# City of Plantation Volunteer Firefighters Retirement System

Actuarial Valuation Report as of October 1, 2018

Annual Employer Contribution for the Fiscal Year Ending September 30, 2020







December 20, 2018

Board of Trustees City of Plantation Volunteer Firefighters Retirement System Plantation, Florida

Re: City of Plantation Volunteer Firefighters Retirement System Actuarial Valuation as of October 1, 2018

Dear Board Members:

The results of the October 1, 2018 Annual Actuarial Valuation of the City of Plantation Volunteer Firefighters Retirement System are presented in this report.

This report was prepared at the request of the Board and is intended for use by the Retirement System and those designated or approved by the Board. This report may be provided to parties other than the System only in its entirety and only with the permission of the Board. GRS is not responsible for unauthorized use of this report.

The purpose of the valuation is to measure the System's funding progress, to determine the employer contribution rate for the fiscal year ending September 30, 2020, and to determine the actuarial information for Governmental Accounting Standards Board (GASB) Statement No. 67 for the fiscal year ending 2018. This report also includes preliminary information for Governmental Accounting Standards Board (GASB) Statement No. 67 for the fiscal year ending 2019. This report should not be relied on for any purpose other than the purposes described herein. Determinations of financial results associated with the benefits described in this report, for purposes other than those identified above may be significantly different.

The contribution rate in this report is determined using the actuarial assumptions and methods disclosed in Section B of this report. This report includes risk metrics in Section A but does not include a more robust assessment of the risks of future experience not meeting the actuarial assumptions. Additional assessment of risks was outside the scope of this assignment.

This valuation assumed the continuing ability of the plan sponsor to make the contributions necessary to fund this plan. A determination regarding whether or not the plan sponsor is actually able to do so is outside our scope of expertise and was not performed.



The findings in this report are based on data or other information through September 30, 2018. The valuation was based upon information furnished by the Plan Administrator concerning Retirement Plan benefits, financial transactions, plan provisions and active members, terminated members, retirees and beneficiaries. We checked for internal and year-to-year consistency, but did not audit the data. We are not responsible for the accuracy or completeness of the information provided by the Plan Administrator.

In addition, this report was prepared using certain assumptions approved by the Board and prescribed by the Florida Statutes as described in the section of this report entitled Actuarial Assumptions and Methods. The prescribed assumptions are the assumed mortality rates detailed in the Actuarial Assumptions and Methods section in accordance with Florida House Bill 1309 (codified in Chapter 2015-157).

This report has been prepared by actuaries who have substantial experience valuing public employee retirement systems. To the best of our knowledge the information contained in this report is accurate and fairly presents the actuarial position of the Retirement Plan as of the valuation date. All calculations have been made in conformity with generally accepted actuarial principles and practices, with the Actuarial Standards of Practice issued by the Actuarial Standards Board, and with applicable statutes.

Jeffrey Amrose and Trisha Amrose are members of the American Academy of Actuaries. These actuaries meet the Academy's Qualification Standards to render the actuarial opinions contained herein.

The signing actuaries are independent of the plan sponsor.

This actuarial valuation and/or cost determination was prepared and completed by me or under my direct supervision, and I acknowledge responsibility for the results. To the best of our knowledge, the results are complete and accurate. In our opinion, the techniques and assumptions used are reasonable, meet the requirements and intent of Part VII, Chapter 112, Florida Statutes, and are based on generally accepted actuarial principles and practices. 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.

Gabriel, Roeder, Smith & Company will be pleased to review this valuation report with the Board of Trustees and to answer any questions pertaining to the valuation.

Respectfully submitted,

GABRIEL, ROEDER, SMITH AND COMPANY

Jeffrey Amrose, MAAA

Enrolled Actuary No. 17-6599

Senior Consultant & Actuary

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Consultant & Actuary





### **TABLE OF CONTENTS**

| <u>Section</u> | <u>Title</u> |   | Page |
|----------------|--------------|---|------|
| Α              | Discus       | sion of Valuation Results                         |      |
|                | 1.           | Discussion of Valuation Results                   | 1    |
|                | 2.           | Risks Associated with Measuring the Accrued       |      |
|                |              | Liability and Actuarially Determined Contribution |      |
|                | 3.           | Chapter Revenue                                   | 5    |
|                | 4.           | Share Plan  | 6    |
| В              | Valuat       | ion Results                                       |      |
|                | 1.           | Participant Data                                  | 7    |
|                | 2.           | Actuarial Determined Contribution                 | 8    |
|                | 3.           | Actuarial Value of Benefits and Assets            | 9    |
|                | 4.           | Calculation of Employer Normal Cost               | 10   |
|                | 5.           | Actuarial Gains and Losses                        | 11   |
|                | 6.           | Recent History of Valuation Results               | 17   |
|                | 7.           | Recent History of Required and                    |      |
|                | 0            | Actual Contributions                              | 19   |
|                | 8.           | Schedule of Funding Progress                      | 21   |
|                | 9.           | Actuarial Assumptions and Cost Method             | 22   |
|                | 10.          | Miscellaneous and Technical Assumptions           | 26   |
|                | 11.          | Glossary of Terms                                 | 27   |
| С              | Pensio       | on Fund Information                               |      |
|                | 1.           | Summary of Assets                                 | 30   |
|                | 2.           | Pension Fund Income and Disbursements             | 31   |
|                | 3.           | Actuarial Value of Assets                         | 32   |
|                | 4.           | Investment Rate of Return                         | 33   |
| D              | Financ       | ial Accounting Information                        |      |
|                | 1.           | FASB No. 35                                       | 34   |
|                | 2.           | GASB No. 67                                       | 35   |
| E              | Miscel       | laneous Information                               |      |
|                | 1.           | Reconciliation of Membership Data                 | 41   |
|                | 2.           | Active Participant Scatter                        | 42   |
|                | 3.           | Inactive Participant Scatter                      | 43   |
| F              | Summ         | ary of Plan Provisions                            | 44   |





**DISCUSSION OF VALUATION RESULTS** 

#### **DISCUSSION OF VALUATION RESULTS**

### **Comparison of Required Employer Contributions**

The following table compares the contribution results developed in this year's actuarial valuation to last year's results.

|   | Base<br>Max | FYE 9/30/2020<br>ed on 10/1/2018<br>Valuation<br>imum Allowable<br>Share Plan<br>Allocation | Base | FYE 9/30/2020 ed on 10/1/2018 Valuation To Share Plan Allocation | FYE 9/30/2019<br>Based on<br>10/1/2017<br>Valuation |
|---|-------------|---|------|--|---|
| Active Members Included in Valuation                                |             | 233   |      | 233  | 216   |
| Required Employer/State Contribution<br>Amount Per Active Member    | \$          | (99,053)<br>(425.12)  | \$   | (267,842)<br>(1,149.54)  | \$<br>(117,106)<br>(542.16)                         |
| Estimated Credit for State Contribution<br>Amount Per Active Member | \$          | 498,143<br>2,137.95   | \$   | 498,143<br>2,137.95  | \$<br>498,143<br>2,306.22                           |
| Required Employer Contribution                                      | \$          | 0   | \$   | 0  | \$<br>0   |

The required employer contribution has been adjusted for interest on the basis that contributions are made in equal payments at the end of each quarter.

#### **Revisions in Benefits**

There have been no revisions in benefits since the last actuarial valuation.

#### **Revisions in Actuarial Assumptions or Methods**

There have been no revisions in actuarial assumptions or methods since the last actuarial valuation.

#### **Actuarial Experience**

There was a net actuarial gain of \$635,011 for the year which means that actual experience was more favorable than expected. The gain was due to more than expected non vested terminated employees and members not accruing a year of service. Also contributing to the gain was a recognized investment return in excess of the assumed rate of 7.08%. The net investment return was 7.9% based on market value of assets and 7.5% based on actuarial value of assets.



#### **Funded Ratio**

The funded ratio based on the Actuarial Value of Assets this year is 128.5% before reflecting a Share Plan allocation and 123.5% after reflecting the maximum allowable Share Plan allocation. The ratio is equal to the actuarial value of assets divided by the actuarial accrued (past service) liability. The funded ratio based on the Market Value of Assets this year before reflecting the Share Plan allocation is 131.1%. After reflecting the maximum allowable Share Plan allocation the funded ratio is 126.1% using the Market Value of Assets.

#### **Variability of Future Contribution Rates**

The Actuarial Cost Method used to determine the contribution rate is intended to produce contribution rates which are generally level. Even so, when experience differs from the assumptions, as it often does, the employer's contribution rate can vary significantly from year-to-year.

Over time, if the year-to-year gains and losses offset each other, the contribution would be expected to return to the current level, but this does not always happen.

The Market Value of Assets exceeds the Actuarial Value of Assets by \$391,961 as of the valuation date (see Section C). This difference will be gradually recognized in the absence of offsetting losses. In turn, the computed employer/state contribution will gradually decrease by approximately \$86,000 or \$369 per active member.

#### **Relationship to Market Value**

If Market Value had been the basis for the valuation, the actuarially required contribution for the City would have remained at \$0 and the funded ratio would have been 131.1% before reflecting a Share Plan allocation and 126.1% after reflecting the maximum allowable Share Plan allocation.

#### Conclusion

The remainder of this Report includes detailed actuarial valuation results, financial information, miscellaneous information and statistics, and a summary of plan provisions.



# RISKS ASSOCIATED WITH THE MEASURING THE ACCRUED LIABILITY AND ACTUARIALLY DETERMINED CONTRIBUTION

The determination of the accrued liability and the actuarially determined contribution requires the use of assumptions regarding future economic and demographic experience. Risk measures, as illustrated in this report, are intended to aid in the understanding of the effects of future experience differing from the assumptions used in the course of the actuarial valuation. Risk measures may also help with illustrating the potential volatility in the accrued liability and the actuarially determined contribution that result from the differences between actual experience and the actuarial assumptions.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions due to changing conditions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period, or additional cost or contribution requirements based on the Plan's funded status); and changes in plan provisions or applicable law. The scope of an actuarial valuation does not include an analysis of the potential range of such future measurements.

Examples of risk that may reasonably be anticipated to significantly affect the plan's future financial condition include:

- Investment risk actual investment returns may differ from the expected returns;
- 2. Asset/Liability mismatch changes in asset values may not match changes in liabilities, thereby altering the gap between the accrued liability and assets and consequently altering the funded status and contribution requirements;
- 3. Contribution risk actual contributions may differ from expected future contributions. For example, actual contributions may not be made in accordance with the plan's funding policy or material changes may occur in the anticipated number of covered employees, covered payroll, or other relevant contribution base;
- 4. Longevity risk members may live longer or shorter than expected and receive pensions for a period of time other than assumed;
- 5. Other demographic risks members may terminate, retire or become disabled at times or with benefits other than assumed resulting in actual future accrued liability and contributions differing from expected.

The effects of certain trends in experience can generally be anticipated. For example if the investment return since the most recent actuarial valuation is less (or more) than the assumed rate, the cost of the plan can be expected to increase (or decrease). Likewise if longevity is improving (or worsening), increases (or decreases) in cost can be anticipated.

The computed contribution rate shown on page 1 may be considered as a minimum contribution rate that complies with the Board's funding policy. The timely receipt of the actuarially determined contributions is critical to support the financial health of the plan. Users of this report should be aware that contributions made at the actuarially determined rate do not necessarily guarantee benefit security.



#### **PLAN MATURITY MEASURES**

Risks facing a pension plan evolve over time. A young plan with virtually no investments and paying few benefits may experience little investment risk. An older plan with a large number of members in pay status and a significant trust may be much more exposed to investment risk. Generally accepted plan maturity measures include the following:

|  | 2018 | 2017 |
|--|------|------|
| Ratio of actives to retirees and beneficiaries   | 2.0  | 2.1  |
| Ratio of net cash flow to market value of assets | -2.2 | -1.8 |

#### **RATIO OF ACTIVES TO RETIREES AND BENEFICIARIES**

A young plan with many active members and few retirees will have a high ratio of active to retirees. A mature open plan may have close to the same number of actives to retirees resulting in a ratio near 1.0. A super-mature or closed plan may have significantly more retirees than actives resulting in a ratio below 1.0.

#### RATIO OF NET CASH FLOW TO MARKET VALUE OF ASSETS

A positive net cash flow means contributions exceed benefits and expenses. A negative cash flow means existing funds are being used to make payments. A certain amount of negative net cash flow is generally expected to occur when benefits are prefunded through a qualified trust. Large negative net cash flows as a percent of assets may indicate a super-mature plan or a need for additional contributions.

#### ADDITIONAL RISK ASSESSMENT

Additional risk assessment is outside the scope of the annual actuarial valuation. Additional assessment may include scenario tests, sensitivity tests, stochastic modeling, stress tests, and a comparison of the present value of accrued benefits at low-risk discount rates with the actuarial accrued liability.



#### **CHAPTER REVENUE**

Increments in Chapter revenue over that received in 1998 must first be used to fund the cost of compliance with minimum benefits. Once minimums are met, any subsequent additional Chapter revenue must be used to provide extra benefits.

