Disability)	221,035	211,455
Accrued Liability (Death)	79,727	77,400
Accrued Liability (Vesting)	212,587	203,975
Accrued Liability (Refunds)	0	0
Accrued Liability (Inactives) ¹	<u>13,235,902</u>	<u>11,667,404</u>
Total Actuarial Accrued Liability (EAN AL)	25,751,520	24,284,174
Unfunded Actuarial Accrued Liability (UAAL)	3,137,240	3,007,020
Funded Ratio (AVA / EAN AL)	87.8%	87.6%

D. Actuarial Present Value of		
Accrued Benefits	<u>10/1/2019</u>	<u>10/1/2018</u>
Vested Accrued Benefits		
Inactives ¹	13,235,902	11,667,404
Actives	9,295,531	9,492,976
Member Contributions	<u>0</u>	<u>0</u>
Total	22,531,433	21,160,380
Non-vested Accrued Benefits	<u>1,170,518</u>	<u>1,192,343</u>
Total Present Value		
Accrued Benefits (PVAB)	23,701,951	22,352,723
Funded Ratio (MVA / PVAB)	94.1%	97.0%
Increase (Decrease) in Present Value of		
Accrued Benefits Attributable to:		
Plan Amendments	0	
Assumption Changes	0	
Plan Experience	920,359	
Benefits Paid	(991,824)	
Interest	1,420,693	
Other	<u>0</u>	
Total	1,349,228	

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

E. Pension Cost

Normal Cost ²	\$613,117	\$583,988
Administrative Expenses ²	27,002	21,715
Payment Required to Amortize Unfunded Actuarial Accrued Liability over 20 years (as of 10/1/2019) ²	291,383	272,906
Minimum Required Contribution	931,502	878,609
Expected Member Contributions ²	0	0
Expected Town Contribution	931,502	878,609

F. Past Contributions

Plan Years Ending:	<u>9/30/2019</u>
Town Requirement	878,609
Actual Contributions Made:	
Members (excluding buyback)	0
Town	<u>1,000,000</u>
Total	1,000,000

G. Net Actuarial (Gain)/Loss	362,223
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¹ The asset values and liabilities include accumulated DROP Plan Balances as of 9/30/2019 and 9/30/2018.

² Contributions developed as of 10/1/2019 displayed above have been adjusted to account for assumed interest.

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

<u>Year</u>	<u>Projected Unfunded Actuarial Accrued Liability</u>
2019	3,137,240
2020	3,049,778
2021	2,956,631
2026	2,391,810
2030	1,792,806
2035	797,270
2039	0

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

	<u>Actual</u>	<u>Assumed</u>
Year Ended 9/30/2019	6.87%	3.50%
Year Ended 9/30/2018	7.75%	3.50%
Year Ended 9/30/2017	8.75%	3.50%
Year Ended 9/30/2016	N/A	N/A
Year Ended 9/30/2015	N/A	N/A

(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 9/30/2019	2.98%	6.39%	6.50%
Year Ended 9/30/2018	9.03%	7.01%	6.50%
Year Ended 9/30/2017	13.73%	13.73%	6.50%
Year Ended 9/30/2016	8.69%	8.69%	N/A
Year Ended 9/30/2015	-1.35%	-1.35%	N/A

STATEMENT BY ENROLLED ACTUARY

This actuarial valuation was prepared and completed by me or under my direct supervision, and I acknowledge responsibility for the results. To the best of my knowledge, the results are complete and accurate, and in my opinion, the techniques and assumptions used are reasonable and meet the requirements and intent of Part VII, Chapter 112, Florida Statutes. There is no benefit or expense to be provided by the plan and/or paid from the plan's assets for which liabilities or current costs have not been established or otherwise taken into account in the valuation. All known events or trends which may require a material increase in plan costs or required contribution rates have been taken into account in the valuation.



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

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

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

RECONCILIATION OF UNFUNDED ACTUARIAL ACCRUED LIABILITIES

(1)	Unfunded Actuarial Accrued Liability as of October 1, 2018	\$3,007,020
(2)	Sponsor Normal Cost developed as of October 1, 2018	548,346
(3)	Expected administrative expenses for the year ended September 30, 2019	20,390
(4)	Expected interest on (1), (2) and (3)	231,761
(5)	Sponsor contributions to the System during the year ended September 30, 2019	1,000,000
(6)	Expected interest on (5)	32,500
(7)	Expected Unfunded Actuarial Accrued Liability as of September 30, 2019 (1)+(2)+(3)+(4)-(5)-(6)	2,775,017
(8)	Change to UAAL due to Assumption Change	0
(9)	Change to UAAL due to Actuarial (Gain)/Loss	362,223
(10)	Unfunded Actuarial Accrued Liability as of October 1, 2019	3,137,240

Type of <u>Base</u>	Date <u>Established</u>	Years <u>Remaining</u>	10/1/2019 <u>Amount</u>	Amortization <u>Amount</u>
Initial Base	10/1/2018	19	2,775,017	242,731
Actuarial Loss	10/1/2019	20	<u>362,223</u>	<u>30,868</u>
			3,137,240	273,599

DETAILED ACTUARIAL (GAIN)/LOSS ANALYSIS

(1) Unfunded Actuarial Accrued Liability (UAAL) as of October 1, 2018	\$3,007,020
(2) Expected UAAL as of October 1, 2019	2,775,017
(3) Summary of Actuarial (Gain)/Loss, by component:	
Investment Return (Actuarial Asset Basis)	23,028
Salary Increases	180,609
Active Decrements	66,806
Inactive Mortality	158,937
2020 COLA Rate Different Than Expected	(56,300)
Other	<u>(10,857)</u>
Increase in UAAL due to (Gain)/Loss	362,223
Assumption Changes	<u>0</u>
(4) Actual UAAL as of October 1, 2019	\$3,137,240

ACTUARIAL ASSUMPTIONS AND METHODS

Mortality Rate

Healthy Active Lives:

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

Male: RP2000 Generational, 50% White Collar / 50% Blue Collar, Scale BB

Healthy Inactive Lives:

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

Male: RP2000 Generational, 50% Annuitant White Collar / 50% Annuitant Blue Collar, Scale BB

Disabled Lives:

Female: 100% RP2000 Disabled Female set forward two years

Male: 100% RP2000 Disabled Male setback four years

The assumed rates of mortality are 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, 2018 FRS actuarial valuation report for non-special risk lives. We feel this assumption sufficiently accommodates future mortality improvements.

Interest Rate

6.50% 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

3.50% per year. This assumption seems reasonable based on experienced observed by other municipal general employee plans.

Payroll Growth

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

Administrative Expenses

\$25,354 annually, based on the average of actual expenses incurred in the prior two fiscal years.

Amortization Method

New UAAL amortization bases will be amortized over 20 years.

Termination Rates

Table V from August 1992 Pension Forum published by the Society of Actuaries, multiplied by 0.35. See table later in this section.

Disability Rates

1987 Commissioner's Group Disability Table, six month elimination period, male and female. See table later in this section.

Retirement Rate

Members are assumed to retire at first normal retirement eligibility, except for Elected Officials who are assumed to retire at first early retirement eligibility. We believe this is reasonable based on plan provisions.

Deferred Benefits

For terminated vested participants benefits are assumed to commence at Normal Retirement Date. For beneficiaries receiving pre-retirement death benefits, benefits are assumed to commence on the date the participant would have reached Normal Retirement Date.

Interest Adjustment for
Required Contribution

6.50% for projecting dollar requirement.

Cost of Living Increases

2.50% per year.

Funding Method

Entry Age Normal Cost Method.

