

BONITA SPRINGS FIRE CONTROL AND RESCUE DISTRICT
GENERAL EMPLOYEES' RETIREMENT SYSTEM

ACTUARIAL VALUATION
AS OCTOBER 1, 2018

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

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



FOSTER & FOSTER
ACTUARIES AND CONSULTANTS

November 20, 2018

Board of Trustees
Bonita Springs Fire
Control & Rescue District
27490 Old 41 Road
Bonita Springs, FL 34135

Re: Bonita Springs Fire Control and Rescue District General Employees' Retirement System

Dear Board:

We are pleased to present to the Board this report of the annual actuarial valuation of the Bonita Springs Fire Control and Rescue District General Employees' 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 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 Bonita Springs Fire Control and Rescue District, financial reports prepared by the custodian bank, and the actuarial assumptions and methods described in the Actuarial Assumptions section of this report. While we cannot verify the accuracy of all this information, the supplied information was reviewed for consistency and reasonableness. As a result of this review, we have no reason to doubt the substantial accuracy of the information and believe that it has produced appropriate results. This information, along with any adjustments or modifications, is summarized in various sections of this report.

The total pension liability, net pension liability, and certain sensitivity information shown in this report are based on an actuarial valuation performed as of the valuation date.


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 Bonita Springs Fire Control and Rescue District, nor does anyone at Foster & Foster, Inc. act as a member of the Board of Trustees of the General Employees' 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: 
Christine M. O'Neal, FSA, EA, MAAA
Enrolled Actuary #17-7916

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Enclosures

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SUMMARY OF REPORT

The regular annual actuarial valuation of the Bonita Springs Fire Control and Rescue District General Employees' Retirement System, performed as of October 1, 2018, has been completed and the results are presented in this Report. The contribution amounts set forth herein are applicable to the plan/fiscal year ending September 30, 2020.

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

| Valuation Date Applicable to Fiscal Year Ending | 10/1/2018 <u>9/30/2020</u> | 10/1/2016 <u>9/30/2018</u> |
|--|-------------------------------|-------------------------------|
| Minimum Required Contribution % of Projected Annual Payroll | 32.1% | 26.9% |
| Member Contributions (Est.) % of Projected Annual Payroll | 7.0% | 7.0% |
| District Required Contribution ² % of Projected Annual Payroll | 25.1% | 19.9% |

¹ Please note that the District has access to a prepaid contribution of \$7,161.48 that is available to offset a portion of the above stated requirements for the fiscal year ending September 30, 2019. The District is required by Resolution to contribute a minimum of 15.0% of Members' Salaries.


As you can see, the Minimum Required Contribution has increased since the prior valuation. The increase is attributable to net unfavorable experience realized by the plan during the past two years, as well as a change of actuarial assumptions. The increase was offset in part by a decline in the plan's Normal Cost associated with a change in active demographics as well as a decrease in assumed administrative expenses.

Plan experience was unfavorable overall on the basis of the plan's actuarial assumptions. Sources of unfavorable experience included average salary increases of 11.56% in 2017 and 6.74% in 2018 which exceeded the assumptions for those years, unfavorable retirement experience, and investment returns of 6.89% in 2017 and 6.26% in 2018 (Actuarial Asset Basis) which both fell short of the 7.80% assumption. These losses were offset in part by a gain associated with more turnover for Members not eligible for retirement than expected.

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 any pending questions concerning its contents.

Respectfully submitted,

FOSTER & FOSTER, INC.

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

By: 
Tyler A. Koftan

CHANGES SINCE PRIOR VALUATION

Plan Changes

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

Actuarial Assumption/Method Changes

Since the prior valuation, the following assumptions were changed:

- The investment return assumption was reduced from 7.8% to 7.6% per year, net of investment-related expenses.
- As required by State law, the mortality rates were changed to be the same as used for the Florida Retirement System (FRS) in the July 1, 2016 actuarial valuation report for non-special risk lives.

CONTRIBUTION IMPACT OF ANNUAL CHANGES

| | |
|---|--------------|
| (1) Contribution Determined as of October 1, 2016 | 19.9% |
| (2) Summary of Contribution Impact by component: | |
| Change in Normal Cost Rate | -0.5% |
| Change in Administrative Expense Percentage | -0.7% |
| Payroll Change Effect on UAAL Amortization | 0.3% |
| Investment Return (Actuarial Asset Basis) | 1.4% |
| Salary Increases | 1.9% |
| Active Decrements | 0.6% |
| Inactive Mortality | 0.4% |
| Assumption Change | 2.4% |
| Other | <u>-0.6%</u> |
| Total Change in Contribution | 5.2% |
| (3) Contribution Determined as of October 1, 2018 | 25.1% |

COMPARATIVE SUMMARY OF PRINCIPAL VALUATION RESULTS

| | New Assump <u>10/1/2018</u> | Old Assump <u>10/1/2018</u> | <u>10/1/2016</u> |
|------------------------------------|--------------------------------|--------------------------------|------------------|
| A. Participant Data | | | |
| Actives | 11 | 11 | 13 |
| Service Retirees | 9 | 9 | 7 |
| DROP Retirees | 0 | 0 | 0 |
| Beneficiaries | 0 | 0 | 0 |
| Disability Retirees | 1 | 1 | 1 |
| Terminated Vested | <u>2</u> | <u>2</u> | <u>0</u> |
| Total | 23 | 23 | 21 |
| Total Annual Payroll | \$686,609 | \$686,609 | \$737,428 |
| Payroll Under Assumed Ret. Age | 573,342 | 573,342 | 587,699 |
| Annual Rate of Payments to: | | | |
| Service Retirees | 147,997 | 147,997 | 110,424 |
| DROP Retirees | 0 | 0 | 0 |
| Beneficiaries | 0 | 0 | 0 |
| Disability Retirees | 27,643 | 27,643 | 27,643 |
| Terminated Vested | 6,771 | 6,771 | 6,771 |
| B. Assets | | | |
| Actuarial Value (AVA) ¹ | 3,316,379 | 3,316,379 | 2,924,349 |
| Market Value (MVA) ¹ | 3,511,424 | 3,511,424 | 2,908,958 |
| C. Liabilities | | | |
| Present Value of Benefits | | | |
| Actives | | | |
| Retirement Benefits | 2,402,748 | 2,311,757 | 2,154,390 |
| Disability Benefits | 38,414 | 37,053 | 34,534 |
| Death Benefits | 8,803 | 14,199 | 13,054 |
| Vested Benefits | 128,724 | 123,216 | 148,809 |
| Refund of Contributions | 10,944 | 10,889 | 20,714 |
| Service Retirees | 1,703,512 | 1,674,109 | 1,322,768 |
| DROP Retirees | 0 | 0 | 0 |
| Beneficiaries | 0 | 0 | 0 |
| Disability Retirees | 280,091 | 275,674 | 284,731 |
| Terminated Vested | <u>32,669</u> | <u>32,669</u> | <u>0</u> |
| Total | 4,605,905 | 4,479,566 | 3,979,000 |

| C. Liabilities - (Continued) | New Assump <u>10/1/2018</u> | Old Assump <u>10/1/2018</u> | <u>10/1/2016</u> |
|---|--------------------------------|--------------------------------|------------------|
| Present Value of Future Salaries | 3,677,452 | 3,626,839 | 3,994,469 |
| Present Value of Future Member Contributions | 257,422 | 253,879 | 279,613 |
| Normal Cost (Retirement) | 88,127 | 83,512 | 82,205 |
| Normal Cost (Disability) | 2,655 | 2,560 | 2,461 |
| Normal Cost (Death) | 553 | 933 | 889 |
| Normal Cost (Vesting) | 3,604 | 3,404 | 8,530 |
| Normal Cost (Refunds) | <u>2,238</u> | <u>2,234</u> | <u>4,015</u> |
| Total Normal Cost | 97,177 | 92,643 | 98,100 |
| Present Value of Future Normal Costs | 627,042 | 589,168 | 653,629 |
| Accrued Liability (Retirement) | 1,830,673 | 1,777,342 | 1,635,135 |
| Accrued Liability (Disability) | 20,447 | 19,993 | 19,120 |
| Accrued Liability (Death) | 5,255 | 8,294 | 7,398 |
| Accrued Liability (Vesting) | 103,948 | 100,046 | 50,239 |
| Accrued Liability (Refunds) | 2,268 | 2,271 | 5,980 |
| Accrued Liability (Inactives) | <u>2,016,272</u> | <u>1,982,452</u> | <u>1,607,499</u> |
| Total Actuarial Accrued Liability (EAN AL) | 3,978,863 | 3,890,398 | 3,325,371 |
| Unfunded Actuarial Accrued Liability (UAAL) | 662,484 | 574,019 | 401,022 |
| Funded Ratio (AVA / EAN AL) | 83.3% | 85.2% | 87.9% |

| D. Actuarial Present Value of Accrued Benefits | New Assump <u>10/1/2018</u> | Old Assump <u>10/1/2018</u> | <u>10/1/2016</u> |
|--|--------------------------------|--------------------------------|------------------|
| Vested Accrued Benefits | | | |
| Inactives | 2,016,272 | 1,982,452 | 1,607,499 |
| Actives | 823,673 | 792,994 | 764,748 |
| Member Contributions | <u>402,097</u> | <u>402,097</u> | <u>445,789</u> |
| Total | 3,242,042 | 3,177,543 | 2,818,036 |
| Non-vested Accrued Benefits | <u>175,137</u> | <u>168,266</u> | <u>79,922</u> |
| Total Present Value | | | |
| Accrued Benefits (PVAB) | 3,417,179 | 3,345,809 | 2,897,958 |
| Funded Ratio (MVA / PVAB) | 102.8% | 104.9% | 100.4% |
| Increase (Decrease) in Present Value of Accrued Benefits Attributable to: | | | |
| Plan Amendments | 0 | 0 | |
| Assumption Changes | 71,370 | 0 | |
| New Accrued Benefits | 0 | 622,956 | |
| Benefits Paid | 0 | (386,088) | |
| Interest | 0 | 210,983 | |
| Other | <u>0</u> | <u>0</u> | |
| Total | 71,370 | 447,851 | |

| | | | |
|----------------------------------|-------------------------|-------------------------|------------------|
| Valuation Date | New Assump 10/1/2018 | Old Assump 10/1/2018 | 10/1/2016 |
| Applicable to Fiscal Year Ending | <u>9/30/2020</u> | <u>9/30/2020</u> | <u>9/30/2018</u> |