As of the valuation date, all minimum benefit requirements have been satisfied.

| Actuarial Confirmation of the Use of State Chapter Money                        |            |  |  |
|---|------------|--|--|
| Base Amount Previous Plan Year  | \$ 523,574 |  |  |
| 2. Amount Received for Previous Plan Year                                       | 498,143    |  |  |
| 3. Benefit Improvements Made in Previous Plan Year                              | 0          |  |  |
| 4. Excess Funds for Previous Plan Year  | 0          |  |  |
| 5. Accumulated Excess at Beginning of Previous Year                             | 0          |  |  |
| 6. Prior Excess Used in Previous Plan Year                                      | 0          |  |  |
| 7. Accumulated Excess as of Valuation Date (Available for Benefit Improvements) | 0          |  |  |
| 8. Base Amount This Plan Year   | 498,143    |  |  |

The Accumulated Excess shown in line 7 is being held in reserve to pay for additional benefits. The reserve is subtracted from Plan assets (see Section C of this Report). The Base Amount in line 8 is the amount the employer may take as a credit against its required contribution; however, in no event may the employer take credit for more than the actual amount of Chapter revenue received.

The Base Amount will be updated each year based on actual Chapter revenue up to a maximum of \$1,091,206.



### **SHARE PLAN ACCOUNT ACTIVITY**

| Market Value of Assets (MVA) Before This Year's Share Plan Allocation                   | 20,117,288 |
|---|------------|
| 2. Entry Age Normal Actuarial Accrued Liability (AAL) This Year                         | 15,344,879 |
| 3. Ratio of MVA to AAL Before Share Plan Allocation: (1) / (2)                          | 131.1 %    |
| 4. Maximum Allowable Share Plan Allocation for Fiscal Year Ending September 30, 2018    | 767,244    |
| 5. Market Value of Assets (MVA) This Year After Maximum Allowable Share Plan Allocation | 19,350,044 |
| 6. Ratio of MVA to AAL After Share Plan Allocation: (5) / (2)                           | 126.1 %    |

| Share Plan Balance (Beginning of This Year)                            | \$ 2,362,015 |
|--|--------------|
| 2. Share Plan Allocation on October 1, 2017                            | 752,599      |
| 3. Share Plan Exit Distributions                                       | (125,007)    |
| 4. Share Plan Interest   | 249,870      |
| 5. Share Plan Forfeitures  | (485,143)    |
| 6. Expenses  | (3,665)      |
| 7. Share Plan Balance (End of Year): (1) + (2) + (3) + (4) + (5) + (6) | 2,750,668    |



## **S**ECTION **B**

**VALUATION RESULTS** 

| PARTICIPANT DATA          |     |         |          |                   |
|---------------------------|-----|---------|----------|-------------------|
|                           | 10, | /1/2018 | 10       | )/1/2017          |
| ACTIVE MEMBERS            |     |         |          |                   |
| Nivershou                 |     | 233     |          | 216               |
| Number                    |     | 36.6    |          | 36.1              |
| Average Age               |     | 30.0    |          | 36.1<br>4.6       |
| Average Age at Hire       |     | 32.6    |          | 4.6<br>31.5       |
| Average Age at Hire       |     | 32.0    |          | 31.5              |
| RETIREES & BENEFICIARIES  |     |         |          |                   |
| Number                    |     | 88      |          | 83                |
| Annual Benefits           | \$  | 801,141 | خ        | 759,127           |
| Average Annual Benefit    | \$  | 9,104   | \$<br>\$ | 9,146             |
| Average Age               | ۲   | 61.6    | ۲        | 61.0              |
| Average Age               |     | 01.0    |          | 01.0              |
| DISABILITY RETIREES       |     |         |          |                   |
| Number                    |     | 1       |          | 1                 |
| Annual Benefits           | \$  | 1,200   | \$       | 1,200             |
| Average Annual Benefit    | \$  | 1,200   | \$       | 1,200             |
| Average Age               |     | 59.0    |          | 58.0              |
| //verage //ge             |     | 33.0    |          | 30.0              |
| TERMINATED VESTED MEMBERS |     |         |          |                   |
| Number                    |     | 25      |          | 21                |
| Annual Benefits           | \$  | 116,535 | \$       | 107,295           |
| Average Annual Benefit    | \$  | 4,661   | \$       | 5,109             |
| Average Age               |     | 43.6    |          | 46.3              |
| Weinge Age                |     | +5.0    |          | <del>-1</del> 0.5 |



| ACTUARIALLY DETERMINED CONTRIBUTION (ADC)                    |  |  |           |  |
|--|--|--|-----------|--|
| A. Valuation Date  | 10/1/2018<br>Maximum<br>Allowable Share<br>Plan Allocation | 10/1/2018<br>No Share Plan<br>Allocation | 10/1/2017 |  |
| B. ADC to Be Paid During<br>Fiscal Year Ending               | 9/30/2020  | 9/30/2020                                | 9/30/2019 |  |
| C. Assumed Date of Employer Contributions                    | Quarterly  | Quarterly                                | Quarterly |  |
| D. Annual Payment to Amortize Unfunded Actuarial Liability   | \$ 0   | \$ 0                                     | \$ 0      |  |
| E. Employer Normal Cost                                      | (88,681)   | (239,796)                                | (104,844) |  |
| F. ADC if Paid on the Valuation<br>Date: D+E                 | (88,681)   | (239,796)                                | (104,844) |  |
| G. ADC Adjusted for Frequency of Payments                    | (99,053)   | (267,842)                                | (117,106) |  |
| H. ADC Per Active Member                                     | (425)  | (1,150)                                  | (542)     |  |
| I. Number of Active Members                                  | 233  | 233                                      | 216       |  |
| J. ADC for Contribution Year: H x I                          | (99,053)   | (267,842)                                | (117,106) |  |
| K. Estimated State Premium Tax Refund                        | 498,143  | 498,143                                  | 498,143   |  |
| L. Balance Required from Employer: J - K                     | 0  | 0  | 0         |  |
| M. Required Employer Contribution (REC) in Contribution Year | 0  | 0  | 0         |  |
| N. REC Per Active Member in<br>Contribution Year             | 0.00   | 0.00                                     | 0.00      |  |



|    | ACTUARIAL VALUE OF BENEFITS AND ASSETS  |  |  |              |  |
|----|---|--|--|--------------|--|
| A. | Valuation Date  | 10/1/2018<br>Maximum<br>Allowable Share<br>Plan Allocation | 10/1/2018<br>No Share Plan<br>Allocation | 10/1/2017    |  |
| В. | Actuarial Present Value of All Projected<br>Benefits for<br>1. Active Members |  |  |              |  |
|    | a. Service Retirement Benefits  | \$ 6,554,575   | \$ 6,554,575                             | \$ 6,192,025 |  |
|    | b. Vesting Benefits   | 1,095,951  | 1,095,951                                | 1,171,626    |  |
|    | c. Disability Benefits  | 387,677  | 387,677                                  | 359,451      |  |
|    | d. Preretirement Death Benefits   | 106,593  | 106,593                                  | 103,185      |  |
|    | e. Return of Member Contributions   |  |  |              |  |
|    | f. Total  | 8,144,796  | 8,144,796                                | 7,826,287    |  |
|    | 2. Inactive Members   |  |  |              |  |
|    | a. Service Retirees & Beneficiaries   | 9,222,796  | 9,222,796                                | 8,767,252    |  |
|    | b. Disability Retirees  | 11,279   | 11,279                                   | 11,446       |  |
|    | c. Terminated Vested Members  | 801,576  | 801,576                                  | 807,772      |  |
|    | d. Total  | 10,035,651   | 10,035,651                               | 9,586,470    |  |
|    | 3. Total for All Members  | 18,180,447   | 18,180,447                               | 17,412,757   |  |
| C. | Actuarial Accrued (Past Service)<br>Liability Under Entry Age Normal          | 15,344,879   | 15,344,879                               | 15,051,989   |  |
| D. | Actuarial Value of Accumulated Plan<br>Benefits per FASB No. 35               |  |  |              |  |
|    | 1. Based on Plan's Interest Rate  | 14,326,059   | 14,326,059                               | 13,911,765   |  |
| E. | Plan Assets   |  |  |              |  |
|    | 1. Market Value   | 19,350,044   | 20,117,288                               | 18,535,207   |  |
|    | 2. Actuarial Value  | 18,958,083   | 19,725,327                               | 18,239,559   |  |
| F. | Actuarial Present Value of One Dollar Per Year for Each Active Member         | 1,183  | 1,183                                    | 1,075        |  |
| _  |   | 1,103  | 1,100                                    | 1,073        |  |
| G. | Actuarial Present Value of Projected<br>Member Contributions                  | 0  | 0  | 0            |  |



| CALCULATION OF EMPLOYER NORMAL COST   |  |  |               |  |
|---|--|--|---------------|--|
| A. Valuation Date   | 10/1/2018<br>Maximum<br>Allowable Share<br>Plan Allocation | 10/1/2018<br>No Share Plan<br>Allocation | 10/1/2017     |  |
| B. Actuarial Present Value of Projected<br>Benefits                         | \$ 18,180,447  | \$ 18,180,447                            | \$ 17,412,757 |  |
| C. Actuarial Value of Assets  | 18,958,083   | 19,725,327                               | 18,239,559    |  |
| D. Unfunded Actuarial Accrued Liability                                     | 0  | 0  | 0             |  |
| E. Actuarial Present Value of Projected Member Contributions                | 0  | 0  | 0             |  |
| F. Actuarial Present Value of Projected<br>Employer Normal Costs: B-C-D-E   | (777,636)  | (1,544,880)                              | (826,802)     |  |
| G. Actuarial Present Value of One Dollar<br>Per Year for Each Active Member | 1,183  | 1,183                                    | 1,075         |  |
| H. Employer Normal Cost Rate: F/G   | (657.34)   | (1,305.90)                               | (769.12)      |  |
| I. Number of Active Members   | 233  | 233                                      | 216           |  |
| J. Employer Normal Cost: H x I  | (153,160)  | (304,275)                                | (166,130)     |  |
| K. Assumed Amount of Expenses   | 64,479   | 64,479                                   | 61,286        |  |
| L. Total Employer Normal Cost: J+K  | (88,681)   | (239,796)                                | (104,844)     |  |
| M. Employer Normal Cost Per Active<br>Member                                | (380.61)   | (1,029.17)                               | (485.39)      |  |



#### **ACTUARIAL GAINS AND LOSSES**

The assumptions used to anticipate mortality, employment turnover, investment income, expenses, salary increases, and other factors have been based on long range trends and expectations. Actual experience can vary from these expectations. The variance is measured by the gain and loss for the period involved. If significant long term experience reveals consistent deviation from what has been expected and that deviation is expected to continue, the assumptions should be modified. The net actuarial gain (loss) for the past year has been computed as follows:

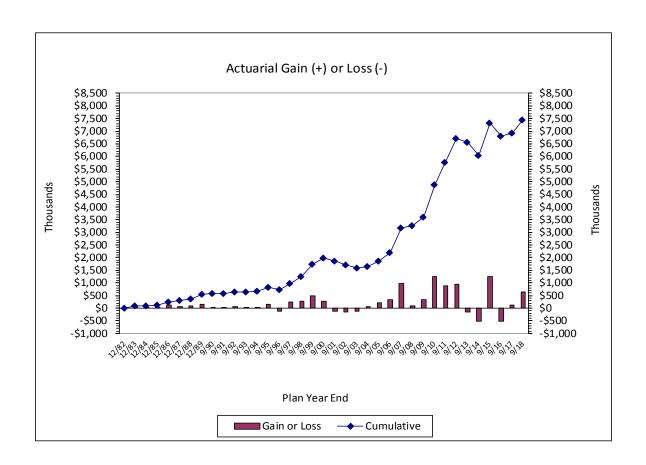
| Α. | Employer Normal Cost Per Active Member  1. Last Valuation  2. Current Valuation (Before Changing Assumption)  3. Difference: 1 - 2 | \$ (769.12)<br>(1,305.90)<br>536.78 |
|----|--|-------------------------------------|
| В. | Actuarial Present Value of One Dollar<br>Per Year for Each Active Member   | 1,183                               |
| C. | Net Actuarial Gain (Loss): A3 x B  | 635,011                             |
| D. | Gain (Loss) Due to Investments   | 97,990                              |
| E. | Gain (Loss) Due to Other Causes  | 537,021                             |



Net actuarial gains in previous years have been as follows:

|            | Change in Employer |             |
|------------|--------------------|-------------|
| Year Ended | Normal Cost Rate   | Gain (Loss) |
| 12/31/82   | \$ 15.96           | \$ 17,396   |
| 12/31/83   | 69.17              | 65,020      |
| 12/31/84   | 19.50              | 19,422      |
| 12/31/85   | 18.32              | 20,317      |
| 12/31/86   | 135.99             | 122,799     |
| , ,        |                    | ,           |
| 12/31/87   | 69.56              | 58,848      |
| 12/31/88   | 93.90              | 79,346      |
| 12/31/89   | 198.72             | 153,213     |
| 9/30/90    | 61.60              | 46,138      |
| 9/30/91    | 4.76               | 4,736       |
| 9/30/92    | 54.18              | 55,209      |
| 9/30/93    | 13.15              | 13,689      |
| 9/30/94    | 12.88              | 14,657      |
| 9/30/95    | 147.97             | 159,216     |
| 9/30/96    | (73.71)            | (105,774)   |
| 9/30/97    | 152.57             | 252,198     |
| 9/30/98    | 150.31             | 268,604     |
| 9/30/99    | 286.51             | 483,342     |
| 9/30/00    | 215.63             | 262,637     |
| 9/30/01    | (94.01)            | (120,239)   |
| 9/30/02    | (114.42)           | (148,288)   |
| 9/30/03    | (93.30)            | (125,022)   |
| 9/30/04    | 38.57              | 49,138      |
| 9/30/05    | 175.89             | 229,536     |
| 9/30/06    | 265.31             | 332,964     |
| 9/30/07    | 751.11             | 962,923     |
| 9/30/08    | 67.49              | 94,688      |
| 9/30/09    | 261.86             | 344,870     |
| 9/30/10    | 1,167.89           | 1,264,825   |
| 9/30/11    | 914.44             | 877,862     |
| 9/30/12    | 1,080.58           | 954,152     |
| 9/30/13    | (155.06)           | (146,222)   |
| 9/30/14    | (489.11)           | (517,967)   |
| 9/30/15    | 1,381.61           | 1,266,936   |
| 9/30/16    | (516.23)           | (514,681)   |
| 9/30/17    | 121.53             | 130,645     |
| 9/30/18    | 536.78             | 635,011     |
| , , -      |                    | , -         |