Actuarial Asset Method

Effective October 1, 2018, all assets are valued at market value with an adjustment to uniformly spread actuarial investment gains and losses (as measured by actual market value investment return against expected market value investment return) over a five-year period. Previously, Market Value of Assets was utilized.

Assumption Tables

% Terminating During the Year		% Becoming Disabled During the Year	
Age	Rate	Age	Rate
20	6.51%	20	0.0000%
25	4.76%	25	0.0854%
30	3.54%	30	0.0986%
35	2.77%	35	0.1242%
40	2.28%	40	0.1760%
45	1.93%	45	0.2944%
50	1.58%	50	0.5396%
55	0.00%	55	0.9770%
		60	1.4774%
		65	1.6710%

GLOSSARY

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

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

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

Unfunded Actuarial Accrued Liability (UAAL) is the difference between the actuarial accrued liability (described above) and the actuarial value of assets.

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.

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.

DISCUSSION OF RISK

ASOP No. 51, Assessment and Disclosure of Risk Associated with Measuring Pension Obligations and Determining Pension Plan Contributions, states that the actuary should identify risks that, in the actuary's professional judgment, may reasonably be anticipated to significantly affect the plan's future financial condition.

Throughout this report, actuarial results are determined using various actuarial assumptions. These results are based on the premise that all future plan experience will align with the plan's actuarial assumptions; however, there is no guarantee that actual plan experience will align with the plan's assumptions. It is possible that actual plan experience will differ from anticipated experience in an unfavorable manner that will negatively impact the plan's funded position.

Below are examples of ways in which plan experience can deviate from assumptions and the potential impact of that deviation. Typically, this results in an actuarial gain or loss representing the current-year financial impact on the plan's unfunded liability of the experience differing from assumptions; this gain or loss is amortized over a period of time determined by the plan's amortization method. When assumptions are selected that adequately reflect plan experience, gains and losses typically offset one another in the long term, resulting in a relatively low impact on the plan's contribution requirements associated with plan experience. When assumptions are too optimistic, losses can accumulate over time and the plan's amortization payment could potentially grow to an unmanageable level.

- Investment Return: When the rate of return on the Actuarial Value of Assets falls short of the assumption, this produces a loss representing assumed investment earnings that were not realized. Further, it is unlikely that the plan will experience a scenario that matches the assumed return in each year as capital markets can be volatile from year to year. Therefore, contribution amounts can vary in the future.
- Salary Increases: When a plan participant experiences a salary increase that was greater than assumed, this produces a loss representing the cost of an increase in anticipated plan benefits for the participant as compared to the previous year. The total gain or loss associated with salary increases for the plan is the sum of salary gains and losses for all active participants.
- Demographic Assumptions: Actuarial results take into account various potential events that could happen to a plan participant, such as retirement, termination, disability, and death. Each of these potential events is assigned a liability based on the likelihood of the event and the financial consequence of the event for the plan. Accordingly, actuarial liabilities reflect a blend of financial consequences associated with various possible outcomes (such as retirement at one of various possible ages). Once the outcome is known (e.g. the participant retires) the liability is adjusted to reflect the known outcome. This adjustment produces a gain or loss depending on whether the outcome was more or less favorable than other outcomes that could have occurred.

Impact of Plan Maturity on Risk

For newer pension plans, most of the participants and associated liabilities are related to active members who have not yet reached retirement age. As pension plans continue in operation and active members reach retirement ages, liabilities begin to shift from being primarily related to active members to being shared amongst active and retired members. Plan maturity is a measure of the extent to which this shift has occurred. It is important to understand that plan maturity can have an impact on risk tolerance and the overall risk characteristics of the plan. For example, closed plans with a large amount of retired liability do not have as long of a time horizon to recover from losses (such as losses on investments due to lower than expected investment returns) as plans where the majority of the liability is attributable to active members. For this reason, less tolerance for investment risk may be warranted for highly mature closed plans with a substantial inactive liability. Similarly, mature closed plans paying substantial retirement benefits resulting in a small positive or net negative cash flow can be more sensitive to near term investment volatility, particularly if the size of the fund is shrinking, which can result in less assets being available for investment in the market.

To assist with determining the maturity of the plan, we have provided some relevant metrics in the table following titled “Plan Maturity Measures and Other Risk Metrics”. Highlights of this information are discussed below:

- The Support Ratio, determined as the ratio of active to inactive members, has decreased from 248.9% on October 1, 2017 to 198.1% on October 1, 2019, indicating that the plan has been maturing during the period.
- The Accrued Liability Ratio, determined as the ratio of the Inactive Accrued Liability, which is the liability associated with members who are no longer employed but are due a benefit from the plan, to the Total Accrued Liability, is 51.4%. With a plan of this maturity, losses due to lower than expected investment returns or demographic factors may result in larger increases in contribution requirements than would be needed for a less mature plan. Please note Chapter 112, Florida Statutes, requires that the plan sponsor contributes the minimum required contribution; thus, there is minimal solvency risk to the plan.
- The Funded Ratio, determined as the ratio of the Actuarial Value of Assets to the Total Accrued Liability, has stayed approximately the same from October 1, 2017 to October 1, 2019, due primarily to changes to benefits, assumptions, and methods implemented during the period. The decrease was offset by an increase attributable to excess Town contributions made during the period.
- The Net Cash Flow Ratio, determined as the ratio of the Net Cash Flow (contributions minus benefit payments and administrative expenses) to the Market Value of Assets, decreased from 0.7% on October 1, 2017 to -0.1% on October 1, 2019. The current Net Cash Flow Ratio of -0.1% indicates that contributions are not currently covering the plan's benefit payments and administrative expenses. This metric has decreased because the annual amount of Town contributions has not changed in recent history while the annual rate of benefit payments has increased.

It is important to note that the actuary has identified the risks in this section as the most significant risks based on the characteristics of the plan and the nature of the project, however, it is not an exhaustive list of potential risks that could be considered. Additional advanced modeling, as well as the identification of additional risks, can be provided at the request of the audience addressed on page 2 of this report.

PLAN MATURITY MEASURES AND OTHER RISK METRICS

	<u>10/1/2017</u>	<u>10/1/2018</u>	<u>10/1/2019</u>
<u>Support Ratio</u>			
Total Actives	112	111	103
Total Inactives	45	47	52
Actives / Inactives	248.9%	236.2%	198.1%

Asset Volatility Ratio

Market Value of Assets (MVA)	19,819,278	21,685,310	22,314,006
Total Annual Payroll	3,267,389	3,521,906	3,539,872
MVA / Total Annual Payroll	606.6%	615.7%	630.4%

Accrued Liability (AL) Ratio

Inactive Accrued Liability	10,981,711	11,667,404	13,235,902
Total Accrued Liability (EAN)	22,321,389	24,284,174	25,751,520
Inactive AL / Total AL	49.2%	48.0%	51.4%

Funded Ratio

Actuarial Value of Assets (AVA)	19,819,278	21,277,154	22,614,280
Total Accrued Liability (EAN)	22,321,389	24,284,174	25,751,520
AVA / Total Accrued Liability (EAN)	88.8%	87.6%	87.8%

Net Cash Flow Ratio

Net Cash Flow ¹	135,647	65,457	(22,142)
Market Value of Assets (MVA)	19,819,278	21,685,310	22,314,006
Ratio	0.7%	0.3%	-0.1%

¹ Determined as total contributions minus benefit payments and administrative expenses.