E. Pension Cost

| | | | |
|---|------|------|------|
| Normal Cost (with interest) % of Total Annual Payroll ² | 17.6 | 16.8 | 17.3 |
| Administrative Expenses (with interest) % of Total Annual Payroll ² | 2.3 | 2.3 | 3.0 |
| Payment Required to Amortize Unfunded Actuarial Accrued Liability over 18 years (as of 10/1/2018, with interest) % of Total Annual Payroll ² | 12.2 | 10.6 | 6.6 |
| Minimum Required Contribution % of Total Annual Payroll ² | 32.1 | 29.7 | 26.9 |
| Expected Member Contributions % of Total Annual Payroll ² | 7.0 | 7.0 | 7.0 |
| Expected District Contribution % of Total Annual Payroll ² | 25.1 | 22.7 | 19.9 |

F. Past Contributions

| | | |
|-----------------------------|------------------|------------------|
| Plan Years Ending: | <u>9/30/2018</u> | <u>9/30/2017</u> |
| Total Required Contribution | 214,051 | \$197,600 |
| District Requirement | 158,350 | 144,806 |
| Actual Contributions Made: | | |
| Members (excluding buyback) | 55,701 | 52,794 |
| District | <u>158,350</u> | <u>144,807</u> |
| Total | 214,051 | 197,601 |

G. Net Actuarial (Gain)/Loss

279,953

¹ Contributions developed as of 10/1/2018 are expressed as a percentage of total annual payroll at 10/1/2018 of \$573,342.

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

| <u>Year</u> | <u>Projected Unfunded Actuarial Accrued Liability</u> |
|-------------|---|
| 2018 | 662,484 |
| 2019 | 640,324 |
| 2020 | 616,480 |
| 2024 | 501,553 |
| 2028 | 347,501 |
| 2032 | 141,000 |
| 2036 | 0 |

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

| | <u>Actual</u> | <u>Assumed</u> |
|----------------------|---------------|----------------|
| Year Ended 9/30/2018 | 6.74% | 6.41% |
| Year Ended 9/30/2017 | 11.56% | 6.27% |
| Year Ended 9/30/2016 | 11.75% | 6.00% |
| Year Ended 9/30/2015 | 10.00% | 6.00% |
| Year Ended 9/30/2014 | 4.98% | 6.00% |

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

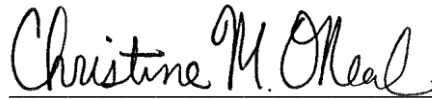
| | <u>Market Value</u> | <u>Actuarial Value</u> | <u>Assumed</u> |
|----------------------|---------------------|------------------------|----------------|
| Year Ended 9/30/2018 | 7.58% | 6.26% | 7.80% |
| Year Ended 9/30/2017 | 11.85% | 6.89% | 7.80% |
| Year Ended 9/30/2016 | 6.45% | 6.53% | 8.00% |
| Year Ended 9/30/2015 | -0.47% | 8.73% | 8.00% |
| Year Ended 9/30/2014 | 8.31% | 8.31% | 8.00% |

(iii) Average Annual Payroll Growth

| | | |
|-------------------------|-----------|-----------|
| (a) Payroll as of: | 10/1/2018 | \$686,609 |
| | 10/1/2008 | 860,996 |
| (b) Total Increase | | -20.25% |
| (c) Number of Years | | 10.00 |
| (d) Average Annual Rate | | -2.24% |

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.



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

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, 2016 | \$401,022 |
| (2) | Sponsor Normal Cost developed as of October 1, 2016 | 56,961 |
| (3) | Expected administrative expenses for the year ended September 30, 2017 | 16,781 |
| (4) | Expected interest on (1), (2) and (3) | 36,377 |
| (5) | Sponsor contributions to the System during the year ended September 30, 2017 | 144,807 |
| (6) | Expected interest on (5) | 5,647 |
| (7) | Expected Unfunded Actuarial Accrued Liability as of September 30, 2017 (1)+(2)+(3)+(4)-(5)-(6) | 360,686 |
| (8) | Sponsor Normal Cost developed as of October 1, 2017 | 48,550 |
| (9) | Expected administrative expenses for the year ended September 30, 2018 | 16,781 |
| (10) | Expected interest on (7), (8) and (9) | 32,575 |
| (11) | Sponsor contributions to the System during the year ended September 30, 2018 | 158,350 |
| (12) | Expected interest on (11) | 6,176 |
| (13) | Expected Unfunded Actuarial Accrued Liability as of September 30, 2018 (7)+(8)+(9)+(10)-(11)-(12) | 294,066 |
| (14) | Change to UAAL due to Assumption Change | 88,465 |
| (15) | Change to UAAL due to Actuarial (Gain)/Loss | 279,953 |
| (16) | Unfunded Actuarial Accrued Liability as of October 1, 2018 | 662,484 |

| Type of <u>Base</u> | Date <u>Established</u> | Years <u>Remaining</u> | 10/1/2018 <u>Amount</u> | Amortization <u>Amount</u> |
|------------------------|----------------------------|---------------------------|----------------------------|-------------------------------|
| Initial Base | 10/1/2016 | 18 | 294,066 | 28,357 |
| Actuarial Loss | 10/1/2018 | 15 | 279,953 | 29,658 |
| Assump Change | 10/1/2018 | 15 | <u>88,465</u> | <u>9,372</u> |
| | | | 662,484 | 67,387 |

DETAILED ACTUARIAL (GAIN)/LOSS ANALYSIS

| | |
|---|---------------|
| (1) Unfunded Actuarial Accrued Liability (UAAL) as of October 1, 2016 | \$401,022 |
| (2) Expected UAAL as of October 1, 2018 | 294,066 |
| (3) Summary of Actuarial (Gain)/Loss, by component: | |
| Investment Return (Actuarial Asset Basis) | 73,878 |
| Salary Increases | 98,758 |
| Active Decrements | 29,888 |
| Inactive Mortality | 20,027 |
| Other | <u>57,402</u> |
| Increase in UAAL due to (Gain)/Loss | 279,953 |
| Assumption Changes | <u>88,465</u> |
| (4) Actual UAAL as of October 1, 2018 | \$662,484 |

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

Previously, the mortality rates were based on those used in the July 1, 2015 FRS valuation report for non-special risk lives.

Interest Rate

7.60% (prior year 7.80%) 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

| Service | Increase |
|---------|----------|
| <1 | 10.0% |
| 1-4 | 7.5% |
| 5+ | 5.5% |

This is based on the experience study dated August 2, 2016.

Payroll Growth

0.00%. This assumption cannot exceed the ten-year average payroll growth, in compliance with Part VII of Chapter 112, Florida Statutes.

Administrative Expenses

\$12,933 annually, based on actual expenses incurred in the prior fiscal year.

Retirement Age

| Age | Retirement Rate |
|-------|-----------------|
| 50 | 25.0% |
| 51-54 | 5.0% |
| 55 | 25.0% |
| 56-59 | 50.0% |
| 60 | 50.0% |
| 61-64 | 50.0% |
| 65+ | 100.0% |

This is based on the experience study dated August 2, 2016.

Disability Rate

Table (1202), sample rates below.

| Age | Disability Rate |
|-----|-----------------|
| 20 | 0.05% |
| 30 | 0.06% |
| 40 | 0.12% |
| 50 | 0.43% |

Termination Rate

Table 1305 for service <7 and half of table 1305 for service after 7 years. See table below for sample rates.

| Service | Age | Termination Rate |
|---------|-------|------------------|
| <7 | <30 | 16.2% |
| | 30-34 | 15.0% |
| | 35-39 | 9.8% |
| | 40-44 | 7.3% |
| | 45+ | 0.8% |
| 7+ | <30 | 7.6% |
| | 30-34 | 7.5% |
| | 35-39 | 5.0% |
| | 40-44 | 3.4% |
| | 45+ | 1.9% |

This is based on the experience study dated August 2, 2016.

Actuarial Cost Method

Asset Valuation Method

Entry Age Normal Cost Method

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

GLOSSARY

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

Total Required Contribution is equal to the Normal Cost plus an amount sufficient to amortize the Unfunded Accrued Liability over no more than 30 years. The required amount is adjusted for interest according to the timing of contributions during the year.

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.