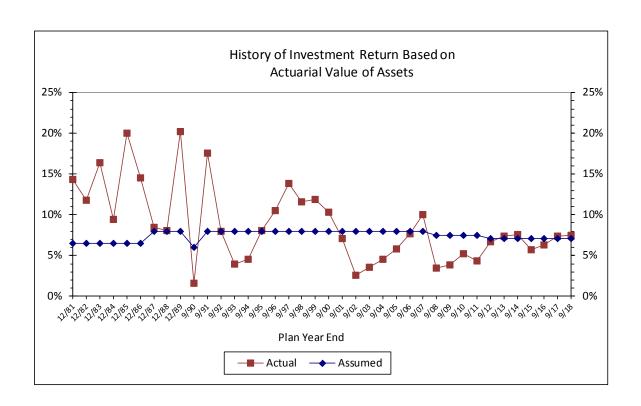


Plan benefits are not based on salaries. Therefore, salary increases have no effect on the cost or liabilities of the plan. The fund earnings assumption has a considerable impact on the cost of the Plan so it is important that said assumption is in line with the actual fund earnings experience. The following table shows the actual fund earnings rate compared to the assumed rate:

|                    | Investment Return on<br>Actuarial Value of Assets |         |  |  |  |
|--------------------|---|---------|--|--|--|
| Year Ending        | Actual  | Assumed |  |  |  |
| 12/31/1981         | 14.3 %  | 6.5 %   |  |  |  |
| 12/31/1982         | 11.8  | 6.5     |  |  |  |
| 12/31/1983         | 16.4  | 6.5     |  |  |  |
| 12/31/1984         | 9.4   | 6.5     |  |  |  |
| 12/31/1985         | 20.0  | 6.5     |  |  |  |
| 12/31/1986         | 14.5  | 6.5     |  |  |  |
| 12/31/1987         | 8.5   | 8.0     |  |  |  |
| 12/31/1988         | 8.1   | 8.0     |  |  |  |
| 12/31/1989         | 20.2  | 8.0     |  |  |  |
| 9/30/1990 (9 mos.) | 1.6   | 6.0     |  |  |  |
| 9/30/1991          | 17.6  | 8.0     |  |  |  |
| 9/30/1992          | 8.0   | 8.0     |  |  |  |
| 9/30/1993          | 4.0   | 8.0     |  |  |  |
| 9/30/1994          | 4.5   | 8.0     |  |  |  |
| 9/30/1995          | 8.1   | 8.0     |  |  |  |
| 9/30/1996          | 10.5  | 8.0     |  |  |  |
| 9/30/1997          | 13.8  | 8.0     |  |  |  |
| 9/30/1998          | 11.6  | 8.0     |  |  |  |
| 9/30/1999          | 11.9  | 8.0     |  |  |  |
| 9/30/2000          | 10.3  | 8.0     |  |  |  |
| 9/30/2001          | 7.1   | 8.0     |  |  |  |
| 9/30/2002          | 2.6   | 8.0     |  |  |  |
| 9/30/2003          | 3.6   | 8.0     |  |  |  |
| 9/30/2004          | 4.5   | 8.0     |  |  |  |
| 9/30/2005          | 5.8   | 8.0     |  |  |  |
| 9/30/2006          | 7.7   | 8.0     |  |  |  |
| 9/30/2007          | 10.0  | 8.0     |  |  |  |
| 9/30/2008          | 3.5   | 7.5     |  |  |  |
| 9/30/2009          | 3.9   | 7.5     |  |  |  |
| 9/30/2010          | 5.2   | 7.5     |  |  |  |
| 9/30/2011          | 4.3   | 7.5     |  |  |  |
| 9/30/2012          | 6.7   | 7.5     |  |  |  |
| 9/30/2013          | 7.4   | 7.08    |  |  |  |
| 9/30/2014          | 7.6   | 7.08    |  |  |  |
| 9/30/2015          | 5.7   | 7.08    |  |  |  |
| 9/30/2016          | 6.3   | 7.08    |  |  |  |
| 9/30/2017          | 7.4   | 7.08    |  |  |  |
| 9/30/2018          | 7.5   | 7.08    |  |  |  |
| Averages           | 8.7 %   |         |  |  |  |

The actual investment return rates shown above are based on the actuarial value of assets.







# Actual (A) Compared to Expected (E) Decrements Among Active Employees

|                | Add<br>Dui | nber<br>ded<br>ring |        | rly   |        | bility |    |     |        | erminat |     |      | Active |
|----------------|------------|---------------------|--------|-------|--------|--------|----|-----|--------|---------|-----|------|--------|
| Year           | Ye         |                     | Retire | ement | Retire | ement  | De | ath | Vested | Other   | To  | tals | End of |
| Ended          | Α          | E                   | Α      | E     | Α      | E      | Α  | E   | Α      | Α       | Α   | E    | Year   |
| 9/30/2002      | 55         | 53                  | 0      | 1     | 0      | 1      | 0  | 0   | 5      | 48      | 53  | 34   | 255    |
| 9/30/2003      | 45         | 37                  | 6      | 2     | 0      | 1      | 0  | 0   | 0      | 31      | 31  | 33   | 263    |
| 9/30/2004      | 47         | 56                  | 0      | 0     | 0      | 1      | 0  | 0   | 0      | 56      | 56  | 35   | 254    |
| 9/30/2005      | 41         | 34                  | 0      | 1     | 0      | 1      | 1  | 0   | 0      | 33      | 33  | 32   | 261    |
| 9/30/2006      | 28         | 34                  | 7      | 2     | 0      | 1      | 2  | 0   | 0      | 25      | 25  | 32   | 255    |
| 9/30/2007      | 49         | 45                  | 4      | 2     | 0      | 1      | 1  | 0   | 0      | 40      | 40  | 31   | 259    |
| 9/30/2008      | 51         | 30                  | 2      | 3     | 1      | 1      | 0  | 0   | 0      | 27      | 27  | 31   | 280    |
| 9/30/2009      | 40         | 58                  | 4      | 3     | 0      | 1      | 0  | 0   | 0      | 54      | 54  | 34   | 262    |
| 9/30/2010      | 48         | 86                  | 4      | 2     | 0      | 1      | 0  | 0   | 3      | 79      | 82  | 31   | 224    |
| 9/30/2011      | 27         | 50                  | 2      | 0     | 0      | 1      | 0  | 0   | 17     | 31      | 48  | 27   | 201    |
| 9/30/2012      | 34         | 46                  | 3      | 1     | 0      | 1      | 0  | 0   | 0      | 43      | 43  | 25   | 189    |
| 9/30/2013      | 31         | 18                  | 4      | 2     | 0      | 1      | 0  | 0   | 2      | 12      | 14  | 23   | 202    |
| 9/30/2014      | 42         | 23                  | 9      | 6     | 0      | 1      | 0  | 0   | 0      | 14      | 14  | 25   | 221    |
| 9/30/2015      | 50         | 81                  | 5      | 5     | 0      | 1      | 0  | 0   | 1      | 75      | 76  | 28   | 190    |
| 9/30/2016      | 35         | 21                  | 3      | 4     | 0      | 1      | 0  | 0   | 3      | 15      | 18  | 23   | 204    |
| 9/30/2017      | 40         | 28                  | 5      | 4     | 0      | 1      | 0  | 0   | 3      | 20      | 23  | 25   | 216    |
| 9/30/2018      | 61         | 44                  | 3      | 4     | 0      | 1      | 0  | 0   | 6      | 35      | 41  | 27   | 233    |
| 9/30/2019      |            |                     |        | 2     |        | 1      |    | 0   |        |         |     | 28   |        |
| 17 Yr Totals * | 724        | 744                 | 61     | 42    | 1      | 17     | 4  | 0   | 40     | 638     | 678 | 496  |        |

<sup>\*</sup> Totals are through current Plan Year only.

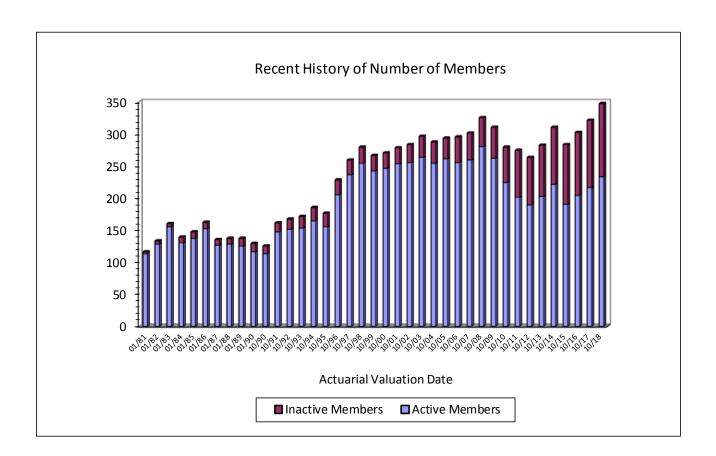


|                   | RECENT HISTORY OF VALUATION RESULTS |     |                                 |            |                                 |                            |  |
|-------------------|-------------------------------------|-----|---------------------------------|------------|---------------------------------|----------------------------|--|
| Valuation<br>Date | Mem<br>No.<br>Active                | No. | Actuarial<br>Value of<br>Assets | UFAAL      | Employer<br>Normal<br>Cost (NC) | NC Per<br>Active<br>Member |  |
| 1/1/81            | 113                                 | 3   | \$ 63,400                       | \$ 122,760 | \$ 30,083                       | \$ 266.22                  |  |
| 1/1/82            | 128                                 | 5   | 111,290                         | 115,440    | 40,272                          | 314.63                     |  |
| 1/1/83            | 155                                 | 5   | 165,678                         | 113,813    | 46,461                          | 299.75                     |  |
| 1/1/84            | 130                                 | 9   | 242,263                         | 107,415    | 31,877                          | 245.21                     |  |
| 1/1/85            | 137                                 | 10  | 298,276                         | 96,406     | 31,872                          | 232.64                     |  |
| 1/1/86            | 152                                 | 10  | 386,437                         | 88,488     | 33,921                          | 223.16                     |  |
| 1/1/87            | 126                                 | 9   | 485,637                         | -          | 750                             | 5.95                       |  |
| 1/1/88            | 128                                 | 9   | 572,261                         | -          | -                               | -                          |  |
| 1/1/89            | 125                                 | 12  | 668,103                         | -          | 10,766                          | 86.13                      |  |
| 1/1/90            | 116                                 | 13  | 843,506                         | -          | -                               | -                          |  |
| 10/1/90           | 113                                 | 12  | 910,594                         | -          | 17,194                          | 152.16                     |  |
| 10/1/91           | 147                                 | 14  | 1,101,665                       | -          | 18,839                          | 128.16                     |  |
| 10/1/92           | 151                                 | 16  | 1,244,146                       | -          | 48,055                          | 318.24                     |  |
| 10/1/93           | 153                                 | 18  | 1,355,239                       | -          | 57,792                          | 377.73                     |  |
| 10/1/94           | 164                                 | 21  | 1,512,802                       | -          | 57,400                          | 350.00                     |  |
| 10/1/95           | 155                                 | 21  | 1,703,783                       | _          | 71,643                          | 462.21                     |  |
| 10/1/96           | 205                                 | 23  | 1,981,184                       | -          | 115,234                         | 562.12                     |  |
| 10/1/97           | 236                                 | 23  | 2,558,255                       | -          | 94,979                          | 402.46                     |  |
| 10/1/98           | 254                                 | 25  | 3,061,946                       | _          | 64,542                          | 254.10                     |  |
| 10/1/99           | 242                                 | 24  | 3,644,381                       | -          | -                               | -                          |  |
| 10/1/00           | 246                                 | 24  | 4,228,809                       | _          | -                               | -                          |  |
| 10/1/01           | 253                                 | 25  | 4,713,468                       | -          | 6,283                           | 24.83                      |  |
| 10/1/02           | 255                                 | 28  | 4,949,437                       | -          | 34,294                          | 134.49                     |  |
| 10/1/03           | 263                                 | 33  | 5,494,604                       | -          | 165,578                         | 629.57                     |  |
| 10/1/04           | 254                                 | 33  | 5,871,506                       | -          | 160,667                         | 632.55                     |  |
| 10/1/05           | 261                                 | 32  | 6,745,570                       | _          | 337,560                         | 1,293.33                   |  |
| 10/1/06           | 255                                 | 40  | 7,589,582                       | _          | 274,010                         | 1,074.55                   |  |
| 10/1/07           | 259                                 | 42  | 10,634,757                      | -          | 104,950                         | 405.21                     |  |
| 10/1/08           | 280                                 | 45  | 11,416,072                      | -          | 106,736                         | 381.20                     |  |
| 10/1/09           | 262                                 | 48  | 12,229,287                      | -          | 54,014                          | 206.16                     |  |
| 10/1/10           | 224                                 | 55  | 13,114,255                      | _          | (204,832)                       | (914.43)                   |  |
| 10/1/11           | 201                                 | 73  | 13,888,870                      | -          | (483,672)                       | (2,406.33)                 |  |
| 10/1/12           | 189                                 | 74  | 14,815,333                      | _          | (259,512)                       | (1,373.08)                 |  |
| 10/1/13           | 202                                 | 80  | 15,623,581                      | _          | (252,649)                       | (1,250.74)                 |  |
| 10/1/14           | 221                                 | 89  | 16,426,771                      | -          | (174,051)                       | (787.56)                   |  |
| 10/1/15           | 190                                 | 93  | 17,879,751                      | -          | (393,726)                       | (2,072.24)                 |  |
| 10/1/16           | 204                                 | 98  | 17,899,750                      | _          | (214,385)                       | (1,050.91)                 |  |
| 10/1/17           | 216                                 | 105 | 18,239,559                      | _          | (104,844)                       | (485.39)                   |  |
| 10/1/18*          | 233                                 | 114 | 19,725,327                      | _          | (239,796)                       | (1,029.17)                 |  |
| 10/1/18**         | 233                                 | 114 | 18,958,083                      | -          | (88,681)                        | (380.61)                   |  |