STATEMENT OF FIDUCIARY NET POSITION
SEPTEMBER 30, 2019

<u>ASSETS</u>	MARKET VALUE
Investments:	
Mutual Funds:	
Fixed Income	6,359,974.26
Equity	15,969,114.78
Total Investments	22,329,089.04
Total Assets	22,329,089.04
<u>LIABILITIES</u>	
Payables:	
To Police Officers' Trust Fund	15,082.92
Total Liabilities	15,082.92
NET POSITION RESTRICTED FOR PENSIONS	22,314,006.12

STATEMENT OF CHANGES IN FIDUCIARY NET POSITION
FOR THE YEAR ENDED SEPTEMBER 30, 2019
Market Value Basis

ADDITIONS

Contributions:

Town	1,000,000.00	
Total Contributions		1,000,000.00
Investment Income:		
Net Increase in Fair Value of Investments	650,837.42	
Less Investment Expense ¹	0.00	
Net Investment Income		650,837.42
Total Additions		1,650,837.42

DEDUCTIONS

Distributions to Members:

Benefit Payments	991,823.64	
Lump Sum DROP Distributions	0.00	
Total Distributions		991,823.64
Administrative Expense		30,317.68
Total Deductions		1,022,141.32
Net Increase in Net Position		628,696.10
NET POSITION RESTRICTED FOR PENSIONS		
Beginning of the Year		21,685,310.02
End of the Year		22,314,006.12

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

ACTUARIAL ASSET VALUATION
September 30, 2019

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

Plan Year Ending	Gain/(Loss)	<u>Gains/Losses Not Yet Recognized</u>				
		Amounts Not Yet Recognized by Valuation Year				
		2019	2020	2021	2022	2023
09/30/2015	N/A					
09/30/2016	N/A					
09/30/2017	N/A					
09/30/2018	510,195	306,117	204,078	102,039	0	0
09/30/2019	(757,989)	(606,391)	(454,793)	(303,195)	(151,597)	0
Total		(300,274)	(250,715)	(201,156)	(151,597)	0

<u>Development of Investment Gain/Loss</u>	
Market Value of Assets, 09/30/2018	21,685,310
Contributions Less Benefit Payments & Admin Expenses	(22,141)
Expected Investment Earnings	1,408,826
Actual Net Investment Earnings	650,837
2019 Actuarial Investment Gain/(Loss)	<u>(757,989)</u>

*Expected Investment Earnings = $0.065 * [21,685,310 + 0.5 * (22,141)]$

<u>Development of Actuarial Value of Assets</u>	
(1) Market Value of Assets, 09/30/2019	22,314,006
(2) Gain/(Loss) Not Yet Recognized	<u>(300,274)</u>
(3) Actuarial Value of Assets, 09/30/2019, (1) - (2)	22,614,280
(A) 09/30/2018 Actuarial Assets:	21,277,154
(I) Net Investment Income:	
1. Earnings and Investment Gains	650,837
2. Change in Actuarial Value	708,430
3. Investment Expenses	<u>0</u>
Total	1,359,267
(B) 09/30/2019 Actuarial Assets:	22,614,280
Actuarial Assets Rate of Return = $2I/(A+B-I)$:	6.39%
Market Value of Assets Rate of Return:	2.98%
Actuarial Gain/(Loss) due to Investment Return (Actuarial Asset Basis)	(23,028)
10/01/2019 Limited Actuarial Assets:	22,614,280

CHANGES IN NET ASSETS AVAILABLE FOR BENEFITS
SEPTEMBER 30, 2019
Actuarial Asset Basis

REVENUES

Contributions:		
Town	1,000,000.00	
Total Contributions		1,000,000.00
Earnings from Investments:		
Earnings and Investment Gains	650,837.42	
Change in Actuarial Value	708,430.00	
Total Earnings and Investment Gains		1,359,267.42
EXPENDITURES		
Distributions to Members:		
Benefit Payments	991,823.64	
Lump Sum DROP Distributions	0.00	
Total Distributions		991,823.64
Expenses:		
Investment related ¹	0.00	
Administrative	30,317.68	
Total Expenses		30,317.68
Change in Net Assets for the Year		1,337,126.10
Net Assets Beginning of the Year		21,277,154.02
Net Assets End of the Year ²		22,614,280.12

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

²Net Assets may be limited for actuarial consideration.

DEFERRED RETIREMENT OPTION PLAN ACTIVITY
October 1, 2018 to September 30, 2019

Beginning of the Year Balance	4,735.20
Plus Additions	30,367.04
Investment Return Earned	0.00
Less Distributions	0.00
End of the Year Balance	35,102.24

Note: Investment Return Earned not available at time of valuation.

TOWN CONTRIBUTIONS IN EXCESS OF MINIMUM REQUIREMENT
FOR THE FISCAL YEAR ENDED (FYE) SEPTEMBER 30, 2019

(1) Required Town Contributions	\$878,609.00
(2) Less 2018 Prepaid Contribution	0.00
(3) Less Actual Town Contributions	<u>(1,000,000.00)</u>
(4) Town Contributions in Excess of Minimum Requirement Applied to Reduce Unfunded Actuarial Accrued Liability as of September 30, 2019	(\$121,391.00)

STATISTICAL DATA

	<u>10/1/2016</u>	<u>10/1/2017</u>	<u>10/1/2018</u>	<u>10/1/2019</u>
<u>Actives - Full-Time General Employees and Elected Officials</u>				
Number	N/A	68	68	65
Average Current Age	48.2	47.6	48.3	48.3
Average Age at Employment	38.6	37.5	37.5	37.4
Average Past Service	9.6	10.1	10.8	10.9
Average Annual Salary	N/A	\$48,050	\$51,793	\$54,460
<u>Actives - Part-Time Employees</u>				
Number	N/A	44	43	38
Average Current Age	55.1	58.8	54.9	51.7
Average Age at Employment	43.9	47.3	43.5	40.9
Average Past Service	11.2	11.5	11.4	10.8
Average Annual Salary	N/A	N/A	N/A	N/A
<u>Service Retirees</u>				
Number	28	29	31	35
Average Current Age	N/A	72.3	74.6	72.8
Average Annual Benefit	N/A	\$29,255	\$29,549	\$29,510
<u>DROP Retirees</u>				
Number	0	0	1	2
Average Current Age	N/A	N/A	63.5	65.7
Average Annual Benefit	N/A	N/A	\$14,206	\$19,532
<u>Beneficiaries</u>				
Number	3	3	2	2
Average Current Age	N/A	52.2	36.6	37.6
Average Annual Benefit	N/A	\$7,527	\$10,767	\$10,939
<u>Disability Retirees</u>				
Number	1	1	1	1
Average Current Age	N/A	65.2	66.2	67.2
Average Annual Benefit	N/A	\$1,197	\$1,255	\$1,275
<u>Terminated Vested</u>				
Number	12	12	12	13
Average Current Age	N/A	46.8	46.2	46.9
Average Annual Benefit	N/A	\$9,365	\$7,380	\$8,422

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	2	2	0	0	0	0	0	0	0	0	0	4
20 - 24	4	2	0	1	0	0	0	0	0	0	0	7
25 - 29	0	0	2	1	0	2	0	0	0	0	0	5
30 - 34	1	0	0	0	1	3	3	0	0	0	0	8
35 - 39	0	1	0	0	0	2	2	0	0	0	0	5
40 - 44	2	0	0	1	0	1	0	1	0	0	0	5
45 - 49	0	0	0	0	5	3	1	1	0	1	0	11
50 - 54	0	0	2	0	2	6	2	3	0	1	1	17
55 - 59	1	0	1	0	2	1	3	0	0	2	3	13
60 - 64	0	0	0	0	2	1	2	1	3	1	0	10
65+	0	0	0	0	0	6	2	3	3	4	0	18
Total	10	5	5	3	12	25	15	9	6	9	4	103