STATEMENT OF FIDUCIARY NET POSITION
SEPTEMBER 30, 2017

| <u>ASSETS</u> | COST VALUE | MARKET VALUE |
|--------------------------------------|--------------|--------------|
| Cash and Cash Equivalents: | | |
| Money Market | 30,855.05 | 30,855.05 |
| Total Cash and Equivalents | 30,855.05 | 30,855.05 |
| Investments: | | |
| Fixed Income | 1,149,132.69 | 1,155,613.51 |
| Equities | 1,839,608.55 | 2,093,648.12 |
| Total Investments | 2,988,741.24 | 3,249,261.63 |
| Total Assets | 3,019,596.29 | 3,280,116.68 |
| <u>LIABILITIES</u> | | |
| Total Liabilities | 0.00 | 0.00 |
| NET POSITION RESTRICTED FOR PENSIONS | 3,019,596.29 | 3,280,116.68 |

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

ADDITIONS

Contributions:

| | |
|----------|------------|
| Member | 52,793.85 |
| District | 144,807.13 |

| | |
|---------------------|------------|
| Total Contributions | 197,600.98 |
|---------------------|------------|

Investment Income:

| | | |
|---|------------|-------------|
| Net Realized Gain (Loss) | 102,905.87 | |
| Unrealized Gain (Loss) | 194,344.83 | |
| Net Increase in Fair Value of Investments | | 297,250.70 |
| Interest & Dividends | | 74,046.09 |
| Less Investment Expense ¹ | | (18,000.00) |

| | |
|-----------------------|------------|
| Net Investment Income | 353,296.79 |
|-----------------------|------------|

| | |
|-----------------|------------|
| Total Additions | 550,897.77 |
|-----------------|------------|

DEDUCTIONS

Distributions to Members:

| | |
|---------------------------------|------------|
| Benefit Payments | 147,844.83 |
| Lump Sum DROP Distributions | 0.00 |
| Lump Sum PLOP Distributions | 13,109.27 |
| Refunds of Member Contributions | 0.00 |

| | |
|---------------------|------------|
| Total Distributions | 160,954.10 |
|---------------------|------------|

| | |
|------------------------|-----------|
| Administrative Expense | 18,785.10 |
|------------------------|-----------|

| | |
|------------------|------------|
| Total Deductions | 179,739.20 |
|------------------|------------|

| | |
|------------------------------|------------|
| Net Increase in Net Position | 371,158.57 |
|------------------------------|------------|

NET POSITION RESTRICTED FOR PENSIONS

| | |
|-----------------------|--------------|
| Beginning of the Year | 2,908,958.11 |
|-----------------------|--------------|

| | |
|-----------------|--------------|
| End of the Year | 3,280,116.68 |
|-----------------|--------------|

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 | 10.16% | |
| 09/30/2015 | -0.47% | |
| 09/30/2016 | 6.45% | |
| 09/30/2017 | 11.85% | |
| Annualized Rate of Return for prior four (4) years: | | 6.89% |
| (A) 10/01/2016 Actuarial Assets: | | \$2,924,348.74 |
| (I) Net Investment Income: | | |
| 1. Interest and Dividends | 74,046.09 | |
| 2. Realized Gains (Losses) | 102,905.87 | |
| 3. Change in Actuarial Value | 43,171.36 | |
| 4. Investment Related Expenses | (18,000.00) | |
| Total | | 202,123.32 |
| (B) 10/01/2017 Actuarial Assets: | | \$3,144,333.84 |
| Actuarial Asset Rate of Return = $2I/(A+B-I)$: | | 6.89% |
| 10/01/2017 Limited Actuarial Assets: | | \$3,144,333.84 |
| 10/01/2017 Market Value of Assets: | | \$3,280,116.68 |
| Actuarial Gain/(Loss) due to Investment Return (Actuarial Asset Basis) | | (\$26,695.53) |

¹Market Value Basis, net of investment related expenses.

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

REVENUES

| | | |
|-------------------------------------|------------|------------|
| Contributions: | | |
| Member | 52,793.85 | |
| District | 144,807.13 | |
| Total Contributions | | 197,600.98 |
| Earnings from Investments: | | |
| Interest & Dividends | 74,046.09 | |
| Net Realized Gain (Loss) | 102,905.87 | |
| Change in Actuarial Value | 43,171.36 | |
| Total Earnings and Investment Gains | | 220,123.32 |

EXPENDITURES

| | | |
|---|------------|--------------|
| Distributions to Members: | | |
| Benefit Payments | 147,844.83 | |
| Lump Sum DROP Distributions | 0.00 | |
| Lump Sum PLOP Distributions | 13,109.27 | |
| Refunds of Member Contributions | 0.00 | |
| Total Distributions | | 160,954.10 |
| Expenses: | | |
| Investment related ¹ | 18,000.00 | |
| Administrative | 18,785.10 | |
| Total Expenses | | 36,785.10 |
| Change in Net Assets for the Year | | 219,985.10 |
| Net Assets Beginning of the Year | | 2,924,348.74 |
| Net Assets End of the Year ² | | 3,144,333.84 |

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

²Net Assets may be limited for actuarial consideration.

STATEMENT OF FIDUCIARY NET POSITION
SEPTEMBER 30, 2018

| <u>ASSETS</u> | COST VALUE | MARKET VALUE |
|--------------------------------------|--------------|--------------|
| Cash and Cash Equivalents: | | |
| Money Market | 190,673.82 | 190,673.82 |
| Total Cash and Equivalents | 190,673.82 | 190,673.82 |
| Receivables: | | |
| Member Contributions in Transit | 2,171.23 | 2,171.23 |
| District Contributions in Transit | 6,451.64 | 6,451.64 |
| Total Receivable | 8,622.87 | 8,622.87 |
| Investments: | | |
| Fixed Income | 1,184,281.99 | 1,143,705.19 |
| Equities | 1,921,681.93 | 2,373,423.02 |
| Total Investments | 3,105,963.92 | 3,517,128.21 |
| Total Assets | 3,305,260.61 | 3,716,424.90 |
| <u>LIABILITIES</u> | | |
| Payables: | | |
| To Firefighters' Trust Fund | 197,839.80 | 197,839.80 |
| Prepaid District Contribution | 7,161.48 | 7,161.48 |
| Total Liabilities | 205,001.28 | 205,001.28 |
| NET POSITION RESTRICTED FOR PENSIONS | 3,100,259.33 | 3,511,423.62 |

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

ADDITIONS

Contributions:

| | |
|----------|------------|
| Member | 55,701.13 |
| District | 158,350.36 |

| | |
|---------------------|------------|
| Total Contributions | 214,051.49 |
|---------------------|------------|

Investment Income:

| | | |
|---|-------------|--|
| Unrealized Gain (Loss) | 150,643.90 | |
| Net Increase in Fair Value of Investments | 150,643.90 | |
| Interest & Dividends | 118,553.42 | |
| Less Investment Expense ¹ | (13,875.00) | |

| | |
|-----------------------|------------|
| Net Investment Income | 255,322.32 |
|-----------------------|------------|

| | |
|-----------------|------------|
| Total Additions | 469,373.81 |
|-----------------|------------|

DEDUCTIONS

Distributions to Members:

| | |
|---------------------------------|------------|
| Benefit Payments | 157,272.99 |
| Lump Sum DROP Distributions | 0.00 |
| Lump Sum PLOP Distributions | 67,860.85 |
| Refunds of Member Contributions | 0.00 |

| | |
|---------------------|------------|
| Total Distributions | 225,133.84 |
|---------------------|------------|

| | |
|------------------------|-----------|
| Administrative Expense | 12,933.03 |
|------------------------|-----------|

| | |
|------------------|------------|
| Total Deductions | 238,066.87 |
|------------------|------------|

| | |
|------------------------------|------------|
| Net Increase in Net Position | 231,306.94 |
|------------------------------|------------|

NET POSITION RESTRICTED FOR PENSIONS

| | |
|-----------------------|--------------|
| Beginning of the Year | 3,280,116.68 |
|-----------------------|--------------|

| | |
|-----------------|--------------|
| End of the Year | 3,511,423.62 |
|-----------------|--------------|

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

ACTUARIAL ASSET VALUATION
SEPTEMBER 30, 2018

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 | |
|--|-----------------------------|----------------|
| 09/30/2015 | -0.47% | |
| 09/30/2016 | 6.45% | |
| 09/30/2017 | 11.85% | |
| 09/30/2018 | 7.58% | |
| Annualized Rate of Return for prior four (4) years: | | 6.26% |
| (A) 10/01/2017 Actuarial Assets: | | \$3,144,333.84 |
| (I) Net Investment Income: | | |
| 1. Interest and Dividends | | 118,553.42 |
| 2. Realized Gains (Losses) | | 0.00 |
| 3. Change in Actuarial Value | | 91,382.11 |
| 4. Investment Related Expenses | | (13,875.00) |
| Total | | 196,060.53 |
| (B) 10/01/2018 Actuarial Assets: | | \$3,316,378.99 |
| Actuarial Asset Rate of Return = $2I/(A+B-I)$: | | 6.26% |
| 10/01/2018 Limited Actuarial Assets: | | \$3,316,378.99 |
| 10/01/2018 Market Value of Assets: | | \$3,511,423.62 |
| Actuarial Gain/(Loss) due to Investment Return (Actuarial Asset Basis) | | (\$45,100.19) |

¹Market Value Basis, net of investment related expenses.

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

REVENUES

| | | |
|-------------------------------------|------------|------------|
| Contributions: | | |
| Member | 55,701.13 | |
| District | 158,350.36 | |
| Total Contributions | | 214,051.49 |
| Earnings from Investments: | | |
| Interest & Dividends | 118,553.42 | |
| Change in Actuarial Value | 91,382.11 | |
| Total Earnings and Investment Gains | | 209,935.53 |

EXPENDITURES

| | | |
|---|------------|--------------|
| Distributions to Members: | | |
| Benefit Payments | 157,272.99 | |
| Lump Sum DROP Distributions | 0.00 | |
| Lump Sum PLOP Distributions | 67,860.85 | |
| Refunds of Member Contributions | 0.00 | |
| Total Distributions | | 225,133.84 |
| Expenses: | | |
| Investment related ¹ | 13,875.00 | |
| Administrative | 12,933.03 | |
| Total Expenses | | 26,808.03 |
| Change in Net Assets for the Year | | 172,045.15 |
| Net Assets Beginning of the Year | | 3,144,333.84 |
| Net Assets End of the Year ² | | 3,316,378.99 |

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

²Net Assets may be limited for actuarial consideration.