<sup>\*</sup> Before any Share Plan Allocation

<sup>\*\*</sup>After reflecting the maximum allowable Share Plan Allocation





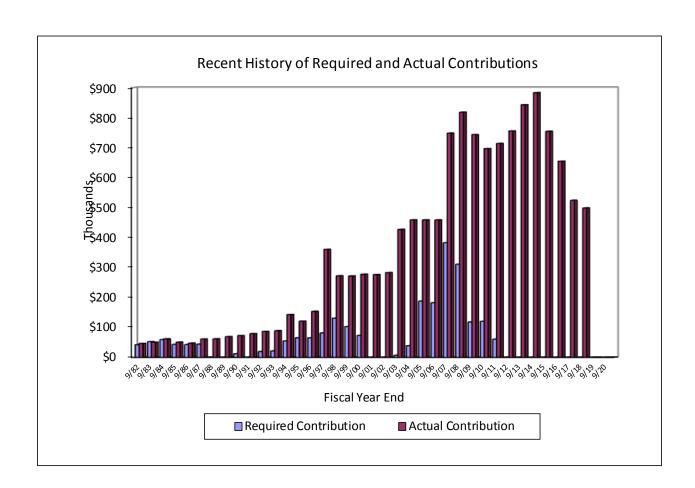


| RECENT HISTORY OF REQUIRED AND ACTUAL CONTRIBUTIONS |                      |                        |                      |                    |                                     |          |                         |               |                    |                     |  |  |
|---|----------------------|------------------------|----------------------|--------------------|-------------------------------------|----------|-------------------------|---------------|--------------------|---------------------|--|--|
|   |                      | Required Contributions |                      |                    |                                     |          |                         |               |                    |                     |  |  |
|   |                      | Employe                | Employer & State     |                    | mployer & State Estimated State Net |          | Net En                  | et Employer A |                    | ctual Contributions |  |  |
| Valn<br>Date  | Applies<br>to<br>FYE | Amount                 | Per Active<br>Member | Amount             | Per<br>Active<br>Member             | Amount   | Per<br>Active<br>Member | City          | State              | Total               |  |  |
| 1/1/81  | 9/30/82              | \$41,945               | \$371.19             | \$25,353           | \$224.36                            | \$16 502 | \$146.83                | \$16,592      | \$29,778           | \$46,370            |  |  |
| 1/1/81  | 9/30/83              | 52,353                 | 409.01               | 29,778             | 232.64                              | 22,575   | 176.37                  | 16,592        | 33,917             | 50,509              |  |  |
| 1/1/83  | 9/30/84              | 58,972                 | 380.46               | 33,917             | 218.82                              | 25,055   | 161.65                  | 25,055        | 36,540             | 61,595              |  |  |
| 1/1/84  | 9/30/85              | 43,075                 | 331.35               | 36,540             | 281.08                              | 6,535    | 50.27                   | 12,518        | 38,041             | 50,559              |  |  |
| 1/1/85  | 9/30/86              | 42,301                 | 308.77               | 38,041             | 277.67                              | 4,260    | 31.09                   | 4,901         | 42,396             | 47,297              |  |  |
|   |                      |                        |                      |                    |                                     |          |                         |               |                    |                     |  |  |
| 1/1/86  | 9/30/87              | 43,967                 | 289.26               | 42,396             | 278.92                              | 1,571    | 10.34                   | 4,653         | 56,362             | 61,015              |  |  |
| 1/1/87  | 9/30/88              | 833                    | 6.61                 | 56,362             | 447.32                              | 0        | 0.00                    | 393           | 61,433             | 61,825              |  |  |
| 1/1/88  | 9/30/89              | 0                      | 0.00                 | 61,433             | 479.95                              | 0        | 0.00                    | 0             | 69,165             | 69,165              |  |  |
| 1/1/89  | 9/30/90              | 11,950                 | 95.60                | 69,165             | 553.32                              | 0        | 0.00                    | 0             | 72,511             | 72,511              |  |  |
| 1/1/90  | 9/30/91              | 0                      | 0.00                 | 64,522             | 556.22                              | 0        | 0.00                    | 0             | 79,164             | 79,164              |  |  |
| 10/1/90   | 9/30/92              | 19,470                 | 172.30               | 72,511             | 641.69                              | 0        | 0.00                    | 0             | 86,523             | 86,523              |  |  |
| 10/1/91   | 9/30/93              | 21,334                 | 145.13               | 79,164             | 538.53                              | 0        | 0.00                    | 0             | 88,699             | 88,699              |  |  |
| 10/1/92   | 9/30/94              | 54,418                 | 360.38               | 86,523             | 573.00                              | 0        | 0.00                    | 0             | 142,569            | 142,569             |  |  |
| 10/1/93   | 9/30/95              | 65,445                 | 427.75               | 88,699             | 579.73                              | 0        | 0.00                    | 0             | 120,591            | 120,591             |  |  |
| 10/1/94   | 9/30/96              | 65,001                 | 396.35               | 105,991            | 646.29                              | 0        | 0.00                    | 0             | 153,411            | 153,411             |  |  |
| 10/1/95   | 9/30/97              | 81,131                 | 523.43               | 120,591            | 778.01                              | 0        | 0.00                    | 0             | 359,980            | 359,980             |  |  |
| 10/1/95   | 9/30/97              | 130,494                | 636.56               |                    | 748.35                              | 0        | 0.00                    | 0             | 271,838            | 271,838             |  |  |
| 10/1/98   | 9/30/98              | 102,577                | 434.65               | 153,411            | 746.33                              | 0        | 0.00                    | 0             | 271,838            | 271,838             |  |  |
|   |                      |                        |                      | 187,075            |                                     |          |                         |               |                    |                     |  |  |
| 10/1/98<br>10/1/99                                  | 9/30/00<br>9/30/01   | 73,089<br>0            | 287.75<br>0.00       | 187,702<br>187,167 | 738.98<br>773.42                    | 0        | 0.00                    | 0             | 276,976<br>276,146 | 276,976<br>276,146  |  |  |
| 10/1/33   | 3/30/01              | U                      | 0.00                 | 107,107            | 773.42                              |          | 0.00                    | 0             | 270,140            | 270,140             |  |  |
| 10/1/00   | 9/30/02              | 0                      | 0.00                 | 182,206            | 740.67                              | 0        | 0.00                    | 0             | 282,472            | 282,472             |  |  |
| 10/1/01   | 9/30/03              | 7,115                  | 28.12                | 276,146            | 1,091.49                            | 0        | 0.00                    | 0             | 426,662            | 426,662             |  |  |
| 10/1/02   | 9/30/04              | 38,835                 | 152.29               | 282,472            | 1,107.73                            | 0        | 0.00                    | 0             | 458,411            | 458,411             |  |  |
| 10/1/03   | 9/30/05              | 187,503                | 712.94               | 426,662            | 1,622.29                            | 0        | 0.00                    | 0             | 458,411            | 458,411             |  |  |
| 10/1/04   | 9/30/06              | 181,944                | 716.31               | 458,411            | 1,804.77                            | 0        | 0.00                    | 0             | 458,411            | 458,411             |  |  |
| 10/1/05   | 9/30/07              | 382,262                | 1,464.61             | 529,141            | 2,027.36                            | 0        | 0.00                    | 0             | 747,880            | 747,880             |  |  |
| 10/1/06   | 9/30/08              | 310,296                | 1,216.85             | 602,489            | 2,362.70                            | 0        | 0.00                    | 0             | 817,475            | 817,475             |  |  |
| 10/1/07   | 9/30/09              | 117,965                | 455.46               |                    | 3,156.27                            | 0        | 0.00                    | 0             | 743,081            | 743,081             |  |  |
| 10/1/08   | 9/30/10              | 119,973                | 428.48               |                    | 2,919.55                            | 0        | 0.00                    | 0             | 696,293            | 696,293             |  |  |
| 10/1/09   | 9/30/11              | 60,712                 | 231.73               |                    | 2,657.61                            | 0        | 0.00                    | 0             | 713,117            | 713,117             |  |  |
| 10/1/10   | 9/30/12              | (230 234)              | (1,027.83)           | 606 202            | 3,108.45                            | 0        | 0.00                    | 0             | 755,032            | 755,032             |  |  |
| 10/1/10   | 9/30/12              |                        | (2,704.74)           |                    | 3,756.38                            | 0        | 0.00                    | 0             | 842,565            | 842,565             |  |  |
| 10/1/11   | 9/30/13              |                        | (1,533.68)           |                    | 4,458.02                            | 0        | 0.00                    | 0             | 882,791            | 882,791             |  |  |
| 10/1/12   | 9/30/14              |                        | (1,333.00)           |                    | 4,438.02                            | 0        | 0.00                    | 0             | 753,944            | 753,944             |  |  |
| 10/1/13   | 9/30/15              | (194,407)              | (879.67)             |                    | 2,306.22                            | 0        | 0.00                    | 0             | 654,033            | 654,033             |  |  |
|   |                      |                        |                      |                    |                                     |          |                         | _             |                    |                     |  |  |
| 10/1/15   | 9/30/17              |                        | (2,314.61)           |                    | 3,968.13                            | 0        | 0.00                    | 0             | 523,574            | 523,574             |  |  |
| 10/1/16   | 9/30/18              |                        | (1,173.82)           |                    | 3,206.04                            | 0        | 0.00                    | 0             | 498,143            | 498,143             |  |  |
| 10/1/17   | 9/30/19              | (117,106)              | (542.16)             |                    | 2,423.95                            | 0        | 0.00                    |               |                    |                     |  |  |
| 10/1/18 *   | 9/30/20              |                        | (1,149.54)           | -                  | 2,137.95                            | 0        | 0.00                    |               |                    |                     |  |  |
| 10/1/18 **  | 9/30/20              | (99,053)               | (425.12)             | 498,143            | 2,137.95                            | 0        | 0.00                    |               |                    |                     |  |  |