VALUATION PARTICIPANT RECONCILIATION

1. Active lives

a. Number in prior valuation 10/1/2018	111
b. Terminations	
i. Vested (partial or full) with deferred annuity	(1)
ii. Non-Vested	(4)
iii. Part-Time to Non-Participating Full-Time	(8)
c. Deaths	
i. Beneficiary receiving benefits	0
ii. No future benefits payable	(2)
d. Disabled	0
e. Retired	(3)
f. DROP	<u>(1)</u>
g. Continuing participants	92
h. New entrants	<u>11</u>
i. Total active life participants in valuation	103

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

	Service Retirees, Vested Receiving <u>Benefits</u>	DROP <u>Benefits</u>	Receiving Death <u>Benefits</u>	Receiving Disability <u>Benefits</u>	Vested (Deferred Annuity)	<u>Total</u>
a. Number prior valuation	31	1	2	1	12	47
Retired	3	0	0	0	0	3
DROP	0	1	0	0	0	1
Vested (Deferred Annuity)	0	0	0	0	1	1
Hired/Terminated in Same Year	0	0	0	0	0	0
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
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	34	2	2	1	13	52

SUMMARY OF CURRENT PLAN
(Through Ordinance C-1599)

<u>Eligibility</u>	Eligible Employees enter the plan on October 1 st or April 1 st next following completion of one Year of Service and attainment of age 21. Age and service requirements are waived for Elected Officials, who enter the Plan at hire.
<u>Compensation</u>	Wages as defined in Code Section 3401(a) and all other payments of compensation by the Employer for a Plan Year for which the Employer is required to furnish the Participant a written statement under Code Sections 6041(d), 6051(a)(3) and 6052. Certain items of compensation are excluded such as overtime, bonuses, amounts attributable to sick pay, and any remuneration that is not a part of the Employee's regular or base salary or wages.
<u>Average Monthly Compensation</u>	Monthly compensation averaged over the 5 consecutive Plan Years which produce the highest monthly average within the last 10 completed years of employment.
<u>Period of Service</u>	The aggregate of all periods as an Eligible Employee commencing with the Employee's first day of employment or reemployment and ending on the date the Employee terminates service with the Employer. Fractional periods of a year will be expressed in terms of complete months.
<u>Year of Service</u>	Effective October 1, 2007, a period of 12 consecutive months during which an Employee has at least 1,750 Hours of Service. Prior to October 1, 2007, a Year of Service meant 1,500 Hours of Service during the 12-month consecutive period.
<u>Normal Retirement</u>	
Date	For benefits accrued as an Elected Official, the attainment of age 55 with 8 years as an Elected Official. For General Employees hired before January 1, 2011, the earlier of attainment of age 62 or completion of 30 Years of Service. For General Employees hired on or after January 1, 2011, the earlier of attainment of age 65 or completion of 35 Years of Service.

Part-time employees become eligible for Normal Retirement under age and service conditions shown in a table below. They are not eligible for any other benefits from the plan.

Benefit

For benefits accrued as the Mayor, \$5,500 times Periods of Service as the Mayor earned before October 1, 2017, and \$8,500 times Periods of Service as the Mayor earned on and after that date.

For benefits accrued as a Councilperson, \$2,500 times Periods of Service as a Councilperson earned before October 1, 2017, and \$3,800 times Periods of Service as a Councilperson earned on and after October 1, 2017.

For benefits accrued as a General Employee, Average Monthly Compensation times Periods of Service times a benefit rate determined based on Periods of Service and date of hire. Benefit rates shown apply to all Periods of Service. See below.

General Employees Hired Before January 1, 2011

<u>Periods of Service</u>	<u>Benefit Rate</u>
0 to 10	2.00%
10 to 15	2.25%
15 to 30	2.50%

General Employees Hired From January 1, 2011 to June 30, 2014

<u>Periods of Service</u>	<u>Benefit Rate</u>
0 to 15	2.00%
15 to 20	2.25%
20 to 30	2.50%

General Employees Hired On or After July 1, 2014

<u>Periods of Service</u>	<u>Benefit Rate</u>
0 to 30	1.67%

The normal retirement benefit for part-time employees is a monthly flat dollar amount payable upon attainment of age and service conditions as shown below.

<u>Age</u>	<u>Periods of Service</u>	<u>Benefit</u>
65	20	\$270
65	25	\$290
70	15	\$250
70	20	\$310
70	25	\$330

Form of Benefit

For General Employees and Elected Officials, lifetime benefits with 20 years guaranteed (10 years guaranteed for General Employees hired on or after July 1, 2014). Options available.

For part-time employees, lifetime benefits, ceasing upon death with no options available.

Early Retirement

Date

For General Employees, age 50. For Elected Officials, age 50 with 8 years of Vesting Service. Part-time employees are not eligible.

Benefit

Accrued Benefit on Early Retirement Date, reduced for each year prior to the Normal Retirement Date. The reduction is 6 2/3% for the first 5 years, 3 1/3% for years 6 to 10, and 2.50% for years 11 to 15. For Early Retirement Dates more than 15 years prior to the Normal Retirement Date, the benefit is further actuarially adjusted. There is no reduction for Elected Officials.

Form of Benefit

Same as for Normal Retirement.

Pre-Retirement Death Benefit

Eligibility

Death in active service while vested. Part-time employees are not eligible.

Benefit

Monthly benefit accrued through date of death, payable for 20 years (10 years if hired on or after July 1, 2014).

Disability

Eligibility

Totally and Permanently Disabled prior to retirement or separation from service. Part-time employees are not eligible.

Amount

Benefit accrued to date of disability. Vesting Service includes service to date of disability and time while Totally and Permanently Disabled.

Termination of Employment

Vesting Service Requirement

5 years for General Employees hired before July 1, 2014. 8 years for General Employees hired on or after July 1, 2014. Elected Officials are immediately vested. Part-time employees are vested only upon attainment of Normal Retirement eligibility requirements.

Benefit

Vested accrued benefit.

Cost of Living Adjustment

Automatic COLA adjustment each January 1st according to the change in Consumer Price Index, limited to a maximum of 3%. The COLA adjustment cannot increase benefits beyond 75% of Average Monthly Compensation for General Employees or 100% of Average Monthly Compensation for Elected Officials.

Deferred Retirement Option Plan

Eligibility

Satisfaction of Normal Retirement requirements as a General Employee.

Participation

Not to exceed 36 months.

Rate of Return

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

Form of Distribution

Cash lump sum (options available) at termination of employment.

STATEMENT OF FIDUCIARY NET POSITION
SEPTEMBER 30, 2019

<u>ASSETS</u>	MARKET VALUE
Total Cash and Equivalents	0
Total Receivable	0
Investments:	
Mutual Funds:	
Fixed Income	6,359,974
Equity	15,969,115
Total Investments	22,329,089
Total Assets	22,329,089
<u>LIABILITIES</u>	
Payables:	
To Police Officers' Trust Fund	15,083
Total Liabilities	15,083
NET POSITION RESTRICTED FOR PENSIONS	22,314,006

STATEMENT OF CHANGES IN FIDUCIARY NET POSITION
FOR THE YEAR ENDED SEPTEMBER 30, 2019
Market Value Basis

ADDITIONS

Contributions:

Town	1,000,000	
Total Contributions		1,000,000
Investment Income:		
Net Increase in Fair Value of Investments	650,837	
Interest & Dividends	0	
Less Investment Expense ¹	0	
Net Investment Income		650,837
Total Additions		1,650,837

DEDUCTIONS

Distributions to Members:

Benefit Payments	991,823	
Lump Sum DROP Distributions	0	
Total Distributions		991,823
Administrative Expense		30,318
Total Deductions		1,022,141
Net Increase in Net Position		628,696

NET POSITION RESTRICTED FOR PENSIONS

Beginning of the Year	21,685,310
End of the Year	22,314,006

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

NOTES TO THE FINANCIAL STATEMENTS

(For the Year Ended September 30, 2019)

Plan Administration

The Plan is a single-employer defined benefit pension plan administered by the Board of Trustees of the Town of Medley Defined Benefit Plan. 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, 2018:

Inactive Plan Members or Beneficiaries Currently Receiving Benefits	35
Inactive Plan Members Entitled to But Not Yet Receiving Benefits	12
Active Plan Members	111
	158

Benefits Provided

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

A summary of the benefit provisions can be found in the October 1, 2018 Actuarial Valuation Report for the Town of Indian River Police Officers' and Firefighters' Retirement System prepared by Foster & Foster Actuaries and Consultants.