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

| | | |
|------|---|---------------------|
| (1) | Total Required Contribution Rate (Fiscal 2017) | 26.2% |
| (2) | 2017 Pensionable Payroll Derived from Member Contributions | \$754,197.86 |
| (3) | Total Fiscal 2017 Required Contribution (1) x (2) | 197,599.84 |
| (4) | Less Actual 2017 Member Contributions | (52,793.85) |
| (5) | Equals Required District Contribution for Fiscal 2017 | 144,805.99 |
| (6) | Less Prepaid Contribution | 0.00 |
| (7) | Less Actual 2017 District Contributions | <u>(144,807.13)</u> |
| (8) | Equals District's Shortfall/(Prepaid) Contribution as of September 30, 2017 ¹ | (\$1.14) |
| (9) | Total Required Contribution Rate (Fiscal 2018) | 26.9% |
| (10) | 2018 Pensionable Payroll Derived from Member Contributions | \$795,730.43 |
| (11) | Total Fiscal 2018 Required Contribution (9) x (10) | 214,051.49 |
| (12) | Less Actual 2018 Member Contributions | (55,701.13) |
| (13) | Equals Required District Contribution for Fiscal 2018 | 158,350.36 |
| (14) | Less Prepaid Contribution | 0.00 |
| (15) | Less Actual 2018 District Contributions | <u>(165,511.84)</u> |
| (16) | Equals District's Shortfall/(Prepaid) Contribution as of September 30, 2018 | (\$7,161.48) |

¹ The prepaid contribution for fiscal 2017 was waived due to being small in magnitude.

STATISTICAL DATA

| | <u>10/1/2011</u> | <u>10/1/2014</u> | <u>10/1/2016</u> | <u>10/1/2018</u> |
|-------------------------------------|------------------|------------------|------------------|------------------|
| <u>Actives</u> | | | | |
| Number | 13 | 11 | 13 | 11 |
| Average Current Age | 48.3 | 47.0 | 47.0 | 48.5 |
| Average Age at Employment | 39.9 | 37.8 | 38.0 | 39.3 |
| Average Past Service | 8.4 | 9.2 | 9.0 | 9.2 |
| Average Annual Salary | \$54,089 | \$58,553 | \$56,725 | \$62,419 |
| <u>Service Retirees</u> | | | | |
| Number | 5 | 6 | 7 | 9 |
| Average Current Age | N/A | 63.2 | 65.0 | 66.5 |
| Average Annual Benefit | \$12,344 | \$12,533 | \$15,775 | \$16,444 |
| <u>DROP Retirees</u> | | | | |
| Number | 0 | 1 | 0 | 0 |
| Average Current Age | N/A | 61.9 | N/A | N/A |
| Average Annual Benefit | N/A | \$31,710 | N/A | N/A |
| <u>Beneficiaries</u> | | | | |
| Number | 0 | 0 | 0 | 0 |
| Average Current Age | N/A | N/A | N/A | N/A |
| Average Annual Benefit | N/A | N/A | N/A | N/A |
| <u>Disability Retirees</u> | | | | |
| Number | 0 | 1 | 1 | 1 |
| Average Current Age | N/A | 47.1 | 49.1 | 51.1 |
| Average Annual Benefit | N/A | \$27,643 | \$27,643 | \$27,643 |
| <u>Terminated Vested</u> | | | | |
| Number | 0 | 0 | 0 | 2 |
| Average Current Age ¹ | N/A | N/A | N/A | N/A |
| Average Annual Benefit ¹ | N/A | N/A | N/A | N/A |

¹ The Average Annual Benefit and Average Current Age exclude participants awaiting a refund of contributions.

AGE AND SERVICE DISTRIBUTION

PAST SERVICE

| AGE | 0 | 1 | 2 | 3 | 4 | 5-9 | 10-14 | 15-19 | 20-24 | 25-29 | 30+ | Total |
|---------|---|---|---|---|---|-----|-------|-------|-------|-------|-----|-------|
| 15 - 19 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 20 - 24 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 25 - 29 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 30 - 34 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| 35 - 39 | 0 | 1 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 3 |
| 40 - 44 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 45 - 49 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 3 |
| 50 - 54 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 2 |
| 55 - 59 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| 60 - 64 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 65+ | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| Total | 0 | 2 | 0 | 2 | 0 | 0 | 6 | 0 | 1 | 0 | 0 | 11 |

VALUATION PARTICIPANT RECONCILIATION

1. Active lives

| | |
|---|----------|
| a. Number in prior valuation 10/1/2016 | 13 |
| b. Terminations | |
| i. Vested (partial or full) with deferred benefits | (2) |
| 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 | (2) |
| f. DROP | <u>0</u> |
| g. Continuing participants | 9 |
| h. New entrants | <u>2</u> |
| i. Total active life participants in valuation | 11 |

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

| | Service Retirees, Vested Receiving <u>Benefits</u> | DROP <u>Benefits</u> | Receiving Death <u>Benefits</u> | Receiving Disability <u>Benefits</u> | Vested Deferred | <u>Total</u> |
|-----------------------------|--|-------------------------|---------------------------------------|--|--------------------|--------------|
| a. Number prior valuation | 7 | 0 | 0 | 1 | 0 | 8 |
| Retired | 2 | 0 | 0 | 0 | 0 | 2 |
| DROP | 0 | 0 | 0 | 0 | 0 | 0 |
| Vested Deferred | 0 | 0 | 0 | 0 | 2 | 2 |
| Death, With Survivor | 0 | 0 | 0 | 0 | 0 | 0 |
| Death, No Survivor | 0 | 0 | 0 | 0 | 0 | 0 |
| Disabled | 0 | 0 | 0 | 0 | 0 | 0 |
| Refund of Contributions | 0 | 0 | 0 | 0 | 0 | 0 |
| Rehires | 0 | 0 | 0 | 0 | 0 | 0 |
| Expired Annuities | 0 | 0 | 0 | 0 | 0 | 0 |
| Data Corrections | 0 | 0 | 0 | 0 | 0 | 0 |
| b. Number current valuation | 9 | 0 | 0 | 1 | 2 | 12 |

SUMMARY OF CURRENT PLAN
THROUGH RESOLUTION NO. 15-12-01

| | |
|---|---|
| <u>Credited Service</u> | Total years and fractional parts of years of contributing employment with the District as a General Employee. |
| <u>Salary</u> | Regular pay for services rendered, not including overtime, incentive or any other non-regular compensation. |
| <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> | 7.0% of Salary |
| <u>District Contributions</u> | Remaining amount required in order to fund to actuarial soundness. District has a minimum contribution of 15.0% of Salaries. |
| <u>Normal Retirement</u> | |
| Date | Earlier of: 1) Age 55 and 7 years of Credited Service, or 2) 25 years of Credited Service, regardless of age. |
| Benefit | 2.48% of Average Final Compensation times Credited Service. |
| Form of Benefit | Ten Year Certain and Life Annuity (options available). |
| <u>Early Retirement</u> | |
| Eligibility | Earlier of 1.) Age 50 and 7 Years of Credited Service, or 2.) 20 years of Credited Service, regardless of age. |
| Benefit | Accrued benefit, reduced 7.0% per year. |
| <u>Cost of Living Adjustment (COLA)</u> | Normal and Early Retirees and their Beneficiaries receive a 1.35% increase in their benefits each October 1 st following retirement (the first adjustment will be a prorated amount of 1.35%). |

Vesting

| | |
|----------|---|
| Schedule | 100% after 7 years of Credited Service. |
|----------|---|

Disability

Eligibility

| | |
|------------------|----------------------------------|
| Service Incurred | Covered from Date of Employment. |
|------------------|----------------------------------|

| | |
|----------------------|------------------------------|
| Non-Service Incurred | 7 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. |
|---------|--|

| | |
|----------|--|
| Duration | Payable for life with 10 years certain (options available) or until recovery (as determined by the Board). |
|----------|--|

Death Benefits

Pre-Retirement

| | |
|--------|---|
| Vested | Monthly accrued benefit payable to designated beneficiary for 10 years at Member's Normal or Early (reduced) Retirement Date. |
|--------|---|

| | |
|------------|---|
| Non-Vested | Refund of accumulated contributions without interest. |
|------------|---|

| | |
|-----------------|---|
| Post-Retirement | Benefits payable to beneficiary in accordance with option selected at retirement. |
|-----------------|---|

Deferred Retirement Option Plan

| | |
|-------------|---|
| Eligibility | Satisfaction of Normal Retirement requirements (earlier of (1) Age 55 with 7 years of Credited Service, or (2) 25 years of Credited Service). |
|-------------|---|

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

| | |
|----------------|---|
| Rate of Return | At the Member's election: (1) 6.5% annual rate, or (2) actual net rate of investment return (total return net of brokerage commissions, management fees, and transaction costs), credited each fiscal quarter. One change between the above is allowed. |
|----------------|---|

| | |
|----------------------|---|
| Form of Distribution | Cash lump sum (options available) at termination of employment. |
|----------------------|---|

STATEMENT OF FIDUCIARY NET POSITION
SEPTEMBER 30, 2018

| <u>ASSETS</u> | MARKET VALUE |
|--------------------------------------|--------------|
| Cash and Cash Equivalents: | |
| Money Market | 190,674 |
| Total Cash and Equivalents | 190,674 |
| Receivables: | |
| Member Contributions in Transit | 2,171 |
| District Contributions in Transit | 6,452 |
| Total Receivable | 8,623 |
| Investments: | |
| Fixed Income | 1,143,705 |
| Equities | 2,373,423 |
| Total Investments | 3,517,128 |
| Total Assets | 3,716,425 |
| <u>LIABILITIES</u> | |
| Payables: | |
| To Firefighters' Trust Fund | 197,840 |
| Total Liabilities | 197,840 |
| NET POSITION RESTRICTED FOR PENSIONS | 3,518,585 |