<sup>\*</sup> Before any Share Plan Allocation

<sup>\*\*</sup>After reflecting the maximum allowable Share Plan Allocation







# SCHEDULE OF FUNDING PROGRESS (Recent History of UAAL and Funded Ratio)

| Actuarial<br>Valuation<br>Date | Actuarial<br>Value of<br>Assets<br>(a) | Actuarial<br>Accrued<br>Liability,<br>(AAL),<br>Entry Age<br>(b) | Unfunded<br>AAL<br>(UAAL)<br>(b) - (a) | Funded<br>Ratio<br>(a) / (b) | Number<br>Active<br>(c) | UAAL Per<br>Active<br>Member<br>(b - a) / (c) |
|--------------------------------|--|--|--|------------------------------|-------------------------|---|
| 10/1/1001                      | ć 1 101 CCE                            | \$ 672,717   | \$ (428.948)                           | 162.0 %                      | 1.47                    | \$ (2,918)                                    |
| 10/1/1991<br>10/1/1992         | \$ 1,101,665<br>1,244,146              | \$ 672,717<br>905,171  | \$ (428,948)<br>(338,975)              | 163.8 %<br>137.4             | 147<br>151              | ` ′ ′   |
| ' '                            | Ī -                                    |  |  |                              |                         | (2,245)                                       |
| 10/1/1993                      | 1,355,239                              | 983,488  | (371,751)                              | 137.8                        | 153                     | (2,430)                                       |
| 10/1/1994                      | 1,512,802                              | 1,088,478  | (424,324)                              | 139.0                        | 164                     | (2,587)                                       |
| 10/1/1995                      | 1,703,783                              | 1,049,296  | (654,487)                              | 162.4                        | 155                     | (4,222)                                       |
| 10/1/1996                      | 1,981,184                              | 1,492,783  | (488,401)                              | 132.7                        | 205                     | (2,382)                                       |
| 10/1/1997                      | 2,558,255                              | 1,741,807  | (816,448)                              | 146.9                        | 236                     | (3,460)                                       |
| 10/1/1998                      | 3,061,946                              | 1,980,647  | (1,081,299)                            | 154.6                        | 254                     | (4,257)                                       |
| 10/1/1999                      | 3,644,381                              | 1,807,780  | (1,836,601)                            | 201.6                        | 242                     | (7,589)                                       |
| 10/1/2000                      | 4,228,809                              | 2,612,708  | (1,616,101)                            | 161.9                        | 246                     | (6,570)                                       |
| 10/1/2001                      | 4,713,468                              | 3,197,994  | (1,515,474)                            | 147.4                        | 253                     | (5,990)                                       |
| 10/1/2002                      | 4,949,437                              | 3,681,303  | (1,268,134)                            | 134.4                        | 255                     | (4,973)                                       |
| 10/1/2003                      | 5,494,604                              | 4,605,331  | (889,273)                              | 119.3                        | 263                     | (3,381)                                       |
| 10/1/2004                      | 5,871,506                              | 4,892,910  | (978,596)                              | 120.0                        | 254                     | (3,853)                                       |
| 10/1/2005                      | 6,745,570                              | 6,143,898  | (601,672)                              | 109.8                        | 261                     | (2,305)                                       |
| 10/1/2006                      | 7,589,582                              | 6,623,203  | (966,379)                              | 114.6                        | 255                     | (3,790)                                       |
| 10/1/2007                      | 10,634,757                             | 8,211,759  | (2,422,998)                            | 129.5                        | 259                     | (9,355)                                       |
| 10/1/2008                      | 11,416,072                             | 8,760,784  | (2,655,288)                            | 130.3                        | 280                     | (9,483)                                       |
| 10/1/2009                      | 12,229,287                             | 9,373,779  | (2,855,508)                            | 130.5                        | 262                     | (10,899)                                      |
| 10/1/2010                      | 13,114,255                             | 9,685,354  | (3,428,901)                            | 135.4                        | 224                     | (15,308)                                      |
| 10/1/2011                      | 13,888,870                             | 9,516,127  | (4,372,743)                            | 146.0                        | 201                     | (21,755)                                      |
| 10/1/2012                      | 14,815,333                             | 11,550,338   | (3,264,995)                            | 128.3                        | 189                     | (17,275)                                      |
| 10/1/2013                      | 15,623,581                             | 12,392,055   | (3,231,526)                            | 126.1                        | 202                     | (15,998)                                      |
| 10/1/2014                      | 16,426,771                             | 13,252,060   | (3,174,711)                            | 124.0                        | 221                     | (14,365)                                      |
| 10/1/2015                      | 17,879,751                             | 13,812,624   | (4,067,127)                            | 129.4                        | 190                     | (21,406)                                      |
| 10/1/2016                      | 17,899,750                             | 14,457,155   | (3,442,595)                            | 123.8                        | 204                     | (16,875)                                      |
| 10/1/2017                      | 18,239,559                             | 15,051,989   | (3,187,570)                            | 121.2                        | 216                     | (14,757)                                      |
| 10/1/2018 *                    | 19,725,327                             | 15,344,879   | (4,380,448)                            | 128.5                        | 233                     | (18,800)                                      |
| 10/1/2018 **                   | 18,958,083                             | 15,344,879   | (3,613,204)                            | 123.5                        | 233                     | (15,507)                                      |

<sup>\*</sup> Before any Share Plan Allocation

<sup>\*\*</sup>After reflecting the maximum allowable Share Plan Allocation



#### **ACTUARIAL ASSUMPTIONS AND COST METHOD**

#### **Valuation Methods**

**Actuarial Cost Method** - Normal cost and the allocation of benefit values between service rendered before and after the valuation date were determined using the **Aggregate Method**. The excess of the Actuarial Present Value of Projected Benefits of the group included in the valuation, over the sum of the Actuarial Value of Assets and the Actuarial Present Value of Future Member Contributions (if any) is allocated as a level percentage of earnings of the group between the valuation date and the assumed retirement age. This allocation is performed for the group as a whole, not as a sum of individual allocations. The portion of this Actuarial Present Value allocated to a specific year is called the Employer Normal Cost.

Under this method, actuarial gains and losses, plan amendments, and changes in actuarial assumptions and methods reduce or increase future Normal Costs.

**Actuarial Value of Assets** - The Actuarial Value of Assets phase in the difference between the expected actuarial value and actual market value of assets at the rate of 20% per year. The Actuarial Value of Assets will be further adjusted to the extent necessary to fall within the corridor whose lower limit is 80% of the Market Value of plan assets and whose upper limit is 120% of the Market Value of plan assets. During periods when investment performance exceeds the assumed rate, Actuarial Value of Assets will tend to be less than Market Value. During periods when investment performance is less than assumed rate, Actuarial Value of Assets will tend to be greater than Market Value.

#### **Valuation Assumptions**

**The actuarial assumptions used** in the valuation are shown in this Section.

#### **Economic Assumptions**

**The investment return rate** assumed in the valuations is 7.08% per year, compounded annually (after subtracting investment related expenses). Previously, it was assumed that the investments would return 7.5% before subtracting investment related expenses.

The **Inflation Rate** assumed in this valuation was 2.5% per year. The Inflation Rate is defined to be the expected long-term rate of annual increase in the price of goods and services.

The assumed **real rate of return** over wage inflation is defined to be the portion of total investment return that is more than the assumed wage inflation rate. Considering other economic assumptions, the 7.08% investment return rate translates to an assumed real rate of return over wage inflation of 4.58%.

**Pay increase assumptions** for individual active members are not applicable to this plan; benefits are not based on salary.

**Administrative Expenses** paid out of the fund are assumed to be equal to the average of actual expenses over the previous two years.



#### **Demographic Assumptions**

**The mortality table** is RP-2000 Combined Healthy Participant Mortality Table (for pre-retirement mortality) and the RP-2000 Mortality Table for Annuitants (for post-retirement mortality), with mortality improvements projected to all future years after 2000 using Scale BB. For males, the base mortality rates include a 90% blue collar adjustment and a 10% white collar adjustment. For females, the base mortality rates include a 100% white collar adjustment. These are the same rates currently in use for Special Risk Class members of the Florida Retirement System (FRS), as mandated by Florida House Bill 1309.

**FRS Mortality for Special Risk Class Members** 

| Sample         | Probability of |         | Future   | e Life     |
|----------------|----------------|---------|----------|------------|
| Attained       | Dying Nex      | kt Year | Expectan | cy (years) |
| Ages (in 2018) | Men            | Women   | Men      | Women      |
| 50             | 0.53 %         | 0.23 %  | 34.01    | 38.40      |
| 55             | 0.67           | 0.32    | 29.37    | 33.39      |
| 60             | 0.90           | 0.47    | 24.80    | 28.48      |
| 65             | 1.29           | 0.73    | 20.40    | 23.74      |
| 70             | 1.98           | 1.22    | 16.26    | 19.27      |
| 75             | 3.21           | 2.07    | 12.52    | 15.19      |
| 80             | 5.29           | 3.47    | 9.30     | 11.56      |

This assumption is used to measure the probabilities of each benefit payment being made after retirement.

FRS Pre-Retirement Mortality for Special Risk Class Members

| Sample<br>Attained | Probabili<br>Dying Nex | •      | Future<br>Expectane |       |
|--------------------|------------------------|--------|---------------------|-------|
| Ages (in 2018)     | Men                    | Women  | Men                 | Women |
| 50                 | 0.22 %                 | 0.15 % | 35.00               | 38.75 |
| 55                 | 0.39                   | 0.24   | 29.88               | 33.61 |
| 60                 | 0.71                   | 0.39   | 25.00               | 28.59 |
| 65                 | 1.21                   | 0.70   | 20.44               | 23.76 |
| 70                 | 1.98                   | 1.22   | 16.26               | 19.27 |
| 75                 | 3.21                   | 2.07   | 12.52               | 15.19 |
| 80                 | 5.29                   | 3.47   | 9.30                | 11.56 |

This assumption is used to measure the probabilities of active members dying prior to retirement.

For disabled retirees, the mortality table used was 60% of the RP-2000 for Disabled Annuitants and 40% of the RP2000 Annuitant Mortality Table with a White Collar adjustment, set back 4 years for males and set forward 2 years for females, with no provision being made for future mortality improvements. These are the same rates currently in use for Special Risk Class members of the Florida Retirement System (FRS), as mandated by Florida House Bill 1309.



**FRS Disabled Mortality for Special Risk Class Members** 

| Sample         | Probability of |         | Future   | e Life     |
|----------------|----------------|---------|----------|------------|
| Attained       | Dying Nex      | kt Year | Expectan | cy (years) |
| Ages (in 2018) | Men            | Women   | Men      | Women      |
| 50             | 1.67 %         | 0.91 %  | 23.74    | 27.06      |
| 55             | 2.03           | 1.26    | 20.77    | 23.37      |
| 60             | 2.47           | 1.67    | 17.91    | 19.90      |
| 65             | 3.07           | 2.24    | 15.15    | 16.62      |
| 70             | 3.90           | 3.18    | 12.52    | 13.58      |
| 75             | 5.30           | 4.60    | 10.02    | 10.86      |
| 80             | 7.59           | 6.66    | 7.80     | 8.48       |

**Rates of retirement** are used to measure the probability of eligible members retiring during the next year.

Active members are assumed to upon reaching age 55 and 10 years of service or upon 20 years of service. Probability of early retirement is 5% for each year eligible.

**Rates of separation from active membership** were as shown below (rates do not apply to members eligible to retire and do not include separation on account of death or disability). This assumption measures the probabilities of members remaining in employment.

|     | Probability of |  |  |  |
|-----|----------------|--|--|--|
| Age | Turnover       |  |  |  |
| 20  | 17.0%          |  |  |  |
| 25  | 17.0%          |  |  |  |
| 30  | 17.0%          |  |  |  |
| 35  | 14.6%          |  |  |  |
| 40  | 10.0%          |  |  |  |
| 45  | 6.8%           |  |  |  |
| 50  | 4.2%           |  |  |  |
| 55  | 0.0%           |  |  |  |

Rates of disability among active members. 100% of disabilities are assumed to be service connected.

| % Becoming Disabled within Next Year |
|--------------------------------------|
| Within Next real                     |
| 0.14%                                |
| 0.15%                                |
| 0.18%                                |
| 0.23%                                |
| 0.30%                                |
| 0.51%                                |
| 1.00%                                |
|                                      |



*Credited Service* It is assumed that each member will receive credit for one year of Service each year in the future; service prior to the valuation date is actual service that has been credited.

Commencement date for vested terminated employees is assumed to be age 55.

Changes from Last Valuation: None.



### **Miscellaneous and Technical Assumptions**

Administrative & Investment

**Expenses** 

The investment return assumption is intended to be the return net of investment expenses. Annual administrative expenses are assumed to be equal to the two year average of administrative expenses. Assumed administrative expenses are added to the Normal Cost.

Benefit Service Members are assumed to earn one whole year of service for each

future complete plan year.

**COLA** None

**Decrement Operation** Disability and mortality decrements operate during retirement

eligibility.

**Decrement Timing** Decrements of all types are assumed to occur at the beginning of the

year.

Eligibility Testing Eligibility for benefits is determined based upon the age nearest

birthday and service nearest whole year at the beginning of the year.

Marriage Assumption 100% of males and 100% of females are assumed to be married for

purposes of death-in-service benefits. Male spouses are assumed to

be three years older than female spouses for active member

valuation purposes.

**Normal Form of Benefit** A ten-year certain and life benefit is the normal form of benefit.



#### **GLOSSARY**

Actuarial Accrued Liability (AAL)

The difference between the Actuarial Present Value of Future Benefits, and the Actuarial Present Value of Future Normal Costs.

**Actuarial Assumptions** 

Assumptions about future plan experience that affect costs or liabilities, such as: mortality, withdrawal, disablement, and retirement; future increases in salary; future rates of investment earnings; future investment and administrative expenses; characteristics of members not specified in the data, such as marital status; characteristics of future members; future elections made by members; and other items.

**Actuarial Cost Method** 

A procedure for allocating the Actuarial Present Value of Future Benefits between the Actuarial Present Value of Future Normal Costs and the Actuarial Accrued Liability.

**Actuarial Equivalent** 

Of equal Actuarial Present Value, determined as of a given date and based on a given set of Actuarial Assumptions.

Actuarial Present Value (APV)

The amount of funds required to provide a payment or series of payments in the future. It is determined by discounting the future payments with an assumed interest rate and with the assumed probability each payment will be made.

Actuarial Present Value of Future Benefits (APVFB)

The Actuarial Present Value of amounts which are expected to be paid at various future times to active members, retired members, beneficiaries receiving benefits, and inactive, nonretired members entitled to either a refund or a future retirement benefit. Expressed another way, it is the value that would have to be invested on the valuation date so that the amount invested plus investment earnings would provide sufficient assets to pay all projected benefits and expenses when due.

**Actuarial Valuation** 

The determination, as of a valuation date, of the Normal Cost, Actuarial Accrued Liability, Actuarial Value of Assets, and related Actuarial Present Values for a plan. An Actuarial Valuation for a governmental retirement system typically also includes calculations of items needed for compliance with GASB No. 67.

**Actuarial Value of Assets** 

The value of the assets as of a given date, used by the actuary for valuation purposes. This may be the market or fair value of plan assets or a smoothed value in order to reduce the year-to-year volatility of calculated results, such as the funded ratio and the actuarially determined contribution (ADC).