Incorporated are the benefit changes for measurement date 09/30/2019 as noted under the Notes to Schedule of Changes in Net Pension Liability and Related Ratios.

Contributions

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

Investments

Investment Policy:

The following was the Board's adopted asset allocation policy as of September 30, 2019:

Asset Class	Target Allocation
Domestic Equity	60%
International Equity	10%
Fixed Income	10%
Cash	20%
Total	100%

Concentrations:

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

Rate of Return:

For the year ended September 30, 2019 the annual money-weighted rate of return on Pension Plan investments, net of Pension Plan investment expense, was 2.98 percent.

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

Deferred Retirement Option Program

Eligibility: Satisfaction of Normal Retirement requirements as a General Employee.

Participation: Not to exceed 36 months.

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

The DROP balance as September 30, 2019 is \$35,102 ¹.

¹ Investment Return for one member will be included in activity for plan year ending September 30, 2019.

NET PENSION LIABILITY OF THE SPONSOR

The components of the Net Pension Liability of the Sponsor on September 30, 2019 were as follows:

Total Pension Liability	\$ 25,395,277
Plan Fiduciary Net Position	\$ (22,314,006)
Sponsor's Net Pension Liability	<u>\$ 3,081,271</u>
Plan Fiduciary Net Position as a percentage of Total Pension Liability	87.87%

Actuarial Assumptions:

The Total Pension Liability was determined by an actuarial valuation as of October 1, 2018 updated to September 30, 2019 using the following actuarial assumptions:

Inflation	2.50%
Salary Increases	3.50%
Discount Rate	6.50%
Investment Rate of Return	6.50%

Mortality Rate Healthy Inactive Lives:

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

Male: RP2000 Generational, 50% Annuitant White Collar / 50% Annuitant Blue Collar, Scale BB.

Mortality Rate Healthy Active Lives:

Female: RP2000 Generational, 100% Combined Healthy (previously Annuitant) White Collar, Scale BB.

Male: RP2000 Generational, 50% Combined Healthy White Collar / 50% Combined Healthy Blue Collar, Scale BB.

Mortality Rate Disabled Lives:

Female: 100% RP2000 Disabled Female set forward two years.

Male: 100% RP2000 Disabled Male setback four years.

The assumed rates of mortality are 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 non-special risk lives. We feel this assumption sufficiently accommodates future mortality improvements.

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

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 2019 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, 2019 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%

GASB 67

Discount Rate:
The Discount Rate used to measure the Total Pension Liability was 6.50 percent.
The projection of cash flows used to determine the Discount Rate assumed that Plan Member contributions will be made at the current contribution rate and that Sponsor contributions will be made at rates equal to the difference between actuarially determined contribution rates and the Member rate. Based on those assumptions, the Pension Plan's Fiduciary Net Position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the Long-Term Expected Rate of Return on Pension Plan investments was applied to all periods of projected benefit payments to determine the Total Pension Liability.

	1% Decrease	Current	1% Increase
	5.50%	Discount Rate	7.50%
		6.50%	
Sponsor's Net Pension Liability	\$ 6,130,942	\$ 3,081,271	\$ 546,306

SCHEDULE OF CHANGES IN NET PENSION LIABILITY AND RELATED RATIOS

Last 10 Fiscal Years

	09/30/2019	09/30/2018	09/30/2017
Total Pension Liability			
Service Cost	557,034	579,607	487,727
Interest	1,531,212	1,509,225	1,313,621
Changes of benefit terms	(446,649)	925,718	-
Differences between Expected and Actual Experience	497,745	(328,364)	331,458
Changes of assumptions	305,126	-	744,029
Benefit Payments, including Refunds of Employee Contributions	(991,823)	(914,153)	(856,112)
Net Change in Total Pension Liability	1,452,645	1,772,033	2,020,723
Total Pension Liability - Beginning	23,942,632	22,170,599	20,149,876
Total Pension Liability - Ending (a)	<u>\$ 25,395,277</u>	<u>\$ 23,942,632</u>	<u>\$ 22,170,599</u>
Plan Fiduciary Net Position			
Contributions - Employer	1,000,000	1,000,000	1,000,000
Net Investment Income	650,837	1,800,575	2,379,107
Benefit Payments, including Refunds of Employee Contributions	(991,823)	(914,153)	(856,112)
Administrative Expense	(30,318)	(20,390)	(8,241)
Net Change in Plan Fiduciary Net Position	628,696	1,866,032	2,514,754
Plan Fiduciary Net Position - Beginning	21,685,310	19,819,278	17,304,524
Plan Fiduciary Net Position - Ending (b)	<u>\$ 22,314,006</u>	<u>\$ 21,685,310</u>	<u>\$ 19,819,278</u>
Net Pension Liability - Ending (a) - (b)	<u>\$ 3,081,271</u>	<u>\$ 2,257,322</u>	<u>\$ 2,351,321</u>
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	87.87%	90.57%	89.39%
Covered Payroll	\$ 3,519,216	\$ 3,194,438	\$ 3,158,747
Net Pension Liability as a percentage of Covered Payroll	87.56%	70.66%	74.44%

SCHEDULE OF CHANGES IN NET PENSION LIABILITY AND RELATED RATIOS

Last 10 Fiscal Years

	09/30/2016 ¹	09/30/2015 ¹	09/30/2014 ¹
Total Pension Liability			
Service Cost	534,368	449,137	373,706
Interest	1,254,523	1,247,292	1,138,268
Changes of benefit terms	185,339	-	-
Differences between Expected and Actual Experience	(1,077,646)	816,952	-
Changes of assumptions	-	-	-
Benefit Payments, including Refunds of Employee Contributions	(810,015)	(746,172)	(707,981)
Net Change in Total Pension Liability	86,569	1,767,209	803,993
Total Pension Liability - Beginning	20,063,307	18,296,098	17,492,105
Total Pension Liability - Ending (a)	<u>\$ 20,149,876</u>	<u>\$ 20,063,307</u>	<u>\$ 18,296,098</u>
Plan Fiduciary Net Position			
Contributions - Employer	1,000,000	900,000	850,000
Net Investment Income	1,376,386	(217,632)	1,361,529
Benefit Payments, including Refunds of Employee Contributions	(810,015)	(746,172)	(707,981)
Administrative Expense	(24,354)	(20,889)	(9,308)
Net Change in Plan Fiduciary Net Position	1,542,017	(84,693)	1,494,240
Plan Fiduciary Net Position - Beginning	15,762,507	15,847,200	14,352,960
Plan Fiduciary Net Position - Ending (b)	<u>\$ 17,304,524</u>	<u>\$ 15,762,507</u>	<u>\$ 15,847,200</u>
Net Pension Liability - Ending (a) - (b)	<u>\$ 2,845,352</u>	<u>\$ 4,300,800</u>	<u>\$ 2,448,898</u>
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	85.88%	78.56%	86.62%
Covered Payroll	\$ 2,652,507	\$ 2,594,629	\$ 2,118,023
Net Pension Liability as a percentage of Covered Payroll	107.27%	165.76%	115.62%

Notes to Schedule of Changes in Net Pension Liability and Related Ratios

¹ The 2014-2016 results were provided by the prior actuary, The Standard Retirement Services, Inc.