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

ADDITIONS

Contributions:

| | | |
|---|----------|---------|
| Member | 55,701 | |
| District | 165,512 | |
| Total Contributions | | 221,213 |
| Investment Income: | | |
| Net Increase in Fair Value of Investments | 150,644 | |
| Interest & Dividends | 118,553 | |
| Less Investment Expense ¹ | (13,875) | |
| Net Investment Income | | 255,322 |
| Total Additions | | 476,535 |

DEDUCTIONS

Distributions to Members:

| | | |
|--------------------------------------|---------|-----------|
| Benefit Payments | 157,273 | |
| Lump Sum DROP Distributions | 0 | |
| Lump Sum PLOP Distributions | 67,861 | |
| Refunds of Member Contributions | 0 | |
| Total Distributions | | 225,134 |
| Administrative Expense | | 12,933 |
| Total Deductions | | 238,067 |
| Net Increase in Net Position | | 238,468 |
| NET POSITION RESTRICTED FOR PENSIONS | | |
| Beginning of the Year | | 3,280,117 |
| End of the Year | | 3,518,585 |

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

NOTES TO THE FINANCIAL STATEMENTS

(For the Year Ended September 30, 2018)

Plan Description

Plan Administration

The Plan is a single-employer defined benefit pension plan administered by the Plan's Board of Trustees. The Board shall consist of five Trustees, one of whom, unless otherwise prohibited by law, shall be a legal resident of the District, who shall be appointed by the Bonita Springs Fire Control and Rescue District Board of Commissioners, one of whom shall be a union Member of the System who shall be elected by a majority of the union Members of the System, one of whom shall be a non-union Member of the System who shall be elected by a majority of the non-union Members of the system and one of whom shall be an at-large Trustee of the System, who shall be elected by a majority of all union and non-union General Employees who are Members of the System. The fifth Trustee shall be chosen by a majority of the previous four Trustees.

Plan Membership as of October 1, 2018:

| | |
|---|---|
| Inactive Plan Members or Beneficiaries Currently Receiving Benefits | 10 |
| Inactive Plan Members Entitled to But Not Yet Receiving Benefits | 2 |
| Active Plan Members | 11 |
| | <hr style="border-top: 1px solid black;"/> |
| | 23 |
| | <hr style="border-top: 3px double black;"/> |

Benefits Provided

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

Normal Retirement:

Date: 1) Age 55 and 7 years of Credited Service, or 2) 25 years of Credited Service, regardless of age.

Benefit: 2.48% of Average Final Compensation times Credited Service.

Early Retirement:

Date: Earlier of 1.) Age 50 and 7 Years of Credited Service, or 2.) 20 years of Credited Service, regardless of age.

Benefit: Accrued benefit, reduced 7.0% per year.

Cost of Living Adjustment (COLA):

Normal and Early service Retirees and their Beneficiaries receive a 1.35% increase in their benefits each October 1st following retirement (the first adjustment will be a prorated amount of 1.35%).

Vesting:

Schedule: 100% after 7 years of Credited Service.

Disability:

Service Incurred: Covered from Date of Employment.

Non-Service Incurred: 7 years of Credited Service.

Benefit accrued to date of disability.

Pre-Retirement Death Benefits:

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

Non-Vested: Refund of accumulated contributions without interest.

Contributions

Member Contributions: 7.0% of Salary.

District Contributions: Remaining amount required in order to fund to actuarial soundness. District has a minimum contribution of 15.0% of Salaries.

Investments

Investment Policy:

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

| Asset Class | Target Allocation |
|-----------------------|-------------------|
| Domestic Equity | 45% |
| International Equity | 15% |
| Domestic Fixed Income | 35% |
| Global Fixed Income | 5% |
| 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, 2018, the annual money-weighted rate of return on Pension Plan investments, net of Pension Plan investment expense, was 7.58 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 (earlier of (1) Age 55 with 7 years of Credited Service, or (2) 25 years of Credited Service).

Participation: Not to exceed 60 months.

Rate of Return: At the Member's election: (1) 6.5% annual rate, or (2) actual net rate of investment return (total return net of brokerage commissions, management fees, and transaction costs), credited each fiscal quarter. One change between the above is allowed.

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

NET PENSION LIABILITY OF THE SPONSOR

The components of the Net Pension Liability of the Sponsor on September 30, 2018 were as follows:

| | |
|--|-------------------|
| Total Pension Liability | \$ 3,935,545 |
| Plan Fiduciary Net Position | \$ (3,518,585) |
| Sponsor's Net Pension Liability | <u>\$ 416,960</u> |
| Plan Fiduciary Net Position as a percentage of Total Pension Liability | 89.41% |

Actuarial Assumptions:

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

| | |
|---------------------------|---------------|
| Inflation | 2.50% |
| Salary Increases | Service based |
| Discount Rate | 7.60% |
| Investment Rate of Return | 7.60% |

Mortality Rate Healthy Active 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 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 Disabled Lives:

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

Male: 100% RP2000 Disabled Male setback four years.

The most recent actuarial experience study used to review the other significant assumptions was dated August 2, 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 2018 the inflation rate assumption of the investment advisor was 2.50%.

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

Best estimates of geometric real rates of return for each major asset class included in the Pension Plan's target asset allocation as of September 30, 2018 are summarized in the following table:

| Asset Class | Long Term Expected Real Rate of Return |
|-----------------------|--|
| Domestic Equity | 7.50% |
| International Equity | 8.50% |
| Domestic Fixed Income | 2.50% |
| Global Fixed Income | 3.50% |

Discount Rate:
The Discount Rate used to measure the Total Pension Liability was 7.60 percent.
The projection of cash flows used to determine the Discount Rate assumed that Plan Member contributions will be made at the current contribution rate and that Sponsor contributions will be made at rates equal to the difference between actuarially determined contribution rates and the Member rate. Based on those assumptions, the Pension Plan's Fiduciary Net Position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the Long-Term Expected Rate of Return on Pension Plan investments was applied to all periods of projected benefit payments to determine the Total Pension Liability.

| | 1% Decrease | Current | 1% Increase |
|---------------------------------|-------------|---------------|-------------|
| | 6.60% | Discount Rate | 8.60% |
| | | 7.60% | |
| Sponsor's Net Pension Liability | \$ 885,328 | \$ 416,960 | \$ 27,409 |

SCHEDULE OF CHANGES IN NET PENSION LIABILITY AND RELATED RATIOS

Last 10 Fiscal Years

| | 09/30/2018 | 09/30/2017 | 09/30/2016 |
|--|---------------------|---------------------|---------------------|
| Total Pension Liability | | | |
| Service Cost | 96,000 | 100,393 | 61,946 |
| Interest | 274,131 | 266,267 | 239,113 |
| Changes of benefit terms | - | - | - |
| Differences between Expected and Actual Experience | 170,358 | (66,906) | 164,346 |
| Changes of assumptions | 43,486 | 44,142 | 148,708 |
| Benefit Payments, including Refunds of Employee Contributions | (225,134) | (160,954) | (294,631) |
| Net Change in Total Pension Liability | 358,841 | 182,942 | 319,482 |
| Total Pension Liability - Beginning | 3,576,704 | 3,393,762 | 3,074,280 |
| Total Pension Liability - Ending (a) | <u>\$ 3,935,545</u> | <u>\$ 3,576,704</u> | <u>\$ 3,393,762</u> |
| Plan Fiduciary Net Position | | | |
| Contributions - Employer | 165,512 | 144,807 | 133,167 |
| Contributions - Employee | 55,701 | 52,794 | 48,551 |
| Net Investment Income | 255,322 | 353,297 | 179,789 |
| Benefit Payments, including Refunds of Employee Contributions | (225,134) | (160,954) | (294,631) |
| Administrative Expense | (12,933) | (18,785) | (16,781) |
| Net Change in Plan Fiduciary Net Position | 238,468 | 371,159 | 50,095 |
| Plan Fiduciary Net Position - Beginning | 3,280,117 | 2,908,958 | 2,858,863 |
| Plan Fiduciary Net Position - Ending (b) | <u>\$ 3,518,585</u> | <u>\$ 3,280,117</u> | <u>\$ 2,908,958</u> |
| Net Pension Liability - Ending (a) - (b) | <u>\$ 416,960</u> | <u>\$ 296,587</u> | <u>\$ 484,804</u> |
| Plan Fiduciary Net Position as a percentage of the Total Pension Liability | 89.41% | 91.71% | 85.71% |
| Covered Employee Payroll ¹ | \$ 795,730 | \$ 754,198 | \$ 693,579 |
| Net Pension Liability as a percentage of Covered Employee Payroll | 52.40% | 39.32% | 69.90% |

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 09/30/2018, amounts reported as changes of assumptions resulted from lowering the investment return assumption from 7.7% to 7.6% per year, net of investment-related expenses.

For measurement date 09/30/2017, as required by Chapter 2015-157, Laws of Florida, the assumed rates of mortality have been changed from those in the July 1, 2015 FRS valuation report to those used in the July 1, 2016 FRS valuation report. Additionally, the investment rate of return was lowered from 7.80% to 7.70%.

Continued Changes of Assumptions:

For measurement date 09/30/2016, amounts reported as changes of assumptions were a result of the August 2, 2016 actuarial experience study. The following changes were adopted:

1. Cost Method was changed from the Frozen Initial Liability Cost Method to the Entry Age Normal Cost Method. This is the same method as required by the Government Accounting Board Standards (GASB) disclosures.
2. Investment return assumption was decreased from 8.0% to 7.8%.
3. Payroll Growth assumption was reduced from 1.1% to 0.0%
4. Salary increase assumption was changed from a flat 6.0% per year to one based on service.
5. Mortality table was changed to be the same as used in the Florida Retirement System's July 1, 2015 valuation for non-special risk lives, as required by State Law.
6. Retirement rates were changed from 100% at first eligibility to age based rates.
7. Withdrawal rates were changed to be lower following the attainment of 7 years of Credited Service.