**Amortization Method** 

A method for determining the Amortization Payment. The most common methods used are level dollar and level percentage of payroll. Under the Level Dollar method, the Amortization Payment is one of a stream of payments, all equal, whose Actuarial Present Value is equal to the UAAL. Under the Level Percentage of Pay method, the Amortization Payment is one of a stream of increasing payments, whose Actuarial Present Value is equal to the UAAL. Under the Level Percentage of Pay method, the stream of payments increases at the rate at which total covered payroll of all active members is assumed to increase.

**Amortization Payment** 

That portion of the plan contribution or ARC which is designed to pay interest on and to amortize the Unfunded Actuarial Accrued Liability.

**Amortization Period** 

The period used in calculating the Amortization Payment.

Actuarially Determined Contribution (ADC)

The employer's periodic required contributions, expressed as a dollar amount or a percentage of covered plan compensation. The ADC consists of the Employer Normal Cost and Amortization Payment.

**Closed Amortization Period** 

A specific number of years that is reduced by one each year, and declines to zero with the passage of time. For example if the amortization period is initially set at 30 years, it is 29 years at the end of one year, 28 years at the end of two years, etc.

**Employer Normal Cost** 

The portion of the Normal Cost to be paid by the employer. This is equal to the Normal Cost less expected member contributions.

Equivalent Single
Amortization Period

For plans that do not establish separate amortization bases (separate components of the UAAL), this is the same as the Amortization Period. For plans that do establish separate amortization bases, this is the period over which the UAAL would be amortized if all amortization bases were combined upon the current UAAL payment.

Experience Gain/Loss

A measure of the difference between the normal cost rate from last year and the normal cost rate from this year.

**Funded Ratio** 

The ratio of the Actuarial Value of Assets to the Actuarial Accrued Liability.

GASB

Governmental Accounting Standards Board.

GASB No. 67 and GASB No. 68

These are the governmental accounting standards that set the accounting rules for public retirement systems and the employers that sponsor or contribute to them. Statement No. 68 sets the accounting rules for the employers that sponsor or contribute to public retirement systems, while Statement No. 67 sets the rules for the systems themselves.



Normal Cost The annual cost assigned, under the Actuarial Cost Method, to the

current plan year.

**Open Amortization Period** An open amortization period is one which is used to determine the

Amortization Payment but which does not change over time. In other words, if the initial period is set as 30 years, the same 30-year period is used in determining the Amortization Period each year. In theory, if an Open Amortization Period is used to amortize the Unfunded Actuarial Accrued Liability, the UAAL will never completely disappear, but will become smaller each year, either as a dollar amount or in relation to

covered payroll.

**Unfunded Actuarial Accrued** 

Liability

The difference between the Actuarial Accrued Liability and Actuarial

Value of Assets.

Valuation Date The date as of which the Actuarial Present Value of Future Benefits are

determined. The benefits expected to be paid in the future are

discounted to this date.



# **SECTION C**

**PENSION FUND INFORMATION** 

# **STATEMENT OF PLAN ASSETS**

|  |      | September 30 |      |             |  |  |  |  |  |
|--|------|--------------|------|-------------|--|--|--|--|--|
| ltem   |      | 2018         |      | 2017        |  |  |  |  |  |
| A. Cash and Cash Equivalents (Operating Cash)          | \$   | 1,943        | \$   | 5,686       |  |  |  |  |  |
| B. Receivables:  |      |              |      |             |  |  |  |  |  |
| 1. Member Contributions                                | \$   | -            | \$   | -           |  |  |  |  |  |
| 2. Employer Contributions                              |      | -            |      | -           |  |  |  |  |  |
| 3. State Contributions                                 |      | -            |      | -           |  |  |  |  |  |
| 4. Investment Income and Other Receivables             |      | 74,987       |      | 60,196      |  |  |  |  |  |
| 5. Total Receivables                                   | \$   | 74,987       | \$   | 60,196      |  |  |  |  |  |
| C. Investments   |      |              |      |             |  |  |  |  |  |
| 1. Short-Term Investments                              | \$   | 495,272      | \$   | 590,100     |  |  |  |  |  |
| 2. Domestic Equities                                   | 2    | 0,553,930    | 1    | 17,933,582  |  |  |  |  |  |
| 3. International Equities                              |      | -            |      | -           |  |  |  |  |  |
| 4. Domestic Fixed Income                               |      | 1,839,392    |      | 1,745,387   |  |  |  |  |  |
| 5. International Fixed Income                          |      | -            |      | -           |  |  |  |  |  |
| 6. Real Estate   |      | -            |      | 1,361,079   |  |  |  |  |  |
| 7. Private Equity                                      |      | -            |      | -           |  |  |  |  |  |
| 8. Total Investments                                   | \$ 2 | 2,888,594    | \$ 2 | 21,630,148  |  |  |  |  |  |
| D. Liabilities   |      |              |      |             |  |  |  |  |  |
| 1. Benefits Payable                                    | \$   | -            | \$   | -           |  |  |  |  |  |
| 2. State Contribution Reserve                          |      | -            |      | -           |  |  |  |  |  |
| 3. Accrued Expenses and Other Payables                 |      | (97,568)     |      | (46,209)    |  |  |  |  |  |
| 4. Share Plan Reserve                                  | (    | 2,750,668)   |      | (2,362,015) |  |  |  |  |  |
| 5. Total Liabilities                                   | \$ ( | 2,848,236)   | \$   | (2,408,224) |  |  |  |  |  |
| E. Total Market Value of Assets Available for Benefits | \$ 2 | 0,117,288 *  | \$ 1 | 19,287,806  |  |  |  |  |  |
| F. Allocation of Investments                           |      |              |      |             |  |  |  |  |  |
| 1. Short-Term Investments                              |      | 2.2%         |      | 2.7%        |  |  |  |  |  |
| 2. Domestic Equities                                   |      | 89.8%        |      | 82.9%       |  |  |  |  |  |
| 3. International Equities                              |      | 0.0%         |      | 0.0%        |  |  |  |  |  |
| 4. Domestic Fixed Income                               |      | 8.0%         |      | 8.1%        |  |  |  |  |  |
| 5. International Fixed Income                          |      | 0.0%         |      | 0.0%        |  |  |  |  |  |
| 6. Real Estate   |      | 0.0%         |      | 6.3%        |  |  |  |  |  |
| 7. Private Equity                                      |      | 0.0%         |      | 0.0%        |  |  |  |  |  |
| 8. Total Investments                                   |      | 100.0%       |      | 100.0%      |  |  |  |  |  |
|  |      |              |      |             |  |  |  |  |  |

<sup>\*</sup>Market Value of Assets as of 9/30/2018 after reflecting the maximum allowable Share Plan Allocation of \$767,244 is \$19,350,044.



# **STATEMENT OF CHANGES IN PLAN ASSETS**

|  | Septer             | nber | 30         |
|--|--------------------|------|------------|
| Item   | 2018               |      | 2017       |
| A. Market Value of Assets at Beginning of Year     | \$<br>21,649,821   | \$   | 19,580,717 |
| B. Revenues and Expenditures                       |                    |      |            |
| 1. Contributions                                   |                    |      |            |
| a. Employee Contributions                          | \$<br>-            | \$   | -          |
| b. Employer Contributions                          | -                  |      | -          |
| c. State Contributions                             | 498,143            |      | 523,574    |
| d. Purchased Service Credit                        | <br>               |      |            |
| e. Total   | \$<br>498,143      | \$   | 523,574    |
| 2. Investment Income                               |                    |      |            |
| a. Interest, Dividends, and Other Income           | \$<br>1,152,336    | \$   | 834,178    |
| <ul><li>b. Net Realized Gains/(Losses)</li></ul>   | 238,676            |      | 573,822    |
| <ul><li>c. Net Unrealized Gains/(Losses)</li></ul> | 421,916            |      | 1,125,052  |
| d. Investment Expenses                             | (123,436)          |      | (115,107)  |
| e. Net Investment Income                           | \$<br>1,689,492    | \$   | 2,417,945  |
| 3. Benefits and Refunds                            |                    |      |            |
| a. Refunds   | \$<br>-            | \$   | -          |
| b. Regular Monthly Benefits                        | (778,593)          |      | (720,160)  |
| c. Partial Lump-Sum Benefits Paid                  | -                  |      | -          |
| d. Share Plan Exit Benefits Paid                   | <br>(125,007)      |      | (89,197)   |
| e. Total   | \$<br>(903,600)    | \$   | (809,357)  |
| 4. Administrative and Miscellaneous Expenses       | \$<br>(65,900)     | \$   | (63,058)   |
| 5. Transfers                                       | \$<br>-            | \$   | -          |
| C. Market Value of Assets at End of Year           |                    |      |            |
| 1. Market Value at End of Year                     | \$<br>22,867,956   | \$   | 21,649,821 |
| 2. Less State Contribution Reserve                 | -                  |      | -          |
| 3. Less Share Plan Reserve                         | 2,750,668          |      | 2,362,015  |
| 4. Final Market Value at End of Year               | \$<br>20,117,288 * | * \$ | 19,287,806 |

<sup>\*</sup> Market Value of Assets as of 9/30/2018 after reflecting the maximum allowable Share Plan Allocation of \$767,244 is \$19,350,044.



# **ACTUARIAL VALUE OF ASSETS**

As of October 1, 2007, the Actuarial Value of Assets was set equal to Market Value of Assets. For subsequent valuations, the asset valuation method recognizes 20% per year of the difference between the market value of assets and the expected actuarial asset value.

| September 30  | 2018  |    | 2017  |
|---|---|----|---|
| A. Funding Value Beginning of Year*   | \$<br>21,354,173  |    | \$ 20,210,544   |
| B. Market Value End of Year*  | 22,867,956  |    | 21,649,821  |
| C. Market Value Beginning of Year*  | 21,649,821  |    | 19,580,717  |
| D. Non-Investment Net Cash Flow   | (471,357)   |    | (348,841)   |
| E. Investment Income E1. Market Total: (B-C-D) E2. Assumed Rate of Return E3. Assumed Amount of Return  | 1,689,492<br>7.08%<br>1,495,189   |    | 2,417,945<br>7.08%<br>1,418,558   |
| <ul><li>F. Expected Funding Value End of Year (A+D+E3)</li><li>G. End of Year Market Value less Expected Funding Value: (B-F)</li><li>H. Phased-In Recognition of Investment Income: (G x .20)</li></ul>  | 22,378,005<br>489,951<br>97,990   |    | 21,280,261<br>369,560<br>73,912   |
| <ol> <li>Actuarial Value of Assets End of Year</li> <li>Preliminary Funding Value End of Year: (F+H)</li> <li>Upper Corridor Limit: 120% x B</li> <li>Lower Corridor Limit: 80% x B</li> <li>Final Funding Value End of Year</li> <li>State Contribution Reserve</li> <li>Share Plan Reserve</li> <li>Adjusted Funding Value End of Year</li> </ol> | 22,475,995<br>27,441,547<br>18,294,365<br>22,475,995<br>-<br>2,750,668<br><b>19,725,327</b> | ** | 21,354,173<br>25,979,785<br>17,319,857<br>21,354,173<br>-<br>2,362,015<br><b>18,992,158</b> |
| <ul><li>J. Recognized Investment Earnings</li><li>K. Gain/(Loss) Due to Investments: (J-E3)</li><li>L. Difference between Market &amp; Funding Value</li></ul>  | 1,593,179<br>97,990<br>391,961  |    | 1,492,470<br>73,912<br>295,648  |
| <ul><li>M. Recognized Net Rate of Return on Actuarial Value*</li><li>N. Market Value Rate of Return</li><li>O. Ratio of Funding Value to Market Value</li></ul>   | 7.5%<br>7.9%<br>98.3%   |    | 7.4%<br>12.5%<br>98.6%  |

<sup>\*</sup>Before offset for State Contribution Reserve and Share Plan Reserve.



<sup>\*\*</sup> Funding Value of Assets as of 9/30/2018 after reflecting the maximum allowable Share Plan Allocation of \$767,244 is \$18,958,083.

#### **Investment Rate of Return**

| Year Ending        | Market Value* | Actuarial Value* |
|--------------------|---------------|------------------|
| 12/31/1981         | 16.0 %        | 14.3 %           |
| 12/31/1981         | 17.3          | 11.8             |
| 12/31/1983         | 12.3          | 16.4             |
| 12/31/1984         | 9.7           | 9.4              |
| 12/31/1985         | 22.9          | 20.0             |
|                    |               |                  |
| 12/31/1986         | 18.6          | 14.5             |
| 12/31/1987         | 7.1           | 8.5              |
| 12/31/1988         | 8.6           | 8.1              |
| 12/31/1989         | 19.1          | 20.2             |
| 9/30/1990 (9 mos.) | 0.9           | 1.6              |
| 9/30/1991          | 19.6          | 17.6             |
| 9/30/1992          | 11.8          | 8.0              |
| 9/30/1993          | 12.3          | 4.0              |
| 9/30/1994          | 1.2           | 4.5              |
| 9/30/1995          | 17.7          | 8.1              |
| 9/30/1996          | 14.1          | 10.5             |
| 9/30/1997          | 24.7          | 13.8             |
| 9/30/1998          | 8.5           | 11.6             |
| 9/30/1999          | 10.7          | 11.9             |
| 9/30/2000          | 6.8           | 10.3             |
| 9/30/2001          | (3.2)         | 7.1              |
| 9/30/2002          | (3.4)         | 2.6              |
| 9/30/2003          | 10.3          | 3.6              |
| 9/30/2004          | 10.8          | 4.5              |
| 9/30/2005          | 10.4          | 5.8              |
| 9/30/2006          | 8.3           | 7.7              |
| 9/30/2007          | 13.6          | 10.0             |
| 9/30/2008          | (12.4)        | 3.5              |
| 9/30/2009          | 5.2           | 3.9              |
| 9/30/2010          | 11.0          | 5.2              |
| 9/30/2011          | (0.1)         | 4.3              |
| 9/30/2012          | 18.0          | 6.7              |
| 9/30/2013          | 11.9          | 7.4              |
| 9/30/2014          | 8.5           | 7.6              |
| 9/30/2015          | (1.6)         | 5.7              |
| 9/30/2016          | 8.5           | 6.3              |
| 9/30/2017          | 12.5          | 7.4              |
| 9/30/2018          | 7.9           | 7.5              |
| Average Returns:   |               |                  |
| Last 5 Years       | 7.1 %         | 6.9 %            |
| Last 10 Years      | 8.0 %         | 6.2 %            |
| All Years          | 9.7 %         | 8.7 %            |
|                    | 2 /6          | 2 ,              |

<sup>\*</sup> Net of investment expenses starting in fiscal year ending 9/30/12

The above rates are based on the retirement system's financial information reported to the actuary. They may differ from figures that the investment consultant reports, in part because of differences in the handling of administrative and investment expenses, and in part because of differences in the handling of cash flows.





FINANCIAL ACCOUNTING INFORMATION

| FASB NO. 35 INFORMAT  | FASB NO. 35 INFORMATION   |  |  |  |  |  |  |  |  |  |  |  |
|---|---|--|--|--|--|--|--|--|--|--|--|--|
| A. Valuation Date   | October 1, 2018   | October 1, 2017  |  |  |  |  |  |  |  |  |  |  |
| B. Actuarial Present Value of Accumulated Plan Benefits   |   |  |  |  |  |  |  |  |  |  |  |  |
| <ol> <li>Vested Benefits         <ul> <li>a. Members Currently Receiving Payments</li> <li>b. Terminated Vested Members</li> <li>c. Other Members</li> <li>d. Total</li> </ul> </li> <li>Non-Vested Benefits</li> <li>Total: 1d + 2</li> <li>Accumulated Contributions of Active Members</li> <li>C. Changes in the Actuarial Present Value of</li> </ol> | \$ 9,234,075<br>801,576<br>3,472,392<br>13,508,043<br>818,016<br>14,326,059 | \$ 8,778,698<br>807,772<br>3,373,300<br>12,959,770<br>951,995<br>13,911,765<br>0 |  |  |  |  |  |  |  |  |  |  |
| Accumulated Plan Benefits  1. Total Value at Beginning of Year  2. Changes During the Period Attributable to:   | 13,911,765  | 13,327,380   |  |  |  |  |  |  |  |  |  |  |
| <ul><li>a. Plan Amendment</li><li>b. Change in Actuarial Assumptions</li><li>c. Latest Member Data, Benefits Accumulated</li></ul>  | 0<br>0  | 0<br>0   |  |  |  |  |  |  |  |  |  |  |
| and Decrease in the Discount Period<br>d. Benefits Paid<br>e. Net Increase  | 1,192,887<br>(778,593)<br>414,294   | 1,304,545<br>(720,160)<br>584,385  |  |  |  |  |  |  |  |  |  |  |
| 3. Total Value at End of Period  D. Market Value of Assets  | 14,326,059<br>20,117,288  | 13,911,765<br>19,287,806   |  |  |  |  |  |  |  |  |  |  |

Actuarial Assumptions listed on page entitled Actuarial Assumptions and Methods



# SCHEDULE OF CHANGES IN THE EMPLOYER'S NET PENSION LIABILITY AND RELATED RATIOS GASB Statement No. 67

| Fiscal year ending September 30,               |      | 2019*       | 2018             | 2017             | 2016             |      | 2015        |     | 2014        |
|--|------|-------------|------------------|------------------|------------------|------|-------------|-----|-------------|
| Total Pension Liability                        |      |             |                  |                  |                  |      |             |     |             |
| Service Cost                                   | \$   | 519,742     | \$<br>446,765    | \$<br>420,503    | \$<br>374,085    | \$   | 428,292     | \$  | 390,954     |
| Interest                                       |      | 1,407,550   | 1,296,115        | 1,190,351        | 1,102,770        |      | 1,009,624   |     | 955,241     |
| Benefit Changes                                |      | -           | -                | -                | -                |      | -           |     | -           |
| Difference between actual & expected experienc |      | (963,784)   | (155,424)        | 136,633          | (490,283)        |      | (4,744)     |     | 19,056      |
| Assumption Changes                             |      | -           |                  | (176,014)        | -                |      | -           |     | -           |
| Benefit Payments                               |      | (803,898)   | (903,600)        | (809,357)        | (780,814)        |      | (671,089)   |     | (597,866)   |
| Refunds  |      | -           | -                | -                | -                |      | -           |     | -           |
| Other (Share Plan Allocation)                  |      | 767,244     | 752,599          | 722,858          | 276,252          |      | 662,604     |     | -           |
| Net Change in Total Pension Liability          |      | 926,854     | 1,436,455        | 1,484,974        | 482,010          |      | 1,424,687   |     | 767,385     |
| Total Pension Liability - Beginning            | 1    | 8,995,607   | 17,559,152       | 16,074,178       | 15,592,168       | :    | 14,167,481  | 1   | 13,400,096  |
| Total Pension Liability - Ending (a)           | \$ 1 | 9,922,461   | \$<br>18,995,607 | \$<br>17,559,152 | \$<br>16,074,178 | \$ : | 15,592,168  | \$1 | 14,167,481  |
| Plan Fiduciary Net Position                    |      |             |                  |                  |                  |      |             |     |             |
| Contributions - Employer (From City)           | \$   | -           | \$<br>-          | \$<br>-          | \$<br>-          | \$   | -           | \$  | -           |
| Contributions - Employer (From State)          |      | 498,143     | 498,143          | 523,574          | 654,033          |      | 753,944     |     | 882,791     |
| Contributions - Member                         |      | -           | -                | -                | -                |      | -           |     | -           |
| Net Investment Income                          |      | 1,605,945   | 1,689,488        | 2,417,947        | 1,535,087        |      | (290,426)   |     | 1,445,086   |
| Benefit Payments                               |      | (803,898)   | (903,600)        | (809,357)        | (780,814)        |      | (671,089)   |     | (597,866)   |
| Refunds  |      | -           | -                | -                | -                |      | -           |     | -           |
| Administrative Expense                         |      | (64,479)    | (65,900)         | (63,058)         | (59,513)         |      | (61,570)    |     | (55,428)    |
| Other  |      | -           | -                | -                | -                |      | -           |     | -           |
| Net Change in Plan Fiduciary Net Position      |      | 1,235,711   | 1,218,131        | 2,069,106        | 1,348,793        |      | (269,141)   |     | 1,674,583   |
| Plan Fiduciary Net Position - Beginning        | 2    | 2,867,956   | 21,649,825       | 19,580,719       | 18,231,926       |      | 18,501,067  | 1   | 16,826,484  |
| Plan Fiduciary Net Position - Ending (b)       | \$ 2 | 4,103,667   | \$<br>22,867,956 | \$<br>21,649,825 | \$<br>19,580,719 | \$ : | 18,231,926  | \$1 | 18,501,067  |
| Net Pension Liability - Ending (a) - (b)       |      | (4,181,206) | (3,872,349)      | (4,090,673)      | (3,506,541)      |      | (2,639,758) |     | (4,333,586) |
| Plan Fiduciary Net Position as a Percentage    |      |             |                  |                  |                  |      |             |     |             |
| of Total Pension Liability                     |      | 120.99 %    | 120.39 %         | 123.30 %         | 121.81 %         |      | 116.93 %    |     | 130.59 %    |
| Number of Active Members                       |      | 233         | 233              | 216              | 204              |      | 190         |     | 221         |
| Net Pension Liability per Active Member        | \$   | (17,945)    | \$<br>(16,620)   | \$<br>(18,938)   | \$<br>(17,189)   | \$   | (13,893)    | \$  | (19,609)    |



<sup>\*</sup> These figures are estimates only. Actual figures will be provided after the end of the fiscal year.

# SCHEDULE OF THE EMPLOYER'S NET PENSION LIABILITY GASB Statement No. 67

| FY Ending<br>September 30, | Total<br>Pension<br>Liability | Plan Net<br>Position | Net Pension<br>Liability | Plan Net Position<br>as a % of Total<br>Pension Liability | Number of<br>Active<br>Members | Net Pension Liability<br>per Active<br>Member |          |
|----------------------------|-------------------------------|----------------------|--------------------------|---|--------------------------------|---|----------|
| 2014                       | \$ 14,167,481                 | \$ 18,501,067        | \$ (4,333,586)           | 130.59%   | 221                            | \$  | (19,609) |
| 2015                       | 15,592,168                    | 18,231,926           | (2,639,758)              | 116.93%   | 190                            |   | (13,893) |
| 2016                       | 16,074,178                    | 19,580,719           | (3,506,541)              | 121.81%   | 204                            |   | (17,189) |
| 2017                       | 17,559,152                    | 21,649,825           | (4,090,673)              | 123.30%   | 216                            |   | (18,938) |
| 2018                       | 18,995,607                    | 22,867,956           | (3,872,349)              | 120.39%   | 233                            |   | (16,620) |
| 2019*                      | 19,922,461                    | 24,103,667           | (4,181,206)              | 120.99%   | 233                            |   | (17,945) |

<sup>\*</sup> These figures are estimates only. Actual figures will be provided after the end of the fiscal year.



# NOTES TO SCHEDULE OF NET PENSION LIABILITY FOR FYE 2018 GASB Statement No. 67

Valuation Date: October 1, 2017

Measurement Date: September 30, 2018

# Methods and Assumptions Used to Determine Net Pension Liability:

Actuarial Cost Method Entry Age Normal

Inflation 2.5%
Salary Increases N/A
Investment Rate of Return 7.08%

Retirement Age Active members are assumed to retire at normal retirement age, or

one year after the valuation date if beyond such date.

Mortality The RP-2000 Mortality Table for annuitants with future

improvements in mortality projected to all future years using Scale BB. For females, the base mortality rates include a 100% white collar adjustment. For males, the base mortality rates include a 90% blue collar adjustment and a 10% white collar adjustment. These are the same rates currently in use for Special Risk Class members of the Florida Retirement System (FRS), as mandated by Florida House Bill

1309 (codified in Chapter 2015-157).

Other Information:

Notes See Discussion of Valuation Results on page 1 of the October 1, 2017

Actuarial Valuation Report.



# SCHEDULE OF CONTRIBUTIONS GASB Statement No. 67

|               | Actuarially |         |    |            | Actuarially Contribution |           |         |                     |  |  | Number of |  |
|---------------|-------------|---------|----|------------|--------------------------|-----------|---------|---------------------|--|--|-----------|--|
| FY Ending     | Dete        | rmined  |    | Actual     | D                        | eficiency | Active  | Actual Contribution |  |  |           |  |
| September 30, | Contr       | ibution | Co | ntribution |                          | (Excess)  | Members | per Active Member   |  |  |           |  |
|               |             |         |    |            |                          |           |         |                     |  |  |           |  |
| 2014          | \$          | -       | \$ | 882,791    | \$                       | (882,791) | 221     | 3,995               |  |  |           |  |
| 2015          |             | -       |    | 753,944    |                          | (753,944) | 190     | 3,968               |  |  |           |  |
| 2016          |             |         |    | 654,033    |                          | (654,033) | 204     | 3,206               |  |  |           |  |
| 2017          |             | -       |    | 523,574    |                          | (523,574) | 216     | 2,424               |  |  |           |  |
| 2018          |             | -       |    | 498,143    |                          | (498,143) | 233     | 2,138               |  |  |           |  |
| 2019*         |             | -       |    | TBD        |                          | TBD       | TBD     | TBD                 |  |  |           |  |

<sup>\*</sup> These figures are estimates only. Actual figures will be provided after the end of the fiscal year.



# NOTES TO SCHEDULE OF CONTRIBUTIONS FOR FYE 2018 GASB Statement No. 67

Valuation Date: October 1, 2016

Notes Actuarially determined contribution rates are calculated as of

October 1, which is two years prior to the end of the fiscal year in

which contributions are reported.

# **Methods and Assumptions Used to Determine Contribution Rates:**

Actuarial Cost Method Aggregate

Amortization Method N/A Remaining Amortization Perioc N/A

Asset Valuation Method 5-year smoothed market

Inflation 2.5%
Salary Increases N/A
Investment Rate of Return 7.08%

Retirement Age Active members are assumed to retire at normal retirement age, or

one year after the valuation date if beyond such date.

Mortality The RP-2000 Mortality Table for annuitants with future

improvements in mortality projected to all future years using Scale BB. For females, the base mortality rates include a 100% white collar adjustment. For males, the base mortality rates include a 90% blue collar adjustment and a 10% white collar adjustment. These are the same rates currently in use for Special Risk Class members of the Florida Retirement System (FRS), as mandated by Florida House Bill

1309 (codified in Chapter 2015-157).

Other Information:

See Discussion of Valuation Results from October 1, 2016 Actuarial

Notes Valuation Report.



# SINGLE DISCOUNT RATE GASB Statement No. 67

A single discount rate of 7.08% was used to measure the total pension liability. This single discount rate was based on the expected rate of return on pension plan investments of 7.08%. The projection of cash flows used to determine this single discount rate assumed that plan member contributions will be made at the current contribution rate and that employer contributions will be made at rates equal to the difference between actuarially determined contribution rates and the member rate. Based on these 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.

Regarding the sensitivity of the net pension liability to changes in the single discount rate, the following presents the plan's net pension liability, calculated using a single discount rate of 7.08%, as well as what the plan's net pension liability would be if it were calculated using a single discount rate that is 1-percentage-point lower or 1-percentage-point higher:

#### Sensitivity of the Net Pension Liability to the Single Discount Rate Assumption for FYE 2018

| Current Single Discount |                 |               |  |  |  |  |  |  |  |  |
|-------------------------|-----------------|---------------|--|--|--|--|--|--|--|--|
| 1% Decrease             | Rate Assumption | 1% Increase   |  |  |  |  |  |  |  |  |
| 6.08%                   | 7.08%           | 8.08%         |  |  |  |  |  |  |  |  |
| (\$1,819,183)           | (\$3,872,349)   | (\$5,542,858) |  |  |  |  |  |  |  |  |

#### Sensitivity of the Net Pension Liability to the Single Discount Rate Assumption for FYE 2019\*

|               | Current Single Discount |               |  |  |  |  |  |  |  |  |  |
|---------------|-------------------------|---------------|--|--|--|--|--|--|--|--|--|
| 1% Decrease   | Rate Assumption         | 1% Increase   |  |  |  |  |  |  |  |  |  |
| 6.08%         | 7.08%                   | 8.08%         |  |  |  |  |  |  |  |  |  |
| (\$2,125,149) | (\$4,181,206)           | (\$5,857,373) |  |  |  |  |  |  |  |  |  |

<sup>\*</sup> These figures are estimates only. Actual figures will be provided after the end of the fiscal year.





**M**ISCELLANEOUS INFORMATION

|  | RECONCILIATION OF MEMBERSHIP DATA   |   |   |  |  |  |  |  |  |
|--|---|---|---|--|--|--|--|--|--|
| _                                      |   | From 10/1/17<br>To 10/1/18                | From 10/1/16<br>To 10/1/17                                      |  |  |  |  |  |  |
| A.                                     | Active Members  |   |   |  |  |  |  |  |  |
| 1.<br>2.<br>3.<br>4.<br>5.<br>6.<br>7. | Number Included in Last Valuation New Members Included in Current Valuation Non-Vested Employment Terminations Vested Employment Terminations Service Retirements Disability Retirements Deaths Other | 216<br>61<br>(35)<br>(6)<br>(3)<br>0<br>0 | 204<br>40<br>(20)<br>(3)<br>(5)<br>0<br>0                       |  |  |  |  |  |  |
|  | Number Included in This Valuation   | 233                                       | 216   |  |  |  |  |  |  |
| В.                                     | Terminated Vested Members   |   |   |  |  |  |  |  |  |
| 1.<br>2.<br>3.<br>4.<br>5.<br>6.       | Number Included in Last Valuation Additions from Active Members Lump Sum Payments Payments Commenced Deaths Other: Returned to Work Number Included in This Valuation                                 | 21<br>6<br>0<br>(2)<br>0<br>0             | 19<br>3<br>0<br>(1)<br>0<br>0<br>21                             |  |  |  |  |  |  |
|  |   |   | 21  |  |  |  |  |  |  |
| <b>C.</b>                              | Service Retirees, Disability Retirees and Bene<br>Number Included in Last Valuation   | eficiaries<br>84                          | 79  |  |  |  |  |  |  |
| 2.                                     | Additions from Active Members Additions from Terminated Vested Members Deaths Resulting in No Further Payments Deaths Resulting in New Survivor Benefits End of Certain Period - No Further Payments  | 3   | 5<br>1<br>(1)<br>0<br>0<br>0<br>——————————————————————————————— |  |  |  |  |  |  |



# **ACTIVE PARTICIPANT SCATTER**

|         |     |     | Voc | urs of Son | vice as of | October 1 | 2019  |       |       |         |        |
|---------|-----|-----|-----|------------|------------|-----------|-------|-------|-------|---------|--------|
|         |     |     |     |            |            |           |       |       |       | ı       |        |
| Ages    | 0-1 | 1-2 | 2-3 | 3-4        | 4-5        | 5-9       | 10-14 | 15-19 | 20-24 | 25 & Up | Totals |
| 15-19   | 2   | -   | -   | -          | -          | -         | -     | -     | -     | -       | 2      |
| 20-24   | 14  | 5   | 3   | 3          | -          | -         | -     | -     | -     | -       | 25     |
| 25-29   | 19  | 5   | 3   | 4          | 1          | 6         | 1     | -     | -     | -       | 39     |
| 30-34   | 17  | 6   | 4   | 3          | 3          | 4         | 5     | -     | -     | -       | 42     |
| 35-39   | 9   | 8   | 3   | 4          | 2          | 8         | 3     | 2     | -     | -       | 39     |
| 40-44   | 3   | 4   | 1   | 3          | 1          | 7         | 5     | 1     | 1     | -       | 26     |
| 45-49   | 7   | 1   | 2   | 1          | 2          | 6         | 5     | 7     | -     | -       | 31     |
| 50-54   | 8   | -   | -   | -          | 3          | 3         | 4     | 3     | -     | -       | 21     |
| 55-59   | 2   | 2   | -   | 1          | -          | -         | -     | 1     | -     | -       | 6      |
| 60-64   | -   | -   | 1   | -          | -          | -         | -     | -     | -     | -       | 1      |
| 65 & Up | 1   |     |     | -          |            | -         | -     |       |       | -       | 1      |
| Totals  | 82  | 31  | 17  | 19         | 12         | 34        | 23    | 14    | 1     | -       | 233    |



# **INACTIVE PARTICIPANT SCATTER**

|          | <b>Terminated Vested</b> |          | Disabled |          | Retirees and Beneficiaries |          |
|----------|--------------------------|----------|----------|----------|----------------------------|----------|
| -        |                          | Annual   |          | Annual   |                            | Annual   |
| Age      | No.                      | Benefits | No.      | Benefits | No.                        | Benefits |
|          |                          |          |          |          |                            |          |
| Under 40 | 8                        | 25,890   | -        | -        | -                          | -        |
| 40-44    | 5                        | 17,175   | -        | -        | 1                          | 13,870   |
| 45-49    | 7                        | 45,390   | -        | -        | 3                          | 40,554   |
| 50-54    | 4                        | 25,200   | -        | -        | 10                         | 95,000   |
| 55-59    | 1                        | 2,880    | 1        | 1,200    | 34                         | 313,620  |
| 60-64    | -                        | -        | -        | -        | 19                         | 182,258  |
| 65-69    | -                        | -        | -        | -        | 11                         | 73,284   |
| 70-74    | -                        | -        | -        | -        | 1                          | 6,002    |
| 75-79    | -                        | -        | -        | -        | 5                          | 50,414   |
| 80-84    | -                        | -        | -        | -        | -                          | -        |
| 85-89    | -                        | -        | -        | -        | 2                          | 13,510   |
| 90 & Up  | -                        | -        | -        | -        | 2                          | 12,629   |
|          |                          |          |          |          |                            |          |
| Total    | 25                       | 116,535  | 1        | 1,200    | 88                         | 801,141  |



# **S**ECTION **F**

**SUMMARY OF PLAN PROVISIONS** 

#### **SUMMARY OF PLAN PROVISIONS**

#### A. Ordinances

Plan established under the Code of Ordinances for the City of Plantation, Florida, Part II, Chapter 18, and was most recently amended under Ordinance No. 2476 which passed on February 27, 2013 and was effective as of October 1, 2012. The Plan is also governed by certain provisions of Part VII, Chapter 112, Florida Statutes (F.S.) and the Internal Revenue Code.

#### **B.** Effective Date

May 21, 1980

# C. Plan Year

October 1 through September 30

# D. Type of Plan

Qualified, governmental defined benefit retirement plan; for GASB purposes it is a single employer plan.

# E. Eligibility Requirements

All Volunteer Firefighters of the City, according to the Board of Fire Officers, are eligible for membership in the system.

#### F. Credited Service

Service is measured as one year of credit given for each year in which a member fulfills his or her position description as a member of the Plantation Fire Department. The year period for this purpose is the fiscal year.

If a member is also covered by another retirement plan supported in whole or in part by public funds, credit for service is only allowed for each year in which such member continuously fulfills his or her duties within his or her position description other than during such member's regular hours of employment.

#### G. Compensation

Not Applicable.

# H. Final Average Compensation (FAC)

Not Applicable.



#### I. Normal Retirement

Eligibility: A member may retire on the first day of the month coincident with or next

following the earlier of age 55 and 7 years of Credited Service or 20 years of

service regardless of age.

Benefit: \$60 per month for each year of Credited Service.

**Normal Form** 

of Benefit: Ten year certain and life annuity, with other options available.

COLA: Not Applicable.

# J. Early Retirement

Eligibility: A member may elect to retire earlier than the Normal Retirement Eligibility up

attainment of Age 50 and 10 years of Credit Service.

Benefit: The Normal Retirement Benefit is reduced by 3% for each year from age 55 to 50.

**Normal Form** 

of Benefit: Ten year certain and life annuity, with other options available.

COLA: Not Applicable.

# K. Delayed Retirement

Same as Normal Retirement taking into account compensation earned and service credited until the date of actual retirement.

### L. Service Connected Disability

Eligibility: A total and permanent disability incurred in the performance of service to the City.

Benefit: \$100 per month or, if greater, the accrued benefit.

Normal Form

of Benefit: Ten year certain and life annuity, with other options available.

COLA: Not Applicable.

#### M. Non-Service Connected Disability

Eligibility: Ten years of credited service and a total and permanent disability not incurred in

the performance of service to the City.

Benefit: \$100 per month or, if greater, the accrued benefit.



**Normal Form** 

of Benefit: Ten year certain and life annuity, with other options available.

COLA: Not Applicable.

# N. Death in the Line of Duty

Eligibility: Members are eligible for survivor benefits after the completion of 7 years of

Credited Service.

Benefit: A Lump Sum benefit equal to the greater of the present value of the accrued

benefit or \$300 per year of credited service, up to a maximum of 20 years, shall be payable to the beneficiary. Alternatively, as determined by the Board, a monthly payment for ten years of the accrued pension will be payable at the early or

normal retirement date.

COLA: Not Applicable.

The designated beneficiary of a plan member with less than 7 years of Credited Service will receive a refund of the member's accumulated contributions.

#### O. Other Pre-Retirement Death

Eligibility: Members are eligible for survivor benefits after the completion of 7 years of

Credited Service.

Benefit: A Lump Sum benefit equal to the greater of the present value of the accrued

benefit or \$300 per year of credited service, up to a maximum of 20 years, shall be payable to the beneficiary. Alternatively, as determined by the Board, a monthly payment for ten years of the accrued pension will be payable at the early or

normal retirement date.

COLA: Not Applicable.

The designated beneficiary of a plan member with less than 7 years of Credited Service will receive a refund of the member's accumulated contributions.

#### P. Post Retirement Death

Benefit determined by the form of benefit elected upon retirement.

### Q. Optional Forms

In lieu of electing the Normal Form of benefit, the optional forms of benefits available to all retirees are the 50%, 75%, 66 2/3% and 100% Joint and Survivor options, without the pop-up feature. A lump sum option is available for members whose benefit does not exceed five thousand (\$5,000.00) are to be granted in the discretion of the board. The value of optional retirement benefits shall be actuarially equivalent to the value of benefits otherwise payable. The member shall make such an election by written request to the board and such an election shall be subject to



the approval of the board.

#### R. Vested Termination

Eligibility: A member has earned a non-forfeitable right to Plan benefits after the completion

of 7 years of Credited Service upon termination. The vesting schedule is as

follows:

| Years of         | Vested |  |  |
|------------------|--------|--|--|
| Credited Service | %      |  |  |
| Under 7          | 0%     |  |  |
| 7                | 25     |  |  |
| 8                | 50     |  |  |
| 9                | 75     |  |  |
| 10 or more       | 100    |  |  |

Benefit: The benefit is the member's accrued Normal Retirement Benefit as of the date

of termination unreduced. Benefits begin when the member attains age 55.

**Normal Form** 

of Benefit: Ten year certain and life annuity, with other options available.

COLA: Not Applicable.

# S. Refunds

Not Applicable.

#### T. Member Contributions

Not Applicable.

# **U. Employer Contributions**

From the State Premium tax refunds

**From the City** The remaining amount necessary to pay the annual normal cost of the

plan plus the additional amount needed to amortize the unfunded

accrued (past service) liability.

#### V. Cost of Living Increases

Not Applicable.

# W. Deferred Retirement Option Plan (DROP)

Not Applicable.



# X. Discretionary Share Plan

If the Market Value of Assets is greater than or equal to 115% of Actuarial Accrued Liability a payment of five percent of the Actuarial Accrued liability may be made to a Share Plan provided the assets still cover at least 115% of the liability after the payment is made. This discretionary annual benefit shall be made annually only upon the affirmative vote of the Board.

# Y. Other Ancillary Benefits

There are no ancillary retirement type benefits not required by statutes but which might be deemed a City of Plantation Volunteer Firefighters Retirement System liability if continued beyond the availability of funding by the current funding source.

# Z. Changes from Last Valuation

None.