Changes of benefit terms:

For measurement date 09/30/2019, amounts reported as changes of benefit terms were outlined in the August 6, 2019 Actuarial Impact Statement.

For measurement date 09/30/2018, amounts reported as changes of benefit terms resulted from Ordinances C-1598 and C-1599, the following changes were implemented:

- 1) Increase the benefit rate for benefits accrued as the Mayor from \$5,500 to \$8,500 for all mayor service.
Applies to Mayors actively serving on and after October 1, 2017.
- 2) Increase the benefit rate for benefits accrued as a Councilperson from \$2,500 to \$3,800 for all council service.
Applies to Councilpersons actively serving on or after October 1, 2017.
- 3) Change benefits for Part Time Employees to the following structure. Benefit amounts at other combinations of age and Periods of Service are eliminated.

<u>Age</u>	<u>Period of Service</u>	<u>Benefit</u>
65	20	\$ 270
65	25	\$ 290
70	15	\$ 250
70	20	\$ 310
70	25	\$ 330

Changes of assumptions:

For measurement date 09/30/2019, amounts reported as changes of assumptions resulted from the following changes:

- Elected officials are now assumed to retire at first eligibility for early retirement, rather than at first eligibility for normal retirement.
- Benefits valued for inactive participants now reflect the cost-of-living adjustment following the valuation date in order to more accurately reflect the benefits that will be paid during the majority of the fiscal year. Previously, benefits valued for these inactives were based on those in effect at the valuation date, without consideration of the COLA effective the following January.

For measurement date 09/30/2017, as required by Chapter 2015-157, Laws of Florida, the assumed rates of mortality have been changed from 2008+ IRS Combined Static Table to those used in the July 1, 2016 FRS valuation report.

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 ¹	Contributions as a percentage of Covered Payroll
09/30/2019	\$ 878,609	\$ 1,000,000	\$ (121,391)	\$ 3,519,216	28.42%
09/30/2018	\$ 900,745	\$ 1,000,000	\$ (99,255)	\$ 3,194,438	31.30%
09/30/2017	\$ 980,532	\$ 1,000,000	\$ (19,468)	\$ 3,158,747	31.66%
09/30/2016 ¹	\$ 980,532	\$ 1,000,000	\$ (19,468)	\$ 2,652,507	37.70%
09/30/2015 ¹	\$ 985,108	\$ 900,000	\$ 85,108	\$ 2,594,629	34.69%
09/30/2014 ¹	\$ 898,200	\$ 850,000	\$ 48,200	\$ 2,118,023	40.13%

¹ The 2014-2016 results were provided by the prior actuary, The Standard Retirement Services, Inc.

Notes to Schedule

Valuation Date: 10/01/2018

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

Methods and assumptions used to determine contribution rates:

Mortality:

Healthy Active Lives

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

Male: RP2000 Generational, 50% White Collar / 50% Blue Collar, Scale BB.

Healthy Inactive Lives:

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

Male: RP2000 Generational, 50% Annuitant White Collar / 50% Annuitant Blue Collar, Scale BB.

Disabled Lives:

Female: 100% RP2000 Disabled Female set forward two years.

Male: 100% RP2000 Disabled Male setback four years.

The assumed rates of mortality are 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 non-special risk lives. We feel this assumption sufficiently accommodates future mortality improvements.

Interest Rate: 6.50%, 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: 3.50% per 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.

Termination Rates: Table V from August 1992 Pension Forum published by the Society of Actuaries, multiplied by 0.35. See table on following page.

Disability Rates: 1987 Commissioner's Group Disability Table, six month elimination period, male and female. See table on following page.

Retirement Rate: Members are assumed to retire at first normal retirement eligibility, except for Elected Officials who are assumed to retire at first early retirement eligibility. We believe this is reasonable based on plan provisions.

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Deferred Benefits:	For terminated vested participants benefits are assumed to commence at Normal Retirement Date. For beneficiaries receiving pre-retirement death benefits, benefits are assumed to commence on the date the participant would have reached Normal Retirement Date.
Interest Adjustment for Required Contribution:	6.50% for projecting dollar requirement.
Cost of Living Increases:	2.50% per year.
Funding Method:	Entry Age Normal Cost Method.
Actuarial Asset Method:	Effective October 1, 2018, all assets are valued at market value with an adjustment to uniformly spread actuarial investment gains and losses (as measured by actual market value investment return against expected market value investment return) over a five-year period. Previously, Market Value of Assets was utilized.

Decrement Tables:	% Terminating	
	During the Year	% Becoming Disabled During the Year
	Age	
	25	4.76%
	30	3.54%
	40	2.28%
	50	1.58%

SCHEDULE OF INVESTMENT RETURNS
Last 10 Fiscal Years

Fiscal Year Ended	Annual Money-Weighted Rate of Return Net of Investment Expense
09/30/2019	2.98%
09/30/2018	9.03%
09/30/2017	13.73%
09/30/2016 ¹	8.69%
09/30/2015 ¹	-1.35%
09/30/2014 ¹	9.55%

¹ The 2014-2016 results were provided by the prior actuary, The Standard Retirement Services, Inc.

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 Board of Trustees of the Town of Medley Defined Benefit Plan. 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. Eligible Employees enter the plan on October 1st or April 1st next following completion of one Year of Service and attainment of age 21. Age and service requirements are waived for Elected Officials, who enter the Plan at hire.

Plan Membership as of October 1, 2018:

Inactive Plan Members or Beneficiaries Currently Receiving Benefits	35
Inactive Plan Members Entitled to But Not Yet Receiving Benefits	12
Active Plan Members	111
	<u>158</u>

Benefits Provided

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

A summary of the benefit provisions can be found in the October 1, 2018 Actuarial Valuation Report for the Town of Indian River Police Officers' and Firefighters' Retirement System prepared by Foster & Foster Actuaries and Consultants.

Incorporated are the benefit changes for measurement date 09/30/2019 as noted under the Notes to Schedule of Changes in Net Pension Liability and Related Ratios.

Contributions

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

Net Pension Liability

The measurement date is September 30, 2019.

The measurement period for the pension expense was October 1, 2018 to September 30, 2019.

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

The Sponsor's Net Pension Liability was measured as of September 30, 2019.

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, 2018 updated to September 30, 2019 using the following actuarial assumptions:

Inflation	2.50%
Salary Increases	3.50%
Discount Rate	6.50%
Investment Rate of Return	6.50%

Mortality Rate Healthy Inactive Lives:

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

Male: RP2000 Generational, 50% Annuitant White Collar / 50% Annuitant Blue Collar, Scale BB.

Mortality Rate Healthy Active Lives:

Female: RP2000 Generational, 100% Combined Healthy (previously Annuitant) White Collar, Scale BB.

Male: RP2000 Generational, 50% Combined Healthy White Collar / 50% Combined Healthy Blue Collar, Scale BB.

Mortality Rate Disabled Lives:

Female: 100% RP2000 Disabled Female set forward two years.

Male: 100% RP2000 Disabled Male setback four years.

The assumed rates of mortality are 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 non-special risk lives. We feel this assumption sufficiently accommodates future mortality improvements.