Additionally, the inflation assumption rate was lowered from 3.00% to 2.50%, matching the long-term inflation assumption utilized by the Plan's investment consultant.

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

| | 09/30/2015 | 09/30/2014 |
|--|---------------------|---------------------|
| Total Pension Liability | | |
| Service Cost | 85,654 | 79,309 |
| Interest | 231,533 | 215,612 |
| Changes of benefit terms | - | - |
| Differences between Expected and Actual Experience | - | - |
| Changes of assumptions | - | - |
| Benefit Payments, including Refunds of Employee Contributions | (102,839) | (101,671) |
| Net Change in Total Pension Liability | 214,348 | 193,250 |
| Total Pension Liability - Beginning | 2,859,932 | 2,666,682 |
| Total Pension Liability - Ending (a) | <u>\$ 3,074,280</u> | <u>\$ 2,859,932</u> |
| Plan Fiduciary Net Position | | |
| Contributions - Employer | 154,995 | 126,276 |
| Contributions - Employee | 42,715 | 34,800 |
| Net Investment Income | (13,270) | 255,640 |
| Benefit Payments, including Refunds of Employee Contributions | (102,839) | (101,671) |
| Administrative Expense | (22,284) | (7,595) |
| Net Change in Plan Fiduciary Net Position | 59,317 | 307,450 |
| Plan Fiduciary Net Position - Beginning | 2,799,546 | 2,492,096 |
| Plan Fiduciary Net Position - Ending (b) | <u>\$ 2,858,863</u> | <u>\$ 2,799,546</u> |
| Net Pension Liability - Ending (a) - (b) | <u>\$ 215,417</u> | <u>\$ 60,386</u> |
| Plan Fiduciary Net Position as a percentage of the Total Pension Liability | 92.99% | 97.89% |
| Covered Employee Payroll ¹ | \$ 790,658 | \$ 497,148 |
| Net Pension Liability as a percentage of Covered Employee Payroll | 27.25% | 12.15% |

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.

SCHEDULE OF CONTRIBUTIONS

Last 10 Fiscal Years

| Fiscal Year Ended | Actuarially Determined Contribution | Contributions in relation to the Actuarially Determined Contributions | Contribution Deficiency (Excess) | Covered Employee Payroll ¹ | Contributions as a percentage of Covered Employee Payroll |
|-------------------|---|---|--|---|---|
| 09/30/2018 | \$ 158,350 | 165,512 | \$ (7,162) | \$ 795,730 | 20.80% |
| 09/30/2017 | \$ 144,806 | \$ 144,807 | \$ (1) | \$ 754,198 | 19.20% |
| 09/30/2016 | \$ 133,167 | \$ 133,167 | \$ - | \$ 693,579 | 19.20% |
| 09/30/2015 | \$ 154,995 | \$ 154,995 | \$ - | \$ 790,658 | 19.60% |
| 09/30/2014 | \$ 126,276 | \$ 126,276 | \$ - | \$ 497,148 | 25.40% |

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: 10/01/2016

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

Methods and assumptions used to determine contribution rates:

Mortality Rate:

Healthy Lives:

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

Male: RP2000 Generational, 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 above assumption rates were mandated by Chapter 2015-157, Laws of Florida. This law mandates the use of the assumption used in either of the two most recent valuations of the Florida Retirement System (FRS). The above rates are those outlined in Milliman's July 1, 2015 FRS valuation report. We feel this assumption sufficiently accommodates future mortality improvements.

Interest Rate: 7.8% per year compounded annually, net of investment expenses. This assumption is supported by the asset allocation and long-term expected rate of returns of the asset classes.

Retirement Age:

| Age | Retirement Rate |
|-------|--------------------|
| 50 | 25.0% |
| 51-54 | 5.0% |
| 55 | 25.0% |
| 56-59 | 50.0% |
| 60 | 50.0% |
| 61-64 | 50.0% |
| 65+ | 100.0% |

25 years of service, regardless of age. Also, any member who has reached Normal Retirement is assumed to continue employment for one additional year. It is assumed that members who are eligible for Early Retirement (50 & 7 or 20 & out) will retire at the rate of 5% per year.)

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Disability Rates:

Table (1202), sample rates below.

| Age | Disability Rate |
|-----|-----------------|
| 20 | 0.05% |
| 30 | 0.06% |
| 40 | 0.12% |
| 50 | 0.43% |

Termination Rates:

Table 1305 for service <7 and half of table 1305 for service after 7 years. See table below for sample rates.

| Service | Age | Termination Rate |
|---------|-------|------------------|
| <7 | <30 | 16.2% |
| | 30-34 | 15.0% |
| | 35-39 | 9.8% |
| | 40-44 | 7.3% |
| | 45+ | 0.8% |
| 7+ | <30 | 7.6% |
| | 30-34 | 7.5% |
| | 35-39 | 5.0% |
| | 40-44 | 3.4% |
| | 45+ | 1.9% |

Salary Increases:

| Service | Age |
|---------|-------|
| <1 | 10.0% |
| 1-4 | 7.5% |
| 5+ | 5.5% |

Payroll Growth:

None.

Actuarial Cost Method:

Entry Age Normal Cost Method.

Asset Valuation Method:

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

SCHEDULE OF INVESTMENT RETURNS
Last 10 Fiscal Years

| Fiscal Year Ended | Annual Money-Weighted Rate of Return Net of Investment Expense |
|-------------------|---|
| 09/30/2018 | 7.58% |
| 09/30/2017 | 11.85% |
| 09/30/2016 | 6.45% |
| 09/30/2015 | -0.47% |
| 09/30/2014 | 10.16% |

NOTES TO THE FINANCIAL STATEMENTS

(For the Year Ended September 30, 2019)

General Information about the Pension Plan

Plan Description

The Plan is a single-employer defined benefit pension plan administered by the Plan's Board of Trustees. The Board shall consist of five Trustees, one of whom, unless otherwise prohibited by law, shall be a legal resident of the District, who shall be appointed by the Bonita Springs Fire Control and Rescue District Board of Commissioners, one of whom shall be a union Member of the System who shall be elected by a majority of the union Members of the System, one of whom shall be a non-union Member of the System who shall be elected by a majority of the non-union Members of the system and one of whom shall be an at-large Trustee of the System, who shall be elected by a majority of all union and non-union General Employees who are Members of the System.

The fifth Trustee shall be chosen by a majority of the previous four Trustees.

All General Employees as of the Effective Date, except the current Human Resources Manager, and all future new General Employees, shall become Members of this System as a condition of employment.

Plan Membership as of October 1, 2018:

| | |
|---|-------|
| Inactive Plan Members or Beneficiaries Currently Receiving Benefits | 10 |
| Inactive Plan Members Entitled to But Not Yet Receiving Benefits | 2 |
| Active Plan Members | 11 |
| | <hr/> |
| | 23 |
| | <hr/> |

Benefits Provided

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

Normal Retirement:

Date: 1) Age 55 and 7 years of Credited Service, or 2) 25 years of Credited Service, regardless of age.

Benefit: 2.48% of Average Final Compensation times Credited Service.

Early Retirement:

Date: Earlier of 1.) Age 50 and 7 Years of Credited Service, or 2.) 20 years of Credited Service, regardless of age.

Benefit: Accrued benefit, reduced 7.0% per year.

Cost of Living Adjustment (COLA):

Normal and Early service Retirees and their Beneficiaries receive a 1.35% increase in their benefits each October 1st following retirement (the first adjustment will be a prorated amount of 1.35%).

Vesting:

Schedule: 100% after 7 years of Credited Service.

Disability:

Service Incurred: Covered from Date of Employment.

Non-Service Incurred: 7 years of Credited Service.

Benefit accrued to date of disability.

Pre-Retirement Death Benefits:

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

Non-Vested: Refund of accumulated contributions without interest.

Contributions

Member Contributions: 7.0% of Salary.

District Contributions: Remaining amount required in order to fund to actuarial soundness. District has a minimum contribution of 15.0% of Salaries.

Net Pension Liability

The measurement date is September 30, 2018.

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

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

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

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

Actuarial Assumptions:

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

| | |
|---------------------------|---------------|
| Inflation | 2.50% |
| Salary Increases | Service based |
| Discount Rate | 7.60% |
| Investment Rate of Return | 7.60% |

Mortality Rate Healthy Active 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 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 Disabled Lives:

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

Male: 100% RP2000 Disabled Male setback four years.

The most recent actuarial experience study used to review the other significant assumptions was dated August 2, 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 2018 the inflation rate assumption of the investment advisor was 2.50%.

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

Best estimates of geometric real rates of return for each major asset class included in the Pension Plan's target asset allocation as of September 30, 2018 are summarized in the following table:

| Asset Class | Target Allocation | Long Term Expected Real Rate of Return |
|-----------------------|-------------------|---|
| Domestic Equity | 45.0% | 7.50% |
| International Equity | 15.0% | 8.50% |
| Domestic Fixed Income | 35.0% | 2.50% |
| Global Fixed Income | 5.0% | 3.50% |
| Total | 100.0% | |

Discount Rate:

The Discount Rate used to measure the Total Pension Liability was 7.60 percent.

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

CHANGES IN NET PENSION LIABILITY

| | Increase (Decrease) | | |
|---|-------------------------|-----------------------------|-----------------------|
| | Total Pension Liability | Plan Fiduciary Net Position | Net Pension Liability |
| | (a) | (b) | (a)-(b) |
| Reporting Period Ending September 30, 2018 | \$ 3,576,704 | \$ 3,280,117 | \$ 296,587 |
| Changes for a Year: | | | |
| Service Cost | 96,000 | - | 96,000 |
| Interest | 274,131 | - | 274,131 |
| Differences between Expected and Actual Experience | 170,358 | - | 170,358 |
| Changes of assumptions | 43,486 | - | 43,486 |
| Changes of benefit terms | - | - | - |
| Contributions - Employer | - | 165,512 | (165,512) |
| Contributions - Employee | - | 55,701 | (55,701) |
| Net Investment Income | - | 255,322 | (255,322) |
| Benefit Payments, including Refunds of Employee Contributions | (225,134) | (225,134) | - |
| Administrative Expense | - | (12,933) | 12,933 |
| Net Changes | 358,841 | 238,468 | 120,373 |
| Reporting Period Ending September 30, 2019 | \$ 3,935,545 | \$ 3,518,585 | \$ 416,960 |

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

| | Current Discount | | |
|---------------------------------|------------------|------------|-------------|
| | 1% Decrease | Rate | 1% Increase |
| | 6.60% | 7.60% | 8.60% |
| Sponsor's Net Pension Liability | \$ 885,328 | \$ 416,960 | \$ 27,409 |

Pension Plan Fiduciary Net Position.

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

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

For the year ended September 30, 2018, the Sponsor has recognized a Pension Expense of \$198,420.

On September 30, 2018, the Sponsor reported Deferred Outflows of Resources and Deferred Inflows of Resources related to pensions from the following sources:

| | Deferred Outflows of Resources | Deferred Inflows of Resources |
|--|--------------------------------------|-------------------------------------|
| Differences between Expected and Actual Experience | 82,174 | 50,181 |
| Changes of assumptions | 107,462 | - |
| Net difference between Projected and Actual Earnings on Pension Plan investments | 10,892 | - |
| Employer contributions subsequent to the measurement date | 165,512 | - |
| Total | <u>\$ 366,040</u> | <u>\$ 50,181</u> |

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

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

| | |
|--------------------------|-------------|
| Year ended September 30: | |
| 2020 | \$ 93,366 |
| 2021 | \$ 104,206 |
| 2022 | \$ (22,085) |
| 2023 | \$ (25,140) |
| 2024 | \$ - |
| Thereafter | \$ - |

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

For the year ended September 30, 2019, the Sponsor will recognize a Pension Expense of \$239,408.

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 | 154,659 | 33,454 |
| Changes of assumptions | 88,239 | - |
| Net difference between Projected and Actual Earnings on Pension Plan investments | - | 12,621 |
| Employer contributions subsequent to the measurement date | TBD | - |
| Total | <u>TBD</u> | <u>\$ 46,075</u> |

The outcome of the Deferred Outflows of resources related to pensions resulting from Employer contributions subsequent to the measurement date will be recognized as a reduction of the Net Pension Liability in the year ended September 30, 2019.

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

| | |
|--------------------------|-------------|
| Year ended September 30: | |
| 2020 | \$ 174,807 |
| 2021 | \$ 48,516 |
| 2022 | \$ (25,820) |
| 2023 | \$ (680) |
| 2024 | \$ - |
| Thereafter | \$ - |

SCHEDULE OF CHANGES IN NET PENSION LIABILITY AND RELATED RATIOS

Last 10 Fiscal Years

| Reporting Period Ending Measurement Date | 09/30/2019 09/30/2018 | 09/30/2018 09/30/2017 | 09/30/2017 09/30/2016 |
|--|--------------------------|--------------------------|--------------------------|
| Total Pension Liability | | | |
| Service Cost | 96,000 | 100,393 | 61,946 |
| Interest | 274,131 | 266,267 | 239,113 |
| Changes of benefit terms | - | - | - |
| Differences between Expected and Actual Experience | 170,358 | (66,906) | 164,346 |
| Changes of assumptions | 43,486 | 44,142 | 148,708 |
| Benefit Payments, including Refunds of Employee Contributions | (225,134) | (160,954) | (294,631) |
| Net Change in Total Pension Liability | 358,841 | 182,942 | 319,482 |
| Total Pension Liability - Beginning | 3,576,704 | 3,393,762 | 3,074,280 |
| Total Pension Liability - Ending (a) | <u>\$ 3,935,545</u> | <u>\$ 3,576,704</u> | <u>\$ 3,393,762</u> |
| Plan Fiduciary Net Position | | | |
| Contributions - Employer | 165,512 | 144,807 | 133,167 |
| Contributions - Employee | 55,701 | 52,794 | 48,551 |
| Net Investment Income | 255,322 | 353,297 | 179,789 |
| Benefit Payments, including Refunds of Employee Contributions | (225,134) | (160,954) | (294,631) |
| Administrative Expense | (12,933) | (18,785) | (16,781) |
| Net Change in Plan Fiduciary Net Position | 238,468 | 371,159 | 50,095 |
| Plan Fiduciary Net Position - Beginning | 3,280,117 | 2,908,958 | 2,858,863 |
| Plan Fiduciary Net Position - Ending (b) | <u>\$ 3,518,585</u> | <u>\$ 3,280,117</u> | <u>\$ 2,908,958</u> |
| Net Pension Liability - Ending (a) - (b) | <u>\$ 416,960</u> | <u>\$ 296,587</u> | <u>\$ 484,804</u> |
| Plan Fiduciary Net Position as a percentage of the Total Pension Liability | 89.41% | 91.71% | 85.71% |
| Covered Employee Payroll ¹ | \$ 795,730 | \$ 754,198 | \$ 693,579 |
| Net Pension Liability as a percentage of Covered Employee Payroll | 52.40% | 39.32% | 69.90% |

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 09/30/2018, amounts reported as changes of assumptions resulted from lowering the investment return assumption from 7.7% to 7.6% per year, net of investment-related expenses.

For measurement date 09/30/2017, as required by Chapter 2015-157, Laws of Florida, the assumed rates of mortality have been changed from those in the July 1, 2015 FRS valuation report to those used in the July 1, 2016 FRS valuation report. Additionally, the investment rate of return was lowered from 7.80% to 7.70%.

Continued Changes of Assumptions:

For measurement date 09/30/2016, amounts reported as changes of assumptions were a result of the August 2, 2016 actuarial experience study. The following changes were adopted:

1. Cost Method was changed from the Frozen Initial Liability Cost Method to the Entry Age Normal Cost Method. This is the same method as required by the Government Accounting Board Standards (GASB) disclosures.
2. Investment return assumption was decreased from 8.0% to 7.8%.
3. Payroll Growth assumption was reduced from 1.1% to 0.0%
4. Salary increase assumption was changed from a flat 6.0% per year to one based on service.
5. Mortality table was changed to be the same as used in the Florida Retirement System's July 1, 2015 valuation for non-special risk lives, as required by State Law.
6. Retirement rates were changed from 100% at first eligibility to age based rates.
7. Withdrawal rates were changed to be lower following the attainment of 7 years of Credited Service.

Additionally, the inflation assumption rate was lowered from 3.00% to 2.50%, matching the long-term inflation assumption utilized by the Plan's investment consultant.

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

| Reporting Period Ending | 09/30/2016 | 09/30/2015 |
|--|---------------------|---------------------|
| Measurement Date | 09/30/2015 | 09/30/2014 |
| Total Pension Liability | | |
| Service Cost | 85,654 | 79,309 |
| Interest | 231,533 | 215,612 |
| Changes of benefit terms | - | - |
| Differences between Expected and Actual Experience | - | - |
| Changes of assumptions | - | - |
| Benefit Payments, including Refunds of Employee Contributions | (102,839) | (101,671) |
| Net Change in Total Pension Liability | 214,348 | 193,250 |
| Total Pension Liability - Beginning | 2,859,932 | 2,666,682 |
| Total Pension Liability - Ending (a) | <u>\$ 3,074,280</u> | <u>\$ 2,859,932</u> |
| Plan Fiduciary Net Position | | |
| Contributions - Employer | 154,995 | 126,276 |
| Contributions - Employee | 42,715 | 34,800 |
| Net Investment Income | (13,270) | 255,640 |
| Benefit Payments, including Refunds of Employee Contributions | (102,839) | (101,671) |
| Administrative Expense | (22,284) | (7,595) |
| Net Change in Plan Fiduciary Net Position | 59,317 | 307,450 |
| Plan Fiduciary Net Position - Beginning | 2,799,546 | 2,492,096 |
| Plan Fiduciary Net Position - Ending (b) | <u>\$ 2,858,863</u> | <u>\$ 2,799,546</u> |
| Net Pension Liability - Ending (a) - (b) | <u>\$ 215,417</u> | <u>\$ 60,386</u> |
| Plan Fiduciary Net Position as a percentage of the Total Pension Liability | 92.99% | 97.89% |
| Covered Employee Payroll ¹ | \$ 790,658 | \$ 497,148 |
| Net Pension Liability as a percentage of Covered Employee Payroll | 27.25% | 12.15% |

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.

SCHEDULE OF CONTRIBUTIONS

Last 10 Fiscal Years

| Fiscal Year Ended | Actuarially Determined Contribution | Contributions in relation to the Actuarially Determined Contributions | Contribution Deficiency (Excess) | Covered Employee Payroll ¹ | Contributions as a percentage of Covered Employee Payroll |
|-------------------|---|---|--|---|---|
| 09/30/2018 | \$ 158,350 | 165,512 | \$ (7,162) | \$ 795,730 | 20.80% |
| 09/30/2017 | \$ 144,806 | \$ 144,807 | \$ (1) | \$ 754,198 | 19.20% |
| 09/30/2016 | \$ 133,167 | \$ 133,167 | \$ - | \$ 693,579 | 19.20% |
| 09/30/2015 | \$ 154,995 | \$ 154,995 | \$ - | \$ 790,658 | 19.60% |
| 09/30/2014 | \$ 126,276 | \$ 126,276 | \$ - | \$ 497,148 | 25.40% |

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: 10/01/2016

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

Methods and assumptions used to determine contribution rates:

Mortality Rate:

Healthy Lives:

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

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

Disabled Lives:

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

Male: 100% RP2000 Disabled Male setback four years.