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

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 2019 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, 2019 are summarized in the following table:

Asset Class	Target Allocation	Long Term Expected Real Rate of Return
Domestic Equity	60%	5.75%
International Equity	10%	5.75%
Fixed Income	10%	0.75%
Cash	20%	0.00%
Total	100%	

Discount Rate:

The Discount Rate used to measure the Total Pension Liability was 6.50 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 at September 30, 2018	\$ 23,942,632	\$ 21,685,310	\$ 2,257,322
Changes for a Year:			
Service Cost	557,034	-	557,034
Interest	1,531,212	-	1,531,212
Differences between Expected and Actual Experience	497,745	-	497,745
Changes of assumptions	305,126	-	305,126
Changes of benefit terms	(446,649)	-	(446,649)
Contributions - Employer	-	1,000,000	(1,000,000)
Net Investment Income	-	650,837	(650,837)
Benefit Payments, including Refunds of Employee Contributions	(991,823)	(991,823)	-
Administrative Expense	-	(30,318)	30,318
Net Changes	1,452,645	628,696	823,949
Balances at September 30, 2019	\$ 25,395,277	\$ 22,314,006	\$ 3,081,271

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

	Current Discount		
	1% Decrease	Rate	1% Increase
	5.50%	6.50%	7.50%
Sponsor's Net Pension Liability	\$ 6,130,942	\$ 3,081,271	\$ 546,306

Pension Plan Fiduciary Net Position.

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

PENSION EXPENSE AND DEFERRED OUTFLOWS OF RESOURCES AND DEFERRED INFLOWS OF RESOURCES RELATED TO PENSIONS

For the year ended September 30, 2019 the Sponsor will recognize a Pension Expense of \$425,541.

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	775,853	728,938
Changes of assumptions	732,007	-
Net difference between Projected and Actual Earnings on Pension Plan investments	-	268,975
Total	<u>\$ 1,507,860</u>	<u>\$ 997,913</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:	
2020	\$ (91,540)
2021	\$ (155,419)
2022	\$ 94,562
2023	\$ 308,923
2024	\$ 193,749
Thereafter	\$ 159,672

SCHEDULE OF CHANGES IN NET PENSION LIABILITY AND RELATED RATIOS

Last 10 Fiscal Years

	09/30/2019	09/30/2018	09/30/2017
Total Pension Liability			
Service Cost	557,034	579,607	487,727
Interest	1,531,212	1,509,225	1,313,621
Changes of benefit terms	(446,649)	925,718	-
Differences between Expected and Actual Experience	497,745	(328,364)	331,458
Changes of assumptions	305,126	-	744,029
Benefit Payments, including Refunds of Employee Contributions	(991,823)	(914,153)	(856,112)
Net Change in Total Pension Liability	1,452,645	1,772,033	2,020,723
Total Pension Liability - Beginning	23,942,632	22,170,599	20,149,876
Total Pension Liability - Ending (a)	<u>\$ 25,395,277</u>	<u>\$ 23,942,632</u>	<u>\$ 22,170,599</u>
Plan Fiduciary Net Position			
Contributions - Employer	1,000,000	1,000,000	1,000,000
Net Investment Income	650,837	1,800,575	2,379,107
Benefit Payments, including Refunds of Employee Contributions	(991,823)	(914,153)	(856,112)
Administrative Expense	(30,318)	(20,390)	(8,241)
Net Change in Plan Fiduciary Net Position	628,696	1,866,032	2,514,754
Plan Fiduciary Net Position - Beginning	21,685,310	19,819,278	17,304,524
Plan Fiduciary Net Position - Ending (b)	<u>\$ 22,314,006</u>	<u>\$ 21,685,310</u>	<u>\$ 19,819,278</u>
Net Pension Liability - Ending (a) - (b)	<u>\$ 3,081,271</u>	<u>\$ 2,257,322</u>	<u>\$ 2,351,321</u>
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	87.87%	90.57%	89.39%
Covered Payroll	\$ 3,519,216	\$ 3,194,438	\$ 3,158,747
Net Pension Liability as a percentage of Covered Payroll	87.56%	70.66%	74.44%

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

	09/30/2016 ¹	09/30/2015 ¹	09/30/2014 ¹
Total Pension Liability			
Service Cost	534,368	449,137	373,706
Interest	1,254,523	1,247,292	1,138,268
Changes of benefit terms	185,339	-	-
Differences between Expected and Actual Experience	(1,077,646)	816,952	-
Changes of assumptions	-	-	-
Benefit Payments, including Refunds of Employee Contributions	(810,015)	(746,172)	(707,981)
Net Change in Total Pension Liability	86,569	1,767,209	803,993
Total Pension Liability - Beginning	20,063,307	18,296,098	17,492,105
Total Pension Liability - Ending (a)	<u>\$ 20,149,876</u>	<u>\$ 20,063,307</u>	<u>\$ 18,296,098</u>
Plan Fiduciary Net Position			
Contributions - Employer	1,000,000	900,000	850,000
Net Investment Income	1,376,386	(217,632)	1,361,529
Benefit Payments, including Refunds of Employee Contributions	(810,015)	(746,172)	(707,981)
Administrative Expense	(24,354)	(20,889)	(9,308)
Net Change in Plan Fiduciary Net Position	1,542,017	(84,693)	1,494,240
Plan Fiduciary Net Position - Beginning	15,762,507	15,847,200	14,352,960
Plan Fiduciary Net Position - Ending (b)	<u>\$ 17,304,524</u>	<u>\$ 15,762,507</u>	<u>\$ 15,847,200</u>
Net Pension Liability - Ending (a) - (b)	<u>\$ 2,845,352</u>	<u>\$ 4,300,800</u>	<u>\$ 2,448,898</u>
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	85.88%	78.56%	86.62%
Covered Payroll	\$ 2,652,507	\$ 2,594,629	\$ 2,118,023
Net Pension Liability as a percentage of Covered Payroll	107.27%	165.76%	115.62%

Notes to Schedule of Changes in Net Pension Liability and Related Ratios

¹ The 2014-2016 results were provided by the prior actuary, The Standard Retirement Services, Inc.

Changes of benefit terms:

For measurement date 09/30/2019, amounts reported as changes of benefit terms were outlined in the August 6, 2019 Actuarial Impact Statement.

For measurement date 09/30/2018, amounts reported as changes of benefit terms resulted from Ordinances C-1598 and C-1599, the following changes were implemented:

- 1) Increase the benefit rate for benefits accrued as the Mayor from \$5,500 to \$8,500 for all mayor service.
Applies to Mayors actively serving on and after October 1, 2017.
- 2) Increase the benefit rate for benefits accrued as a Councilperson from \$2,500 to \$3,800 for all council service.
Applies to Councilpersons actively serving on or after October 1, 2017.
- 3) Change benefits for Part Time Employees to the following structure. Benefit amounts at other combinations of age and Periods of Service are eliminated.

<u>Age</u>	<u>Period of Service</u>	<u>Benefit</u>
65	20	\$ 270
65	25	\$ 290
70	15	\$ 250
70	20	\$ 310
70	25	\$ 330

Changes of assumptions:

For measurement date 09/30/2019, amounts reported as changes of assumptions resulted from the following changes:

- Elected officials are now assumed to retire at first eligibility for early retirement, rather than at first eligibility for normal retirement.
- Benefits valued for inactive participants now reflect the cost-of-living adjustment following the valuation date in order to more accurately reflect the benefits that will be paid during the majority of the fiscal year. Previously, benefits valued for these inactives were based on those in effect at the valuation date, without consideration of the COLA effective the following January.

For measurement date 09/30/2017, as required by Chapter 2015-157, Laws of Florida, the assumed rates of mortality have been changed from 2008+ IRS Combined Static Table to those used in the July 1, 2016 FRS valuation report.

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 ¹	Contributions as a percentage of Covered Payroll
09/30/2019	\$ 878,609	\$ 1,000,000	\$ (121,391)	\$ 3,519,216	28.42%
09/30/2018	\$ 900,745	\$ 1,000,000	\$ (99,255)	\$ 3,194,438	31.30%
09/30/2017	\$ 980,532	\$ 1,000,000	\$ (19,468)	\$ 3,158,747	31.66%
09/30/2016 ¹	\$ 980,532	\$ 1,000,000	\$ (19,468)	\$ 2,652,507	37.70%
09/30/2015 ¹	\$ 985,108	\$ 900,000	\$ 85,108	\$ 2,594,629	34.69%
09/30/2014 ¹	\$ 898,200	\$ 850,000	\$ 48,200	\$ 2,118,023	40.13%

¹ The 2014-2016 results were provided by the prior actuary, The Standard Retirement Services, Inc.

Notes to Schedule

Valuation Date: 10/01/2018

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

Methods and assumptions used to determine contribution rates:

Mortality:

Healthy Active Lives

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

Male: RP2000 Generational, 50% White Collar / 50% Blue Collar, Scale BB.

Healthy Inactive Lives:

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

Male: RP2000 Generational, 50% Annuitant White Collar / 50% Annuitant Blue Collar, Scale BB.

Disabled Lives:

Female: 100% RP2000 Disabled Female set forward two years.

Male: 100% RP2000 Disabled Male setback four years.

The assumed rates of mortality are 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 non-special risk lives. We feel this assumption sufficiently accommodates future mortality improvements.

Termination Rates:

Table V from August 1992 Pension Forum published by the Society of Actuaries, multiplied by 0.35. See table on following page.

Disability Rates:

1987 Commissioner's Group Disability Table, six month elimination period, male and female. See table on following page.

Retirement Rate:

Members are assumed to retire at first normal retirement eligibility, except for Elected Officials who are assumed to retire at first early retirement eligibility. We

Deferred Benefits:

For terminated vested participants benefits are assumed to commence at Normal Retirement Date. For beneficiaries receiving pre-retirement death benefits, benefits are assumed to commence on the date the participant would have reached Normal Retirement Date.

Interest Rate:

6.50%, 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

Salary Increases:

3.50% per year.

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Interest Adjustment for Required

Contribution:

Cost of Living Increases:

Funding Method:

Actuarial Asset Method:

6.50% for projecting dollar requirement.

2.50% per year.

Entry Age Normal Cost Method.

Effective October 1, 2018, all assets are valued at market value with an adjustment to uniformly spread actuarial investment gains and losses (as measured by actual market value investment return against expected market value investment return) over a five-year period. Previously, Market Value of Assets was utilized.

Decrement Tables:

Age	% Terminating During the Year	% Becoming Disabled During the Year
25	4.76%	0.0854%
30	3.54%	0.0986%
40	2.28%	0.1760%
50	1.58%	0.5396%

EXPENSE DEVELOPMENT AND AMORTIZATION SCHEDULES

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

COMPONENTS OF PENSION EXPENSE
FISCAL YEAR SEPTEMBER 30, 2019

	Net Pension Liability	Deferred Inflows	Deferred Outflows	Pension Expense
Beginning balance	\$ 2,257,322	\$ 2,215,405	\$ 1,326,944	\$ -
Total Pension Liability Factors:				
Service Cost	557,034	-	-	557,034
Interest	1,531,212	-	-	1,531,212
Changes in benefit terms	(446,649)	-	-	(446,649)
Differences between Expected and Actual Experience with regard to economic or demographic assumptions	497,745	-	497,745	-
Current year amortization of experience difference	-	(189,792)	(240,408)	50,616
Change in assumptions about future economic or demographic factors or other inputs	305,126	-	305,126	-
Current year amortization of change in assumptions	-	-	(131,143)	131,143
Benefit Payments, including Refunds of Employee Contributions	(991,823)	-	-	-
Net change	<u>1,452,645</u>	<u>(189,792)</u>	<u>431,320</u>	<u>1,823,356</u>
Plan Fiduciary Net Position:				
Contributions - Employer	1,000,000	-	-	-
Projected Net Investment Income	1,408,826	-	-	(1,408,826)
Difference between projected and actual earnings on Pension Plan investments	(757,989)	-	757,989	-
Current year amortization	-	(421,308)	(402,001)	(19,307)
Benefit Payments, including Refunds of Employee Contributions	(991,823)	-	-	-
Administrative Expenses	(30,318)	-	-	30,318
Net change	<u>628,696</u>	<u>(421,308)</u>	<u>355,988</u>	<u>(1,397,815)</u>
Ending Balance	<u>\$ 3,081,271</u>	<u>\$ 1,604,305</u>	<u>\$ 2,114,252</u>	<u>\$ 425,541</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)	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
2019	\$ 757,989	5	\$ 151,597	\$ 151,598	\$ 151,598	\$ 151,598	\$ 151,598	\$ -	\$ -	\$ -	\$ -	\$ -
2018	\$ (510,195)	5	\$ (102,039)	\$ (102,039)	\$ (102,039)	\$ (102,039)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2017	\$ (1,249,904)	5	\$ (249,981)	\$ (249,981)	\$ (249,981)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2016	\$ (346,440)	5	\$ (69,288)	\$ (69,288)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2015	\$ 1,001,616	4	\$ 250,404	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Net Increase (Decrease) in Pension Expense			\$ (19,307)	\$ (269,710)	\$ (200,422)	\$ 49,559	\$ 151,598	\$ -	\$ -	\$ -	\$ -	\$ -

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)	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
2019	\$ 305,126	8	\$ 38,139	\$ 38,141	\$ 38,141	\$ 38,141	\$ 38,141	\$ 38,141	\$ 38,141	\$ 38,141	\$ -	\$ -	\$ -
2017	\$ 744,029	8	\$ 93,004	\$ 93,004	\$ 93,004	\$ 93,004	\$ 93,004	\$ 93,004	\$ -	\$ -	\$ -	\$ -	\$ -
Net Increase (Decrease) in Pension Expense			\$ 131,143	\$ 131,145	\$ 131,145	\$ 131,145	\$ 131,145	\$ 131,145	\$ 38,141	\$ 38,141	\$ -	\$ -	\$ -

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)	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
2019	\$ 497,745	8.00	\$ 62,219	\$ 62,218	\$ 62,218	\$ 62,218	\$ 62,218	\$ 62,218	\$ 62,218	\$ 62,218	\$ -	\$ -	\$ -
2018	\$ (328,364)	8.00	\$ (41,046)	\$ (41,046)	\$ (41,046)	\$ (41,046)	\$ (41,046)	\$ (41,046)	\$ (41,046)	\$ -	\$ -	\$ -	\$ -
2017	\$ 331,458	8.00	\$ 41,432	\$ 41,432	\$ 41,432	\$ 41,432	\$ 41,432	\$ 41,432	\$ -	\$ -	\$ -	\$ -	\$ -
2016	\$ (1,077,646)	7.24	\$ (148,746)	\$ (148,746)	\$ (148,746)	\$ (148,746)	\$ (36,424)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2015	\$ 680,195	4.97	\$ 136,757	\$ 133,167	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Net Increase (Decrease) in Pension Expense			\$ 50,616	\$ 47,025	\$ (86,142)	\$ (86,142)	\$ 26,180	\$ 62,604	\$ 21,172	\$ 62,218	\$ -	\$ -	\$ -