The above assumption rates were mandated by Chapter 2015-157, Laws of Florida.

This law mandates the use of the assumption used in either of the two most recent valuations of the Florida Retirement System (FRS). The above rates are those outlined in Milliman's July 1, 2015 FRS valuation report. We feel this assumption sufficiently accommodates future mortality improvements.

Interest Rate:

7.8% per year compounded annually, net of investment expenses. This assumption is supported by the asset allocation and long-term expected rate of returns of the asset classes.

Retirement Age:

| Age | Retirement Rate |
|-------|--------------------|
| 50 | 25.0% |
| 51-54 | 5.0% |
| 55 | 25.0% |
| 56-59 | 50.0% |
| 60 | 50.0% |
| 61-64 | 50.0% |
| 65+ | 100.0% |

25 years of service, regardless of age. Also, any member who has reached Normal Retirement is assumed to continue employment for one additional year. It is assumed that members who are eligible for Early Retirement (50 & 7 or 20 & out) will retire at the rate of 5% per year.)

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Disability Rates:

Table (1202), sample rates below.

| Age | Disability Rate |
|-----|-----------------|
| 20 | 0.05% |
| 30 | 0.06% |
| 40 | 0.12% |
| 50 | 0.43% |

Termination Rates:

Table 1305 for service <7 and half of table 1305 for service after 7 years. See table below for sample rates.

| Service | Age | Termination Rate |
|---------|-------|------------------|
| <7 | <30 | 16.2% |
| | 30-34 | 15.0% |
| | 35-39 | 9.8% |
| | 40-44 | 7.3% |
| | 45+ | 0.8% |
| 7+ | <30 | 7.6% |
| | 30-34 | 7.5% |
| | 35-39 | 5.0% |
| | 40-44 | 3.4% |
| | 45+ | 1.9% |

Salary Increases:

| Service | Age |
|---------|-------|
| <1 | 10.0% |
| 1-4 | 7.5% |
| 5+ | 5.5% |

Payroll Growth:

None.

Actuarial Cost Method:

Entry Age

Asset Valuation Method:

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

EXPENSE DEVELOPMENT AND AMORTIZATION SCHEDULES

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

FINAL COMPONENTS OF PENSION EXPENSE
FISCAL YEAR SEPTEMBER 30, 2018

| | Net Pension Liability | Deferred Inflows | Deferred Outflows | Pension Expense |
|--|--------------------------|---------------------|----------------------|--------------------|
| Beginning balance | \$ 484,804 | \$ 21,680 | \$ 558,664 | \$ - |
| Employer Contributions made after 09/30/2017 | - | - | 165,512 | - |
| Total Pension Liability Factors: | | | | |
| Service Cost | 100,393 | - | - | 100,393 |
| Interest | 266,267 | - | - | 266,267 |
| Changes in benefit terms | - | - | - | - |
| Differences between Expected and Actual Experience with regard to economic or demographic assumptions | (66,906) | 66,906 | - | - |
| Current year amortization of experience difference | - | (16,725) | (41,086) | 24,361 |
| Change in assumptions about future economic or demographic factors or other inputs | 44,142 | - | 44,142 | - |
| Current year amortization of change in assumptions | - | - | (48,211) | 48,211 |
| Benefit Payments, including Refunds of Employee Contributions | (160,954) | - | - | - |
| Net change | <u>182,942</u> | <u>50,181</u> | <u>120,357</u> | <u>439,232</u> |
| Plan Fiduciary Net Position: | | | | |
| Contributions - Employer | 144,807 | - | (144,807) | - |
| Contributions - Employee | 52,794 | - | - | (52,794) |
| Projected Net Investment Income | 227,595 | - | - | (227,595) |
| Difference between projected and actual earnings on Pension Plan investments | 125,702 | 125,702 | - | - |
| Current year amortization | - | (35,982) | (56,774) | 20,792 |
| Benefit Payments, including Refunds of Employee Contributions | (160,954) | - | - | - |
| Administrative Expenses | (18,785) | - | - | 18,785 |
| Net change | <u>371,159</u> | <u>89,720</u> | <u>(201,581)</u> | <u>(240,812)</u> |
| Ending Balance | <u>\$ 296,587</u> | <u>\$ 161,581</u> | <u>\$ 477,440</u> | <u>\$ 198,420</u> |

PRELIMINARY COMPONENTS OF PENSION EXPENSE
FISCAL YEAR SEPTEMBER 30, 2019

| | Net Pension Liability | Deferred Inflows | Deferred Outflows | Pension Expense |
|--|--------------------------|---------------------|----------------------|--------------------|
| Beginning balance | \$ 296,587 | \$ 161,581 | \$ 477,440 | \$ - |
| Employer Contributions made after 09/30/2018 | - | - | TBD* | - |
| Total Pension Liability Factors: | | | | |
| Service Cost | 96,000 | - | - | 96,000 |
| Interest | 274,131 | - | - | 274,131 |
| Changes in benefit terms | - | - | - | - |
| Differences between Expected and Actual Experience with regard to economic or demographic assumptions | 170,358 | - | 170,358 | - |
| Current year amortization of experience difference | - | (16,727) | (97,873) | 81,146 |
| Change in assumptions about future economic or demographic factors or other inputs | 43,486 | - | 43,486 | - |
| Current year amortization of change in assumptions | - | - | (62,708) | 62,708 |
| Benefit Payments, including Refunds of Employee Contributions | (225,134) | - | - | - |
| Net change | <u>358,841</u> | <u>(16,727)</u> | <u>53,263</u> | <u>513,985</u> |
| Plan Fiduciary Net Position: | | | | |
| Contributions - Employer | 165,512 | - | (165,512) | - |
| Contributions - Employee | 55,701 | - | - | (55,701) |
| Projected Net Investment Income | 251,920 | - | - | (251,920) |
| Difference between projected and actual earnings on Pension Plan investments | 3,402 | 3,402 | - | - |
| Current year amortization | - | (36,662) | (56,773) | 20,111 |
| Benefit Payments, including Refunds of Employee Contributions | (225,134) | - | - | - |
| Administrative Expenses | (12,933) | - | - | 12,933 |
| Net change | <u>238,468</u> | <u>(33,260)</u> | <u>(222,285)</u> | <u>(274,577)</u> |
| Ending Balance | <u>\$ 416,960</u> | <u>\$ 111,594</u> | <u>TBD</u> | <u>\$ 239,408</u> |

* Employer State Contributions subsequent to the measurement date made after September 30, 2018 but made on or before September 30, 2019 need to be added.

AMORTIZATION SCHEDULE - INVESTMENTS

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

| Plan Year Ending | Differences Between Projected and Actual Earnings | Recognition Period (Years) | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 |
|--|---|-------------------------------|-------------|-------------|-------------|-------------|-------------|----------|------|------|------|------|------|
| 2014 | \$ (54,200) | 5 | \$ (10,840) | \$ (10,840) | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| 2015 | \$ 240,137 | 5 | \$ 48,027 | \$ 48,027 | \$ 48,027 | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| 2016 | \$ 43,732 | 5 | \$ 8,747 | \$ 8,746 | \$ 8,746 | \$ 8,746 | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| 2017 | \$ (125,702) | 5 | \$ (25,142) | \$ (25,140) | \$ (25,140) | \$ (25,140) | \$ (25,140) | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| 2018 | \$ (3,402) | 5 | \$ - | \$ (682) | \$ (680) | \$ (680) | \$ (680) | \$ (680) | \$ - | \$ - | \$ - | \$ - | \$ - |
| Net Increase (Decrease) in Pension Expense | | | \$ 20,792 | \$ 20,111 | \$ 30,953 | \$ (17,074) | \$ (25,820) | \$ (680) | \$ - | \$ - | \$ - | \$ - | \$ - |

AMORTIZATION SCHEDULE - CHANGES OF ASSUMPTIONS

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

| Plan Year Ending | Changes of Assumptions | Recognition Period (Years) | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 |
|--|---------------------------|-------------------------------|-----------|-----------|-----------|-----------|------|------|------|------|------|------|------|
| 2016 | \$ 148,708 | 4 | \$ 37,177 | \$ 37,177 | \$ 37,177 | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| 2017 | \$ 44,142 | 4 | \$ 11,034 | \$ 11,036 | \$ 11,036 | \$ 11,036 | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| 2018 | \$ 43,486 | 3 | \$ - | \$ 14,495 | \$ 14,495 | \$ 14,495 | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| Net Increase (Decrease) in Pension Expense | | | \$ 48,211 | \$ 62,708 | \$ 62,708 | \$ 25,531 | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |

AMORTIZATION SCHEDULE - EXPERIENCE

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

| Plan Year Ending | Differences Between Expected and Actual Experience | Recognition Period (Years) | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 |
|--|--|-------------------------------|-------------|-------------|-------------|-------------|------|------|------|------|------|------|------|
| 2016 | \$ 164,346 | 4 | \$ 41,086 | \$ 41,087 | \$ 41,087 | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| 2017 | \$ (66,906) | 4 | \$ (16,725) | \$ (16,727) | \$ (16,727) | \$ (16,727) | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| 2018 | \$ 170,358 | 3 | \$ - | \$ 56,786 | \$ 56,786 | \$ 56,786 | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |
| Net Increase (Decrease) in Pension Expense | | | \$ 24,361 | \$ 81,146 | \$ 81,146 | \$ 40,059 | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - |