

MIAMI SPRINGS POLICE AND FIREFIGHTERS' RETIREMENT SYSTEM

ANNUAL ACTUARIAL VALUATION AS OF OCTOBER 1, 2017

ANNUAL EMPLOYER CONTRIBUTION FOR THE FISCAL YEAR
ENDING SEPTEMBER 30, 2019



April 26, 2018

Board of Trustees
City of Miami Springs Police
and Firefighters' Retirement System
Miami Springs, Florida

Dear Board Members:

The results of the October 1, 2017 Annual Actuarial Valuation of the City of Miami Springs Police and Firefighters' Retirement System are presented in this report.

The computed contribution rate shown on page 1 may be considered as a minimum contribution rate that complies with the Board's funding policy. Users of this report should be aware that contributions made at that rate do not guarantee benefit security. Given the importance of benefit security to any retirement system, we suggest that contributions to the System in excess of those presented in this report be considered.

The contribution rate in this report is determined using the actuarial assumptions and methods disclosed in Section B of this report. This report does not include an assessment of the risks of future experience not meeting the actuarial assumptions, as assessment of these risks was outside the scope of this assignment. We encourage a review and assessment of investment and other significant risks that may have a material effect on the Plan's financial condition.

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, 2019, and to report the actuarial information for Governmental Accounting Standards Board (GASB) Statement No. 67 for the fiscal year ending September 30, 2017. This report also includes estimated GASB Statement No. 67 information for the fiscal year ending September 30, 2018. This report should not be relied on for any purpose other than the purpose 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 findings in this report are based on data or other information through September 30, 2017. Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: system experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions;

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 system'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.

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 valuation was based upon information furnished by the City and the Plan Administrator concerning Retirement System 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 City and 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 Cost Method". The prescribed assumptions are the assumed mortality rates detailed in the Actuarial Assumptions and Cost Method section in accordance with the Florida Statutes Chapter 112.63.

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 Miami Springs Police and Firefighters' Retirement System 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.

Peter N. Strong and Nicolas Lahaye are members of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries 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 us or under our direct supervision, and we 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 system and/or paid from the system'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 system costs or required contribution rates have been taken into account in the valuation.

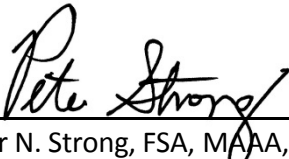


Board of Trustees
City of Miami Springs Police and Firefighters' Retirement System
April 26, 2018
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Gabriel, Roeder, Smith & Company will be pleased to review this valuation report with the Board of Trustees and to answer any questions pertaining to the valuation.

Respectfully submitted,

GABRIEL, ROEDER, SMITH & COMPANY

By 
Peter N. Strong, FSA, MAAA, FCA
Enrolled Actuary No. 17-6975


By 
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Enrolled Actuary No. 17-7775



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SECTION A

DISCUSSION OF VALUATION RESULTS

DISCUSSION OF VALUATION RESULTS

Comparison of Required Employer Contributions

The required employer contribution developed in this year's valuation is compared below to last year's results.

| | For FYE 9/30/2019 | For FYE 9/30/2018* | Increase (Decrease) |
|--|----------------------|-----------------------|------------------------|
| Total Required Contribution | \$ 717,355 | \$ 746,623 | \$ (29,268) |
| As % of Covered Payroll | 27.20 % | 29.97 % | (2.77) % |
| Allowable Credit for State Revenue | \$ 192,169 | \$ 126,539 | \$ 65,630 |
| As % of Covered Payroll | 7.29 % | 5.08 % | 2.21 % |
| Required Employer Contribution | \$ 525,186 | \$ 620,084 | \$ (94,898) |
| As % of Covered Payroll | 19.91 % | 24.89 % | (4.98) % |
| As % of Total Payroll including DROP participants | 17.68 % | 21.02 % | (3.34) % |
| Member Contribution Rate | 12.5 % | 12.5 % | 0.0 % |

*Based on results from September 25, 2017 Actuarial Impact Statement.

The required employer contribution has been computed under the assumption that the amount to be received from the State in fiscal years ending in 2018 and 2019 will be the same as the fiscal year 2017 amount of \$120,798, and that the full City contribution would be made on October 1, 2018. The actual State base amount and employer contributions for the fiscal year ending September 30, 2017 were \$49,427 and \$678,763, respectively, for a total contribution of \$728,190. The minimum required contribution reflecting actual payment timing was \$728,190.

Revision in Benefits

Under Ordinance No. 1094-2017, the following changes are made:

- The employee contribution rate is limited to a maximum of 12.5% for the period October 1, 2017 through September 30, 2020.
- All accumulated excess and annual Chapter 185 premium tax monies are allocated to fund the reduction in employee contributions, and to the extent that Chapter 185 premium tax revenues are not sufficient to fully fund the reduction, the City's contribution shall be increased.

The impact of these changes was measured in the September 25, 2017 Actuarial Impact Statement. The results as of October 1, 2016 reflect these changes.

Revisions in Actuarial Assumptions or Methods

The assumed investment return assumption has been reduced by 0.50% from 7.50% to 7.00%. Assumed rates of salary increase, retirement, withdrawal, and disability have also been revised based on a 9-year experience study performed for the Plan since the prior valuation. Please see the Actuarial Assumptions and Cost Method subsection of this report as well as the Assumption Study and Experience Review for the Nine-Year Period Ending September 30, 2016, dated December 22, 2017 for additional information on the revised assumptions. The new assumptions were adopted by the Pension Board in March 2018 for initial use in this October 1, 2017 Actuarial Valuation Report.

In the aggregate, the assumption changes mentioned above increased the required contribution by 2.76% of covered payroll.

Actuarial Experience

There was a net actuarial gain of \$637,181 for the year which means that actual experience was more favorable than expected. The gain is primarily due to a recognized investment return above the assumed rate of 7.5%. The investment return was 10.1% based on the actuarial value of assets and 11.8% based on the market value of assets. The investment gain was partially offset by modest demographic experience losses. The demographic losses are primarily attributable to the delayed payment of a refund to a vested member who was previously removed from the census data and adjustments to dates of hire for six employees to reflect their police academy service. Lower than expected salary increases for continuing active members (2.4% on average vs. 5.9% expected) helped to offset the impact of these losses. The net actuarial gain caused the required employer contribution to decrease by 2.36% of covered payroll.

Funded Ratio

The funded ratio, one measure of the Plan's financial health, is equal to the actuarial value of assets divided by the actuarial accrued (past service) liability. The funded ratio is 88.6% this year (after reflecting the assumption changes) compared to 89.5% last year. The funded ratio this year was 92.8% prior to reflecting the assumption changes described above.

Analysis of Change in Required Contributions

The components of change in the required City contribution are as follows:

| | |
|---|---------------|
| City Contribution rate last year | 24.89 % |
| Revision in assumptions and methods | 2.76 |
| Amortization of UAAL | (1.56) |
| Normal Cost Rate | (0.67) |
| Experience (gain) loss | (2.36) |
| Change in administrative expense | (0.94) |
| Increase in employee contribution rate | 0.00 |
| Change in amount of State revenue applied | <u>(2.21)</u> |
| City Contribution rate this year | 19.91 |

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 as a percent of payroll. 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 rate 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 \$1,471,494 as of the valuation date (see Section C). This difference will be recognized over the next four years. In turn, the computed City contribution rate is expected to decrease by approximately 2.8% of covered payroll (reflecting cost sharing) over the same period in the absence of offsetting losses.

Relationship to Market Value

If we were not using an asset smoothing method, the funded ratio would have been 93.3%, the City contribution rate would have been 16.81%, and the member contribution rate would have been 10.1%. These contribution rates would have been this low in fiscal year 2019 only due to the remaining accumulated excess Chapter Money reserve being used in fiscal year 2019. In future years, only annual Chapter Money additions will be available to offset the City contribution. In the absence of additional gains and losses or other changes (including future changes to the member contribution rate cap of 12.5%), the City contribution rate (under full cost sharing) should decrease to approximately 17.1% and the member contribution rate should remain at the 12.5% cap.

Conclusion

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

STATE CONTRIBUTION RESERVE

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, the minimum duty disability benefit should be equal to the accrued pension, a minimum non-duty death benefit payable after 10 years of service should be added, and the normal form of benefit should be changed to 10 years certain and life annuity to meet the minimum required benefits.

For the fiscal years ending September 30, 2018 through September 30, 2020, the City and the Police Officers Union have reached mutual consent with regard to the use of State Chapter Money. All accumulated excess and annual Chapter 185 premium tax monies shall be used to fund the reduction in the employee contribution rate to no more than 12.5%.

| Actuarial Confirmation of the Use of State Chapter Money | |
|---|-----------|
| 1. Base Amount Previous Plan Year | \$ 49,427 |
| 2. Amount Received for Previous Plan Year | 120,798 |
| 3. Benefit Improvements Made in Previous Plan Year | 0 |
| 4. Excess Funds for Previous Plan Year: (2) - (1) - (3) | 71,371 |
| 5. Accumulated Excess at Beginning of Previous Year | 71,527 |
| 6. Prior Excess Used in Previous Plan Year | 65,786 |
| 7. Accumulated Excess as of Valuation Date (Available for Benefit Improvements): (4) + (5) - (6) | 77,112 |
| 8. Expected Amount to be Received This Plan Year: | 120,798 |

The Accumulated Excess shown in line 7 is being held in reserve to fund the reduction in the employee cost sharing contribution. The reserve is subtracted from Plan assets (see Section C of this Report).

SECTION B

VALUATION RESULTS

| PARTICIPANT DATA | | | |
|---|---|--|------------------|
| | October 1, 2017 <i>After Changes</i> | October 1, 2017 <i>Before Changes</i> | October 1, 2016* |
| ACTIVE MEMBERS | | | |
| Number | 37 | 37 | 35 |
| Covered Annual Payroll | \$ 2,637,346 | \$ 2,647,689 | \$ 2,491,689 |
| Average Annual Payroll | \$ 71,280 | \$ 71,559 | \$ 71,191 |
| Average Age | 38.9 | 38.9 | 40.4 |
| Average Past Service | 8.6 | 8.6 | 8.7 |
| Average Age at Hire | 30.3 | 30.3 | 31.7 |
| RETIREES, BENEFICIARIES & DROP | | | |
| Number | 44 | 44 | 46 |
| Annual Benefits | \$ 2,007,627 | \$ 2,007,627 | \$ 1,984,242 |
| Average Annual Benefit | \$ 45,628 | \$ 45,628 | \$ 43,136 |
| Average Age | 66.7 | 66.7 | 67.3 |
| DISABILITY RETIREES | | | |
| Number | 0 | 0 | 0 |
| Annual Benefits | \$ 0 | \$ 0 | \$ 0 |
| Average Annual Benefit | \$ 0 | \$ 0 | \$ 0 |
| Average Age | 0.0 | 0.0 | 0.0 |
| TERMINATED VESTED MEMBERS | | | |
| Number | 3 | 3 | 3 |
| Annual Benefits | \$ 52,298 | \$ 52,298 | \$ 52,298 |
| Average Annual Benefit | \$ 17,433 | \$ 17,433 | \$ 17,433 |
| Average Age | 47.5 | 47.5 | 46.5 |

* From September 25, 2017 Actuarial Impact Statement.

ACTUARIALLY DETERMINED (REQUIRED) CONTRIBUTION (ADC)

| | October 1, 2017 <i>After Changes</i> | October 1, 2017 <i>Before Changes</i> | October 1, 2016* |
|--|---|--|------------------|
| A. Valuation Date | | | |
| B. ADC to Be Paid During Fiscal Year Ending | 9/30/2019 | 9/30/2019 | 9/30/2018 |
| C. Assumed Date of Employer Contributions | Evenly | Evenly | Evenly |
| D. Annual Payment to Amortize Unfunded Actuarial Liability | \$ 330,625 | \$ 228,941 | \$ 306,224 |
| E. Employer Normal Cost | 414,215 | 447,975 | 458,929 |
| F. Employer ADC if Paid on the Valuation Date: D+E | 744,840 | 676,916 | 765,153 |
| G. Employer ADC Adjusted for Frequency of Payments | 825,000 | 755,039 | 853,459 |
| H. Employer ADC as % of Covered Payroll | 31.28 % | 28.52 % | 34.25 % |
| I. Assumed Rate of Increase in Covered Payroll to Contribution Year | 0.00 % | 0.00 % | 0.00 % |
| J. Covered Payroll for Contribution Year | 2,637,346 | 2,647,689 | 2,491,689 |
| K. Employer ADC for Contribution Year: H x J ** | 825,000 | 755,039 | 853,459 |
| L. Employer ADC as % of Covered Payroll in Contribution Year: K ÷ J ** | 31.28 % | 28.52 % | 34.25 % |

* From September 25, 2017 Actuarial Impact Statement.

** See Adjustment page for final results.

| ADJUSTMENT TO EMPLOYER AND MEMBER CONTRIBUTIONS | | |
|---|----------------------------------|-----------------------------------|
| | As of October 1 | |
| | 2017 For FYE 9/30/2019 | 2016* For FYE 9/30/2018 |
| 1. Covered Annual Payroll for All Members | \$ 2,637,346 | \$ 2,491,689 |
| 2. Employer Cost Before Adjustment as % of Covered Payroll | 31.28 % | 34.25 % |
| 3. Combined Employer/Employee Cost | 40.28 % | 43.25 % |
| 4. Excess of (3) over 18%, or Excess of 14% over (3)** [rounded to 0.1%] | 22.3 % | 25.3 % |
| 5. One-Half of (4) | 11.2 % | 12.7 % |
| 6. Employer Contribution Rate: 5% - (5); 9% + (5); or (2) (not less than 0%) | 20.2 % | 21.7 % |
| 7. Employer Contribution Amount: (6) x (1) | \$ 532,744 | \$ 540,697 |
| 8. Member Contribution Rate for Next Year: 9% - (5) (not less than 0.5%); or 9% + (5) if (3) is greater than 18% | 20.2 % | 21.7 % |
| 9. Reduction in Member Contribution Rate due to Release of Excess State Contribution Reserve Funds and Additional City Contribution | 7.7 % | 9.2 % |
| 10. Revised Member Contribution Rate for Next Year: (8) - (9) | 12.5 % | 12.5 % |
| 11. Estimated Amount of Excess State Contribution Reserve Funds Released | \$ 192,169 | \$ 126,539 |
| 12. Amount of Additional City Contribution | \$ 10,907 | \$ 102,696 |
| 13. Total Employer Contribution: (7) + (12) As % of Covered Payroll | \$ 543,651 20.61 % | \$ 643,393 25.82 % |
| If the City Makes its Contribution on October 1st: | | |
| 14. Employee Contribution Rate for All Members | 12.5 % *** | 12.5 % *** |
| 15. Total Employer Contribution | \$ 525,186 | \$ 620,084 |
| 16. As % of Covered Payroll | 19.91 % | 24.89 % |

* From September 25, 2017 Actuarial Impact Statement.

** If (3) is between 14% and 18%, the Union Member Contribution Rate remains at 9%.

***During the fiscal years ending September 30, 2018 through September 30, 2020, the employee contribution rate is 12.5% of covered pay. There is no cap on the employee contribution rate during the fiscal year ending September 30, 2021 and beyond.

ACTUARIAL VALUE OF BENEFITS AND ASSETS

| A. Valuation Date | October 1, 2017 <i>After Changes</i> | October 1, 2017 <i>Before Changes</i> | October 1, 2016* |
|---|---|--|-------------------|
| B. Actuarial Present Value of All Projected Benefits for | | | |
| 1. Active Members | | | |
| a. Service Retirement Benefits | \$ 10,672,094 | \$ 9,980,113 | \$ 9,509,023 |
| b. Vesting Benefits | 936,326 | 747,826 | 635,359 |
| c. Disability Benefits | 111,384 | 643,830 | 622,400 |
| d. Preretirement Death Benefits | 136,678 | 112,237 | 114,904 |
| e. Return of Member Contributions | 53,095 | 47,634 | 38,237 |
| f. Total | <u>11,909,577</u> | <u>11,531,640</u> | <u>10,919,923</u> |
| 2. Inactive Members | | | |
| a. Service Retirees & Beneficiaries | 23,465,895 | 22,413,718 | 22,122,399 |
| b. Disability Retirees | - | - | - |
| c. Terminated Vested Members | 515,729 | 483,219 | 447,641 |
| d. Total | <u>23,981,624</u> | <u>22,896,937</u> | <u>22,570,040</u> |
| 3. Total for All Members | 35,891,201 | 34,428,577 | 33,489,963 |
| C. Actuarial Accrued (Past Service) Liability | 31,776,159 | 30,343,814 | 29,631,328 |
| D. Actuarial Value of Accumulated Plan Benefits per FASB No. 35 | 30,844,900 | 29,872,946 | 29,475,699 |
| E. Plan Assets | | | |
| 1. Market Value | 29,632,898 | 29,632,898 | 27,421,729 |
| 2. Actuarial Value | 28,161,404 | 28,161,404 | 26,530,152 |
| F. Unfunded Actuarial Accrued Liability: C - E2 | 3,614,755 | 2,182,410 | 3,101,176 |
| G. Actuarial Present Value of Projected Covered Payroll | 21,114,617 | 20,406,151 | 18,304,434 |
| H. Actuarial Present Value of Projected Member Contributions | 1,900,316 | 1,836,554 | 1,647,399 |
| I. Accumulated Contributions of Active Members | 3,002,989 | 3,002,989 | 2,716,252 |

* From September 25, 2017 Actuarial Impact Statement.

CALCULATION OF EMPLOYER NORMAL COST

| A. Valuation Date | October 1, 2017 <i>After Changes</i> | October 1, 2017 <i>Before Changes</i> | October 1, 2016* |
|---|---|--|------------------|
| B. Normal Cost for | | | |
| 1. Service Retirement Benefits | \$ 443,843 | \$ 440,096 | \$ 429,235 |
| 2. Vesting Benefits | 81,693 | 66,940 | 60,328 |
| 3. Disability Benefits | 9,582 | 65,804 | 63,588 |
| 4. Preretirement Death Benefits | 12,085 | 11,157 | 12,178 |
| 5. Return of Member Contributions | <u>8,813</u> | <u>6,710</u> | <u>6,137</u> |
| 6. Total for Future Benefits | 556,016 | 590,707 | 571,466 |
| 7. Assumed Amount for Administrative Expenses | <u>95,560</u> | <u>95,560</u> | <u>111,715</u> |
| 8. Total Normal Cost | 651,576 | 686,267 | 683,181 |
| C. Expected Member Contribution (9.00%) | 237,361 | 238,292 | 224,252 |
| D. Employer Normal Cost: B8-C | 414,215 | 447,975 | 458,929 |
| E. Employer Normal Cost as % of Covered Payroll | 15.71 % | 16.92 % | 18.42 % |

* From September 25, 2017 Actuarial Impact Statement.

LIQUIDATION OF THE UNFUNDED ACTUARIAL ACCRUED LIABILITY

| UAAL Amortization Period and Payments | | | | | | |
|---------------------------------------|-------------------|-----------------------------|--------------|-----------------|--------------|------------|
| Original UAAL | | | | Current UAAL | | |
| Date Established | Source | Amortization Period (Years) | Amount | Years Remaining | Amount | Payment |
| 10/1/09 | Initial Unfunded | 30 | \$ 126,169 | 22 | \$ 421,869 | \$ 35,644 |
| 10/1/10 | (Gain)/Loss | 20 | 137,668 | 13 | 136,052 | 15,214 |
| 10/1/10 | Assumption Change | 30 | 435,269 | 23 | 486,930 | 40,371 |
| 10/1/11 | (Gain)/Loss | 20 | 1,999,999 | 14 | 1,547,524 | 165,375 |
| 10/1/11 | Assumption Change | 30 | 467,798 | 24 | 412,414 | 33,606 |
| 10/1/12 | (Gain)/Loss | 20 | 650,071 | 15 | 498,557 | 51,158 |
| 10/1/12 | Assumption Change | 30 | 247,309 | 25 | 211,844 | 16,989 |
| 10/1/13 | (Gain)/Loss | 20 | 459,569 | 16 | 365,911 | 36,200 |
| 10/1/13 | Assumption Change | 30 | 487,877 | 26 | 423,618 | 33,478 |
| 10/1/13 | Plan Change | 30 | (518,873) | 26 | (450,533) | (35,605) |
| 10/1/14 | (Gain)/Loss | 20 | (280,317) | 17 | (231,984) | (22,207) |
| 10/1/15 | (Gain)/Loss | 20 | (222,509) | 18 | (193,808) | (18,007) |
| 10/1/16 | (Gain)/Loss | 20 | (886,593) | 19 | (817,250) | (73,899) |
| 10/1/16 | Assumption Change | 30 | 8,960 | 29 | 8,447 | 643 |
| 10/1/17 | (Gain)/Loss | 20 | (637,181) | 20 | (637,181) | (56,211) |
| 10/1/17 | Assumption Change | 30 | 1,432,345 | 30 | 1,432,345 | 107,876 |
| | | | \$ 3,907,561 | | | \$ 330,625 |
| | | | | | \$ 3,614,755 | |

Amortization Schedule

The UAAL is being liquidated as a level dollar amount over the number of years remaining in the amortization period. The following schedule illustrates the expected amortization of the UAAL:

| Amortization Schedule | |
|-----------------------|---------------|
| Year | Expected UAAL |
| 2017 | \$ 3,614,755 |
| 2018 | 3,514,019 |
| 2019 | 3,406,232 |
| 2020 | 3,290,899 |
| 2021 | 3,167,493 |
| 2022 | 3,035,449 |
| 2027 | 2,222,881 |
| 2032 | 1,293,923 |
| 2037 | 1,182,999 |
| 2042 | 473,478 |
| 2047 | - |

ACTUARIAL GAINS AND LOSSES

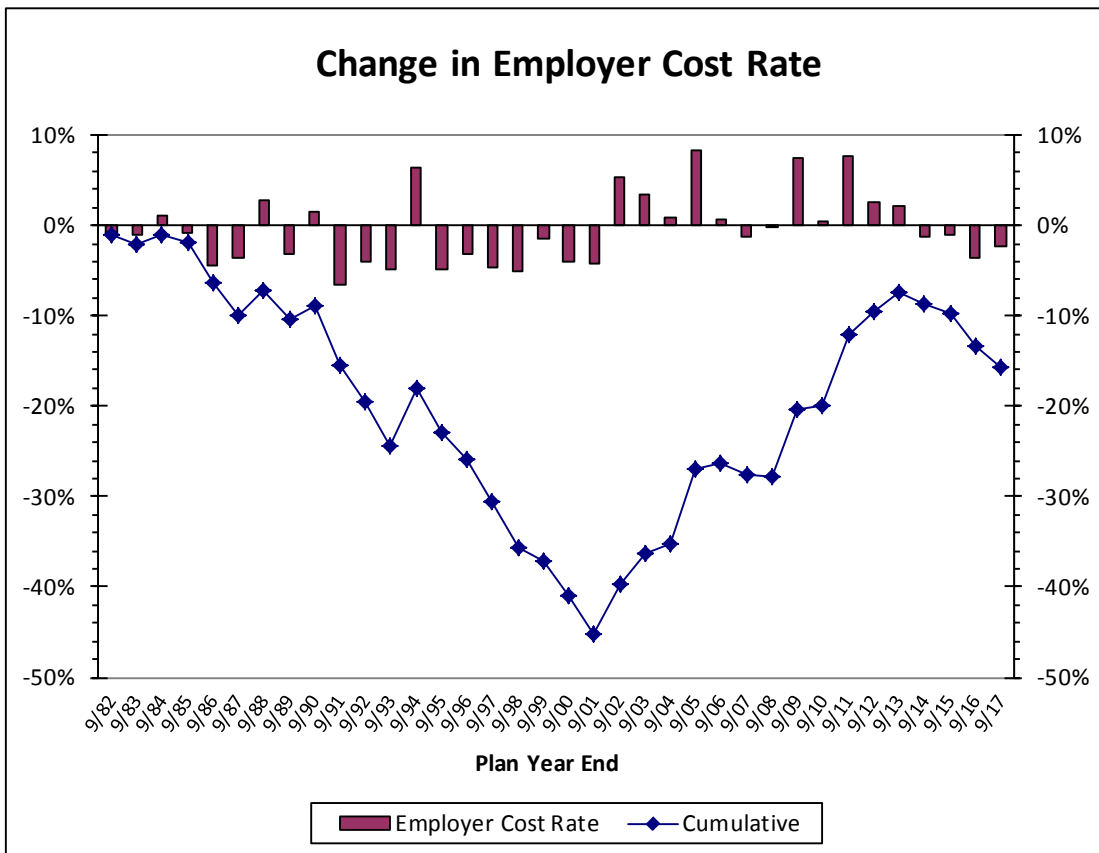
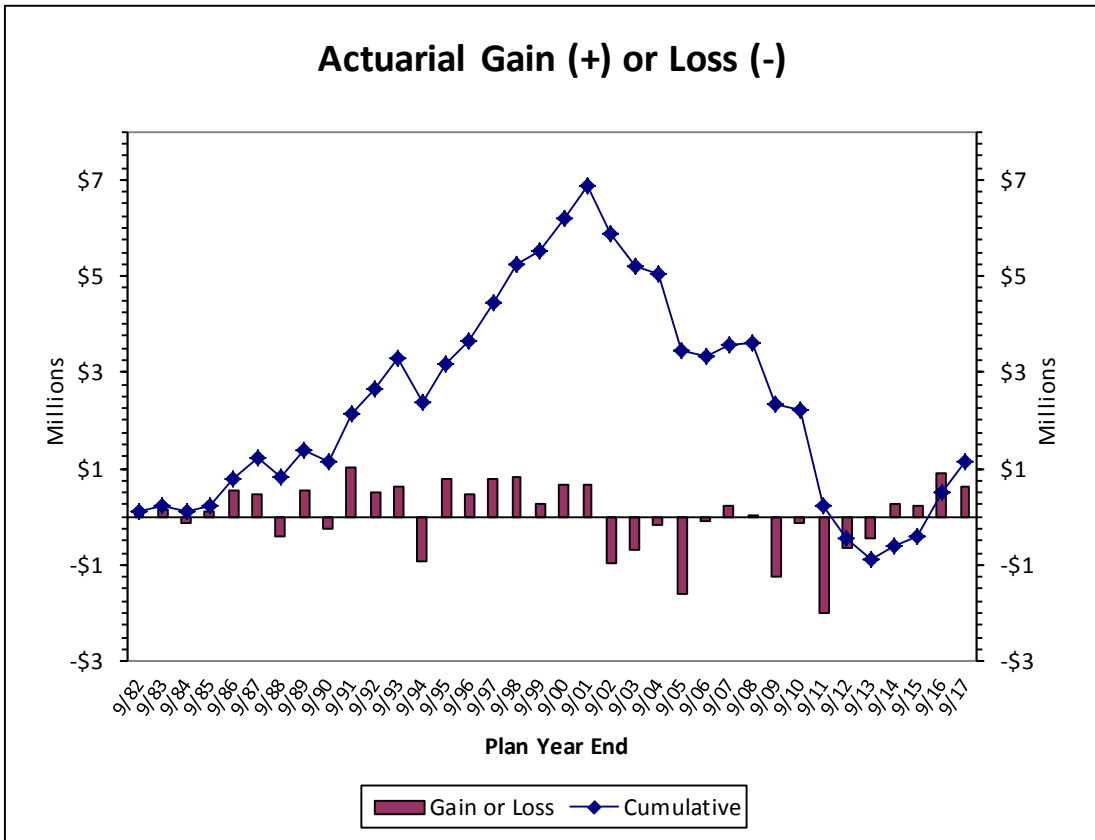
The assumptions used to anticipate mortality, employment turnover, investment income, expenses, salary increases, and other factors have been based on long range trends and expectations. Actual experience can vary from these expectations. The variance is measured by the gain and loss for the period involved. 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 is computed as follows:

| Derivation of the Current UAAL | |
|--|--------------|
| 1. Last Year's UAAL* | \$ 3,101,176 |
| 2. Last Year's Employer Normal Cost* | 458,929 |
| 3. Last Year's Employer/State Contributions & Excess Employee Sharing Contributions | 946,572 |
| 4. Interest at the Assumed Rate on: | |
| a. 1 and 2 for one year | 267,008 |
| b. 3 from dates paid | 60,950 |
| c. a - b | 206,058 |
| 5. This Year's Expected UAAL: 1 + 2 - 3 + 4c | 2,819,591 |
| 6. This Year's Actual UAAL (Before any changes in benefits and/or assumptions) | 2,182,410 |
| 7. Net Actuarial Gain (Loss): (5) - (6) | 637,181 |
| 8. Gain (Loss) due to investments | 703,194 |
| 9. Gain (Loss) due to other sources | (66,013) |
| 10. Change in UAAL due to assumption changes | 1,432,345 |
| 11. This Year's Actual UAAL (After assumption changes) | 3,614,755 |

* From September 25, 2017 Actuarial Impact Statement.

Net actuarial gains in previous years have been as follows:

| Year Ended | Change in Employer Cost Rate | Gain (Loss) |
|------------|------------------------------|-------------|
| 9/30/82 | (0.96) % | \$ 116,839 |
| 9/30/83 | (1.06) | 130,253 |
| 9/30/84 | 1.01 | (133,338) |
| 9/30/85 | (0.86) | 123,277 |
| 9/30/86 | (4.48) | 535,696 |
| 9/30/87 | (3.58) | 467,598 |
| 9/30/88 | 2.72 | (406,082) |
| 9/30/89 | (3.21) | 548,079 |
| 9/30/90 | 1.53 | (247,930) |
| 9/30/91 | (6.61) | 1,012,130 |
| 9/30/92 | (3.93) | 509,906 |
| 9/30/93 | (4.91) | 632,963 |
| 9/30/94 | 6.41 | (909,739) |
| 9/30/95 | (4.92) | 788,804 |
| 9/30/96 | (3.09) | 478,412 |
| 9/30/97 | (4.59) | 786,754 |
| 9/30/98 | (5.11) | 816,496 |
| 9/30/99 | (1.50) | 267,011 |
| 9/30/00 | (3.91) | 667,046 |
| 9/30/01 | (4.12) | 674,533 |
| 9/30/02 | 5.41 | (968,673) |
| 9/30/03 | 3.49 | (674,975) |
| 9/30/04 | 0.97 | (173,041) |
| 9/30/05 | 8.39 | (1,595,352) |
| 9/30/06 | 0.60 | (102,352) |
| 9/30/07 | (1.27) | 226,866 |
| 9/30/08 | (0.17) | 26,333 |
| 9/30/09 | 7.40 | (1,245,631) |
| 9/30/10 | 0.48 | (137,668) |
| 9/30/11 | 7.72 | (1,999,999) |
| 9/30/12 | 2.56 | (650,071) |
| 9/30/13 | 2.17 | (459,569) |
| 9/30/14 | (1.35) | 280,317 |
| 9/30/15 | (1.05) | 222,509 |
| 9/30/16 | (3.49) | 886,593 |
| 9/30/17 | (2.36) | 637,181 |

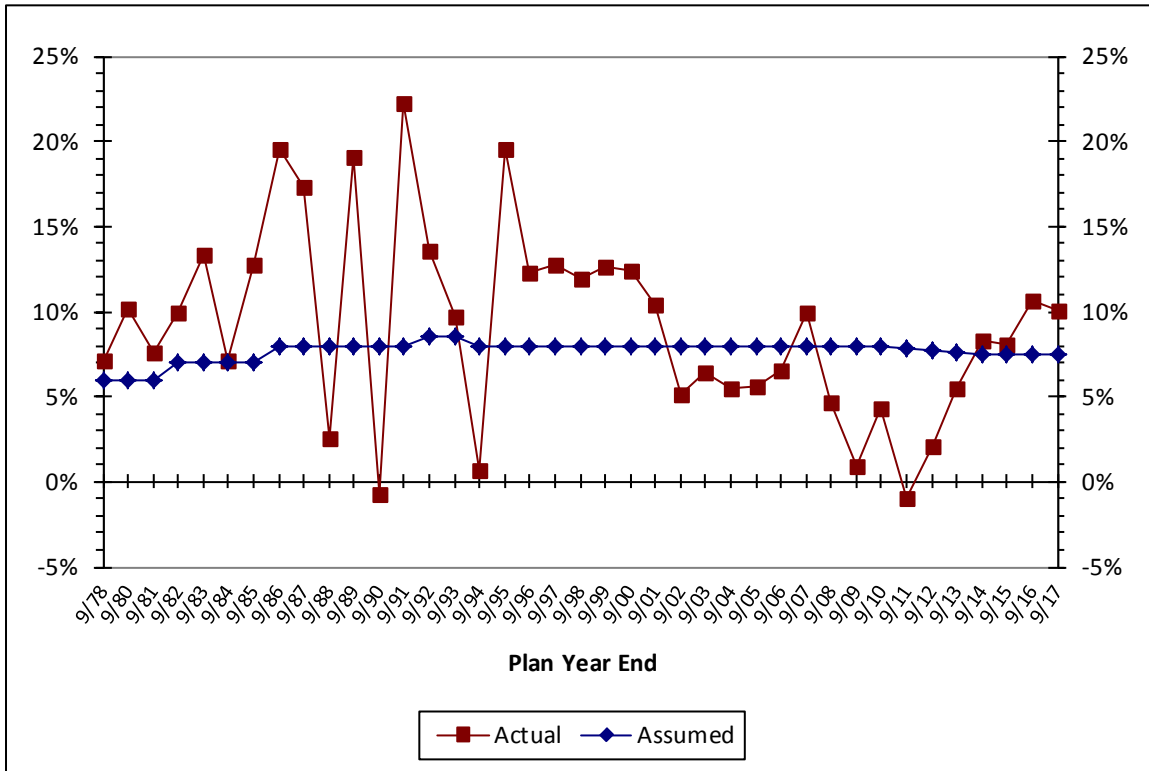


The fund earnings and salary increase assumptions have considerable impact on the cost of the Plan so it is important that they are in line with the actual experience. The following table shows the actual fund earnings and salary increase rates compared to the assumed rates for the last few years:

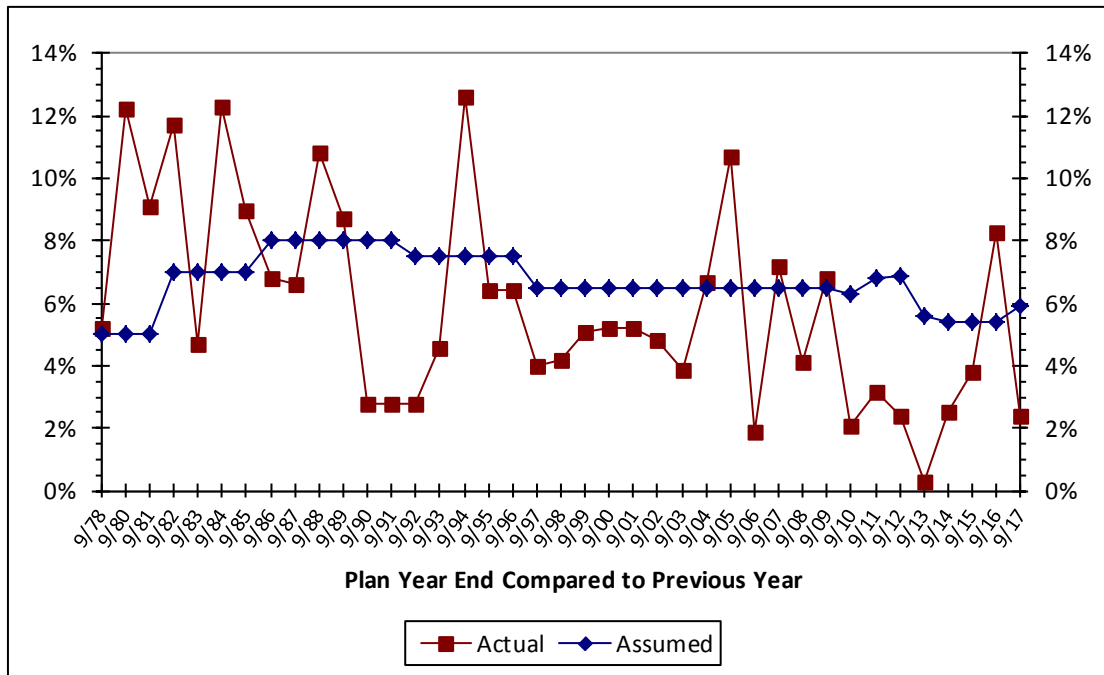
| Year Ending | Investment Return | | Salary Increases | |
|-------------|-------------------|---------|------------------|---------|
| | Actual | Assumed | Actual | Assumed |
| 9/30/1977 | --- | 5.0 % | 4.9 % | 3.5 % |
| 9/30/1978 | 7.1 % | 6.0 | 9.9 | 5.0 |
| 9/30/1979 | --- | 6.0 | 5.2 | 5.0 |
| 9/30/1980 | 10.2 | 6.0 | 12.2 | 5.0 |
| 9/30/1981 | 7.6 | 6.0 | 9.1 | 5.0 |
| 9/30/1982 | 10.0 | 7.0 | 11.7 | 7.0 |
| 9/30/1983 | 13.3 | 7.0 | 4.7 | 7.0 |
| 9/30/1984 | 7.1 | 7.0 | 12.3 | 7.0 |
| 9/30/1985 | 12.8 | 7.0 | 9.0 | 7.0 |
| 9/30/1986 | 19.5 | 8.0 | 6.8 | 8.0 |
| 9/30/1987 | 17.3 | 8.0 | 6.6 | 8.0 |
| 9/30/1988 | 2.6 | 8.0 | 10.8 | 8.0 |
| 9/30/1989 | 19.1 | 8.0 | 8.7 | 8.0 |
| 9/30/1990 | (0.7) | 8.0 | 2.8 | 8.0 |
| 9/30/1991 | 22.3 | 8.0 | 2.8 | 8.0 |
| 9/30/1992 | 13.6 | 8.5 | 2.8 | 7.5 |
| 9/30/1993 | 9.7 | 8.5 | 4.6 | 7.5 |
| 9/30/1994 | 0.7 | 8.0 | 12.6 | 7.5 |
| 9/30/1995 | 19.6 | 8.0 | 6.4 | 7.5 |
| 9/30/1996 | 12.3 | 8.0 | 6.4 | 7.5 |
| 9/30/1997 | 12.7 | 8.0 | 4.0 | 6.5 |
| 9/30/1998 | 11.9 | 8.0 | 4.2 | 6.5 |
| 9/30/1999 | 12.6 | 8.0 | 5.1 | 6.5 |
| 9/30/2000 | 12.4 | 8.0 | 5.2 | 6.5 |
| 9/30/2001 | 10.4 | 8.0 | 5.2 | 6.5 |
| 9/30/2002 | 5.1 | 8.0 | 4.8 | 6.5 |
| 9/30/2003 | 6.4 | 8.0 | 3.9 | 6.5 |
| 9/30/2004 | 5.5 | 8.0 | 6.7 | 6.5 |
| 9/30/2005 | 5.6 | 8.0 | 10.7 | 6.5 |
| 9/30/2006 | 6.5 | 8.0 | 1.9 | 6.5 |
| 9/30/2007 | 9.9 | 8.0 | 7.2 | 6.5 |
| 9/30/2008 | 4.7 | 8.0 | 4.1 | 6.5 |
| 9/30/2009 | 0.9 | 8.0 | 6.8 | 6.5 |
| 9/30/2010 | 4.3 | 7.9 | 2.1 | 6.3 |
| 9/30/2011 | (0.9) | 7.8 | 3.2 | 6.8 |
| 9/30/2012 | 2.1 | 7.7 | 2.4 | 6.9 |
| 9/30/2013 | 5.5 | 7.6 | 0.3 | 5.6 |
| 9/30/2014 | 8.3 | 7.5 | 2.5 | 5.4 |
| 9/30/2015 | 8.1 | 7.5 | 3.8 | 5.4 |
| 9/30/2016 | 10.6 | 7.5 | 8.3 | 5.4 |
| 9/30/2017 | 10.1 | 7.5 | 2.4 | 5.9 |
| Averages | 9.0 % | --- | 5.9 % | --- |

The actual investment return rates shown above are based on the actuarial value of assets. The actual salary increase rates shown above are the increases received by those active members who were included in the actuarial valuations both at the beginning and the end of each year.

History of Investment Return Based on Actuarial Value of Assets



History of Salary Increases



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

| Year Ended | Number Added During Year | | Service & DROP Retirement | | Disability Retirement | | Death | | Terminations | | | | Active Members End of Year |
|----------------|--------------------------|----|---------------------------|----|-----------------------|---|-------|---|--------------|-------|--------|----|----------------------------|
| | A | E | A | E | A | E | A | E | Vested | Other | Totals | | |
| | | | | | | | | | A | A | A | E | |
| 9/30/2005 | 9 | 2 | 1 | 5 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 43 |
| 9/30/2006 | 1 | 3 | 0 | 5 | 0 | 0 | 0 | 0 | 1 | 2 | 3 | 1 | 41 |
| 9/30/2007 | 2 | 2 | 1 | 7 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 41 |
| 9/30/2008 | 1 | 5 | 0 | 9 | 0 | 0 | 0 | 0 | 1 | 4 | 5 | 1 | 37 |
| 9/30/2009 | 2 | 1 | 1 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 38 |
| 9/30/2010 | 5 | 1 | 0 | 8 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 42 |
| 9/30/2011 | 3 | 7 | 7 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 38 |
| 9/30/2012 | 1 | 3 | 2 | 5 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 36 |
| 9/30/2013 | 0 | 5 | 4 | 5 | 0 | 1 | 0 | 0 | 0 | 1 | 1 | 1 | 31 |
| 9/30/2014 | 2 | 4 | 2 | 1 | 0 | 0 | 0 | 0 | 2 | 0 | 2 | 1 | 29 |
| 9/30/2015 | 2 | 2 | 0 | 2 | 0 | 0 | 0 | 0 | 2 | 0 | 2 | 1 | 29 |
| 9/30/2016 | 9 | 3 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 35 |
| 9/30/2017 | 4 | 2 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 37 |
| 9/30/2018 | | | | 1 | | 0 | | 0 | | | | 2 | |
| 13 Yr Totals * | 41 | 40 | 21 | 68 | 0 | 1 | 0 | 0 | 7 | 12 | 19 | 13 | |

* Totals are through current Plan Year only

| HISTORY OF VALUATION RESULTS | | | | | | | | | |
|------------------------------|----------------|------------------|------------------------|-----------------------------------|---------------------------|---------------------|--------------|----------------------|--------------|
| Valuation Date | Number of | | Covered Annual Payroll | Actuarial Accrued Liability (AAL) | Actuarial Value of Assets | Unfunded AAL (UAAL) | Funded Ratio | Employer Normal Cost | |
| | Active Members | Inactive Members | | | | | | Amount | % of Payroll |
| 10/1/91 | 39 | 19 | 1,497,245 | 6,047,914 | 7,351,487 | (1,303,573) | 121.6 % | 64,777 | 4.33 |
| 10/1/92 | 41 | 19 | 1,719,567 | 6,511,956 | 8,371,472 | (1,859,516) | 128.6 | 55,911 | 3.25 |
| 10/1/93 | 41 | 19 | 1,671,539 | 7,439,759 | 9,139,118 | (1,699,359) | 122.8 | 56,559 | 3.38 |
| 10/1/94 | 41 | 19 | 1,861,526 | 8,290,037 | 9,173,332 | (883,295) | 110.7 | 157,101 | 8.44 |
| 10/1/95 | 42 | 22 | 1,928,267 | 9,057,279 | 10,801,762 | (1,744,483) | 119.3 | 96,314 | 4.99 |
| 10/1/96 | 41 | 24 | 1,979,735 | 9,964,792 | 11,781,770 | (1,816,978) | 118.2 | 47,237 | 2.39 |
| 10/1/97 | 40 | 24 | 2,011,862 | 10,678,212 | 13,172,435 | (2,494,223) | 123.4 | (33,900) | (1.69) |
| 10/1/98 | 34 | 30 | 1,694,220 | 11,224,635 | 14,419,701 | (3,195,066) | 128.5 | (24,973) | (1.47) |
| 10/1/99 | 37 | 31 | 1,864,081 | 12,300,196 | 15,694,388 | (3,394,192) | 127.6 | (55,162) | (2.96) |
| 10/1/00 | 34 | 34 | 1,762,503 | 13,050,899 | 16,997,941 | (3,947,042) | 130.2 | (104,810) | (5.95) |
| 10/1/01 | 33 | 35 | 1,784,871 | 13,696,930 | 18,066,919 | (4,369,989) | 131.9 | (177,120) | (9.92) |
| 10/1/02 | 35 | 35 | 1,975,547 | 14,386,889 | 18,220,141 | (3,833,252) | 126.6 | (101,837) | (5.15) |
| 10/1/03 | 38 | 37 | 2,150,827 | 15,064,523 | 18,524,225 | (3,459,702) | 123.0 | (33,300) | (1.55) |
| 10/1/04 | 36 | 38 | 2,129,336 | 16,705,557 | 18,785,109 | (2,079,552) | 112.4 | 111,350 | 5.23 |
| 10/1/05 | 43 | 40 | 2,643,594 | 17,915,014 | 19,124,909 | (1,209,895) | 106.8 | 336,420 | 12.73 |
| 10/1/06 | 41 | 41 | 2,577,762 | 18,856,229 | 19,830,782 | (974,553) | 105.2 | 353,054 | 13.70 |
| 10/1/07 | 41 | 38 | 2,758,044 | 20,247,518 | 21,524,929 | (1,277,411) | 106.3 | 342,014 | 12.40 |
| 10/1/08 | 37 | 38 | 2,603,398 | 21,056,209 | 22,226,151 | (1,169,942) | 105.6 | 319,885 | 12.29 |
| 10/1/09 | 38 | 36 | 2,802,601 | 22,294,846 | 22,168,677 | 126,169 | 99.4 | 568,239 | 20.28 |
| 10/1/10 | 42 | 35 | 3,044,657 | 23,790,041 | 22,837,385 | 952,656 | 96.0 | 637,303 | 20.93 |
| 10/1/11 | 38 | 42 | 2,700,275 | 26,067,780 | 22,377,116 | 3,690,664 | 85.8 | 593,638 | 21.98 |
| 10/1/12 | 36 | 42 | 2,608,415 | 27,041,069 | 22,335,041 | 4,706,028 | 82.6 | 527,423 | 20.22 |
| 10/1/13 | 31 | 45 | 2,173,033 | 27,807,221 | 22,758,500 | 5,048,721 | 81.8 | 448,142 | 20.62 |
| 10/1/14 | 29 | 48 | 2,043,213 | 28,424,890 | 23,784,762 | 4,640,128 | 83.7 | 444,538 | 21.76 |
| 10/1/15 | 29 | 49 | 2,069,404 | 28,986,140 | 24,771,577 | 4,214,563 | 85.5 | 441,484 | 21.33 |
| 10/1/16 | 35 | 49 | 2,491,689 | 29,631,328 | 26,530,152 | 3,101,176 | 89.5 | 458,929 | 18.42 |
| 10/1/17 | 37 | 47 | 2,637,346 | 31,776,159 | 28,161,404 | 3,614,755 | 88.6 | 414,215 | 15.71 |

HISTORY OF REQUIRED AND ACTUAL CONTRIBUTIONS
(Continued on Next Page)

| Valuation Date | End of Year To Which Valuation Applies | Employer Contribution Rate Before Adjustment | Adjusted Employer Contribution Rate | Adjusted Employer Contribution Amount* | Actual Employer Contribution For Year |
|-----------------------|---|---|--|---|--|
| 10/1/76 | 9/30/78 | 13.50% | 13.75% | \$ 144,794 | \$ 142,039 |
| 10/1/77 | 9/30/79 | 12.80 | 13.40 | 141,186 | 141,186 |
| 10/1/78 | 9/30/80 | 13.00 | 13.50 | 93,080 | 93,080 |
| 10/1/79 | 9/30/81 | 13.80 | 13.90 | 97,089 | 97,089 |
| 10/1/80 | 9/30/82 | 14.10 | 14.05 | 106,730 | 106,730 |
| 10/1/81 | 9/30/83 | 15.78 | 14.89 | 120,910 | 120,910 |
| 10/1/82 | 9/30/84 | 24.13 | 23.42 | 207,352 | 207,352 |
| 10/1/83 | 9/30/85 | 21.37 | 22.18 | 204,744 | 212,717 |
| 10/1/84 | 9/30/86 | 23.31 | 23.15 | 236,364 | 233,234 |
| 10/1/85 | 9/30/87 | 14.92 | 14.46 | 167,401 | 161,036 |
| 10/1/86 | 9/30/88 | 7.43 | 7.43 | 83,441 | 79,284 |
| 10/1/87 | 9/30/89 | 3.18 | 3.18 | 39,207 | 46,864 |
| 10/1/88 | 9/30/90 | 7.12 | 7.12 | 96,039 | 93,372 |
| 10/1/89 | 9/30/91 | 4.23 | 5.12 | 77,374 | 81,388 |
| 10/1/90 | 9/30/92 | 5.72 | 6.47 | 97,870 | 97,870 |

*Equals the Adjusted Rate multiplied by the Covered Payroll.

| HISTORY OF REQUIRED AND ACTUAL CONTRIBUTIONS | | | | | | | | | | |
|--|-------------------------------|------------------------|--------------|-----------------|--------------|---------------|--------------|----------------------|-----------|-----------|
| Valuation | Applies to Fiscal Year Ending | Required Contributions | | | | | | Actual Contributions | | |
| | | Employer & State* | | Estimated State | | Net Employer* | | Employer | State | Total |
| | | Amount | % of Payroll | Amount | % of Payroll | Amount | % of Payroll | | | |
| 10/1/91 | 9/30/93 | \$ 90,072 | 6.02 % | \$ 43,403 | 2.90 % | \$ 46,669 | 3.12 % | \$ 53,674 | \$ 36,398 | \$ 90,072 |
| 10/1/92 | 9/30/94 | 102,762 | 5.98 | 35,776 | 2.08 | 66,986 | 3.90 | 68,093 | 41,120 | 109,213 |
| 10/1/93 | 9/30/95 | 104,551 | 6.25 | 36,398 | 2.18 | 68,153 | 4.08 | 84,900 | 39,996 | 124,896 |
| 10/1/94 | 9/30/96 | 187,360 | 10.06 | 39,131 | 2.10 | 148,229 | 7.96 | 148,229 | 46,201 | 194,430 |
| 10/1/95 | 9/30/97 | 131,185 | 6.80 | 39,996 | 2.07 | 91,189 | 4.73 | 97,041 | 50,727 | 147,768 |
| 10/1/96 | 9/30/98 | 108,756 | 5.49 | 46,201 | 2.33 | 62,555 | 3.16 | 60,695 | 49,427 | 110,122 |
| 10/1/97 | 9/30/99 | 66,210 | 3.29 | 50,727 | 2.52 | 15,483 | 0.77 | 19,343 | 46,867 | 66,210 |
| 10/1/98 | 9/30/00 | 55,842 | 3.29 | 49,427 | 2.91 | 6,415 | 0.38 | 14,205 | 41,901 | 56,106 |
| 10/1/99 | 9/30/01 | 49,703 | 2.67 | 46,867 | 2.52 | 2,836 | 0.15 | 13,862 | 44,271 | 58,133 |
| 10/1/00 | 9/30/02 | 43,649 | 2.48 | 41,901 | 2.38 | 1,748 | 0.10 | 1,872 | 49,427 | 51,299 |
| 10/1/01 | 9/30/03 | 44,346 | 2.48 | 44,271 | 2.48 | 75 | 0.00 | 75 | 49,427 | 49,502 |
| 10/1/02 | 9/30/04 | 51,555 | 2.61 | 49,427 | 2.50 | 2,128 | 0.11 | 4,345 | 49,427 | 53,772 |
| 10/1/03 | 9/30/05 | 61,673 | 2.87 | 49,427 | 2.30 | 12,246 | 0.57 | 13,930 | 49,427 | 63,357 |
| 10/1/04 | 9/30/06 | 144,756 | 6.80 | 49,427 | 2.32 | 95,329 | 4.48 | 112,800 | 49,427 | 162,227 |
| 10/1/05 | 9/30/07 | 337,176 | 12.75 | 49,427 | 1.87 | 287,749 | 10.88 | 294,086 | 49,427 | 343,513 |
| 10/1/06 | 9/30/08 | 343,008 | 13.31 | 49,427 | 1.92 | 293,581 | 11.39 | 305,103 | 49,427 | 354,530 |
| 10/1/07 | 9/30/09 | 344,208 | 12.48 | 49,427 | 1.79 | 294,781 | 10.69 | 302,448 | 49,427 | 351,875 |
| 10/1/08 | 9/30/10 | 325,216 | 12.49 | 49,427 | 1.90 | 275,789 | 10.59 | 307,956 | 49,427 | 357,383 |
| 10/1/09 | 9/30/11 | 475,428 | 17.06 | 49,427 | 1.76 | 426,001 | 15.30 | 426,001 | 49,427 | 475,428 |
| 10/1/10 | 9/30/12 | 566,884 | 18.62 | 49,427 | 1.62 | 517,457 | 17.00 | 539,341 | 49,427 | 588,768 |
| 10/1/11 | 9/30/13 | 662,619 | 24.54 | 49,427 | 1.83 | 613,192 | 22.71 | 613,192 | 49,427 | 662,619 |
| 10/1/12 | 9/30/14 | 650,366 | 24.93 | 49,427 | 1.89 | 600,939 | 23.04 | 600,939 | 49,427 | 650,366 |
| 10/1/13 | 9/30/15 | 712,370 | 32.78 | 49,427 | 2.27 | 662,943 | 30.51 | 663,337 | 49,427 | 712,764 |
| 10/1/14 | 9/30/16 | 752,596 | 36.83 | 49,427 | 2.42 | 703,169 | 34.41 | 703,169 | 49,427 | 752,596 |
| 10/1/15 | 9/30/17 | 728,190 | 35.19 | 49,427 | 2.39 | 678,763 | 32.80 | 678,763 | 49,427 | 728,190 |
| 10/1/16 | 9/30/18 | 746,623 | 29.97 | 126,539 | 5.08 | 620,084 | 24.89 | --- | --- | --- |
| 10/1/17 | 9/30/19 | 717,355 | 27.20 | 192,169 | 7.29 | 525,186 | 19.91 | --- | --- | --- |

*Reflects assumed City contribution timing of October 1st beginning after the fiscal year ending September 30, 2013.

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 an **Individual Entry-Age Actuarial Cost Method** having the following characteristics:

- (i) the annual normal cost for each individual active member, payable from the date of employment to the date of retirement, is sufficient to accumulate the value of the member's benefit at the time of retirement;
- (ii) each annual normal cost is a constant percentage of the member's year by year projected covered pay.

Actuarial gains/(losses), as they occur, reduce (increase) the Unfunded Actuarial Accrued Liability.

Financing of Unfunded Actuarial Accrued Liabilities - Unfunded Actuarial Accrued Liabilities (full funding credit if assets exceed liabilities) were amortized by level (principal & interest combined) dollar contributions over a reasonable period of future years.

Actuarial Value of Assets - The Actuarial Value of Assets phases in the difference between the actual and expected investment earnings over a period of 5 years. 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 7.0% per year, compounded annually (net after investment expenses). This rate was 7.5% in the previous valuation.

The **Price 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 increases in the prices of goods and services. This rate was 3.0% in the previous valuation.

The assumed **real rate of return** over inflation is defined to be the portion of total investment return that is more than the assumed inflation rate. Considering other economic assumptions, the 7.0% investment return rate translates to an assumed real rate of return over inflation of 4.5%.

The assumed rates of salary increase for individual active members are shown below. This assumption is used to project a member’s current salary to the salaries upon which benefits will be based. Part of the assumption is for productivity, merit and/or seniority increase, and 2.5% recognizes inflation. This assumption was changed this year (based on the results of a 9-year experience study) from the service-based rates used in the prior valuation, which varied from 4.0% to 10.0%.

| Years of Service at Valuation Date | Salary Increase Rates | | |
|------------------------------------|-----------------------|-----------|----------------|
| | % Increase in Salary | | |
| | Merit and Seniority | Inflation | Total Increase |
| 0 - 1 | 7.00% | 2.5% | 9.50% |
| 2 - 6 | 5.00 | 2.5 | 7.50 |
| 7 - 9 | 2.00 | 2.5 | 4.50 |
| 10 - 19 | 0.75 | 2.5 | 3.25 |
| 20 + | 1.75 | 2.5 | 4.25 |

Demographic Assumptions

The mortality table is the RP-2000 Combined Healthy Participant Mortality Tables (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 Statutes Chapter 112.63.

FRS Healthy Post-Retirement Mortality for Special Risk Class Members

| Sample Attained Ages (in 2017) | Probability of Dying Next Year | | Future Life Expectancy (years) | |
|--------------------------------|--------------------------------|--------|--------------------------------|-------|
| | Men | Women | Men | Women |
| 50 | 0.54 % | 0.23 % | 33.90 | 38.31 |
| 55 | 0.67 | 0.32 | 29.26 | 33.29 |
| 60 | 0.90 | 0.47 | 24.68 | 28.39 |
| 65 | 1.31 | 0.74 | 20.28 | 23.65 |
| 70 | 2.01 | 1.24 | 16.15 | 19.19 |
| 75 | 3.26 | 2.09 | 12.43 | 15.11 |
| 80 | 5.37 | 3.51 | 9.23 | 11.49 |

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

FRS Healthy Pre-Retirement Mortality for Special Risk Class Members

| Sample Attained Ages (in 2017) | Probability of Dying Next Year | | Future Life Expectancy (years) | |
|--------------------------------------|-----------------------------------|--------|-----------------------------------|-------|
| | Men | Women | Men | Women |
| 50 | 0.23 % | 0.15 % | 34.89 | 38.66 |
| 55 | 0.39 | 0.24 | 29.77 | 33.51 |
| 60 | 0.71 | 0.39 | 24.89 | 28.49 |
| 65 | 1.23 | 0.70 | 20.33 | 23.67 |
| 70 | 2.01 | 1.24 | 16.15 | 19.19 |
| 75 | 3.26 | 2.09 | 12.43 | 15.11 |
| 80 | 5.37 | 3.51 | 9.23 | 11.49 |

This assumption is used to measure the probabilities of active members dying prior to retirement (66.7% of deaths are assumed to be service-connected).

For disabled retirees, the mortality table used was the 60% of the RP-2000 for Disabled Annuitants with ages set back 4 years for males and set forward 2 years for females, and 40% of the RP-2000 Annuitant Mortality Table with a White Collar adjustment with no age setback, both 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 Statutes Chapter 112.63.

FRS Disabled Mortality for Special Risk Class Members

| Sample Attained Ages (in 2017) | Probability of Dying Next Year | | Future Life Expectancy (years) | |
|--------------------------------------|-----------------------------------|--------|-----------------------------------|-------|
| | 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 |

The rates of retirement used to measure the probability of eligible members retiring are as shown below.

For employees hired on or after October 12, 2014 the rates remain unchanged from the previous valuation:

| Number of Years After First Eligibility for Normal Retirement | Probability of Normal Retirement |
|--|---|
| 0 | 80 % |
| 1 | 40 |
| 2 | 40 |
| 3 | 40 |
| 4 | 40 |
| 5+ | 100 |

For employees hired before October 12, 2014, the retirement rates were changed this year (based on the results of a 9-year experience study) from the rates shown above to the following:

| Number of Years After First Eligibility for Normal Retirement | Probability of Normal Retirement |
|--|---|
| 0 | 50 % |
| 1 | 25 |
| 2 | 25 |
| 3 | 50 |
| 4 | 50 |
| 5 | 50 |
| 6 | 50 |
| 7+ | 100 |

The rate of retirement is 3% for each year of eligibility for early retirement.

Rates of separation from active membership are 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 separating from employment for reasons other than death, disability or retirement. This assumption was changed this year (based on the results of a 9-year experience study) from the age-based rates used in the prior valuation, which varied from 0.2% to 6%.

| Years of Service | % of Active Members Separating Within Next Year |
|-----------------------------|--|
| 0 | 25.0 % |
| 1 - 3 | 7.0 |
| 4 - 7 | 4.0 |
| 8+ | 2.5 |

Rates of disability among active members are as shown below. These are the same rates currently in use for Special Risk Class members of the Florida Retirement System (FRS). This assumption was changed this year (based on the results of a 9-year experience study) from the age-based rates used in the prior valuation, which varied from 0.14% to 1.55%.

| Sample Ages | % Becoming Disabled within Next Year | | | |
|----------------|---|---------|-------------------|---------|
| | Non-Service Connected | | Service Connected | |
| | Males | Females | Males | Females |
| 20 | 0.020 % | 0.000 % | 0.010 % | 0.000 % |
| 25 | 0.020 | 0.020 | 0.010 | 0.004 |
| 30 | 0.030 | 0.020 | 0.010 | 0.004 |
| 35 | 0.030 | 0.030 | 0.010 | 0.004 |
| 40 | 0.030 | 0.030 | 0.020 | 0.040 |
| 45 | 0.030 | 0.060 | 0.060 | 0.040 |
| 50 | 0.080 | 0.110 | 0.140 | 0.050 |
| 55 | 0.050 | 0.110 | 0.100 | 0.080 |

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 average of the expenses over the previous 2 years. Assumed administrative expenses are added to the Normal Cost. |
| Benefit Service | Exact fractional service (years and completed months) is used to determine the amount of benefit payable. |
| Decrement Operation | Disability and mortality decrements operate during retirement eligibility. |
| Decrement Timing | Decrement 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 on the date the decrement is assumed to occur. |
| Forfeitures | For vested separations from service, it is assumed that 0% of members separating will withdraw their contributions and forfeit an employer financed benefit. It was further assumed that the liability at termination is the greater of the vested deferred benefit (if any) or the member's accumulated contributions. |
| Incidence of Contributions | Employer contributions are assumed to be made in equal installments at the end of each pay period. Member contributions are assumed to be received continuously throughout the year based upon the computed percent of payroll shown in this report, and the actual payroll payable at the time contributions are made. |
| 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 life annuity is the normal form of benefit. |
| Pay Increase Timing | Middle of fiscal year. This is equivalent to assuming that reported pays represent amounts paid to members during the year ended on the valuation date. |
| Service Credit Accruals | It is assumed that members accrue one year of service credit per year. |

GLOSSARY OF TERMS

| | |
|---|---|
| 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. |
| 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. |
| 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 ADC 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. |
| 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 actual experience and that expected based upon a set of Actuarial Assumptions, during the period between two actuarial valuations. To the extent that actual experience differs from that assumed, Unfunded Actuarial Accrued Liabilities emerge which may be larger or smaller than projected. Gains are due to favorable experience, e.g., the assets earn more than projected, salaries do not increase as fast as assumed, members retire later than assumed, etc. Favorable experience means actual results produce actuarial liabilities not as large as projected by the actuarial assumptions. On the other hand, losses are the result of unfavorable experience, i.e., actual results that produce Unfunded Actuarial Accrued Liabilities which are larger than projected. |

| | |
|---|---|
| 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 at Market Value

| Item | September 30 | |
|---|----------------------|-----------------------|
| | 2017 | 2016 |
| A. Cash and Cash Equivalents (Operating Cash) | \$ - | \$ - |
| B. Receivables | | |
| 1. Member Contributions | \$ - | \$ - |
| 2. Employer Contributions | - | - |
| 3. State Contribution | 120,798 | - |
| 4. Investment Income and Other Receivables | 67,341 | 171,749 |
| 5. Total Receivables | <u>\$ 188,139</u> | <u>\$ 171,749</u> |
| C. Investments | | |
| 1. Short Term Investments | \$ 662,599 | \$ 635,052 |
| 2. Domestic Equities | 19,276,217 | 17,227,723 |
| 3. International Equities | - | - |
| 4. Domestic Fixed Income | 7,886,931 | 8,556,560 |
| 5. International Fixed Income | - | - |
| 6. Real Estate | 2,358,783 | 2,218,131 |
| 7. Private Equity | - | - |
| 8. Total Investments | <u>\$ 30,184,530</u> | <u>\$ 28,637,466</u> |
| D. Liabilities | | |
| 1. Benefits Payable | \$ - | \$ - |
| 2. Accrued Expenses and Other Payables | (27,724) | (32,540) |
| 3. Prepaid Contribution | - | - |
| 4. Due to Broker | (11,952) | (36,535) |
| 5. Total Liabilities | <u>\$ (39,676)</u> | <u>\$ (69,075)</u> |
| E. Total Market Value of Assets Available for Benefits | \$ 30,332,993 | \$ 28,740,140 |
| F. Reserves | | |
| 1. DROP Accounts | \$ (622,983) | \$ (1,246,884) |
| 2. State Contribution Reserve | (77,112) | (71,527) |
| 3. Total Reserves | <u>\$ (700,095)</u> | <u>\$ (1,318,411)</u> |
| G. Market Value Net of Reserves | \$ 29,632,898 | \$ 27,421,729 |
| H. Allocation of Investments (excluding unsettled trades) | | |
| 1. Short Term Investments | 2.2% | 2.1% |
| 2. Domestic Equities | 63.9% | 60.2% |
| 3. International Equities | 0.0% | 0.0% |
| 4. Domestic Fixed Income | 26.1% | 29.9% |
| 5. International Fixed Income | 0.0% | 0.0% |
| 6. Real Estate | 7.8% | 7.8% |
| 7. Private Equity | 0.0% | 0.0% |
| 8. Total Investments | <u>100.0%</u> | <u>100.0%</u> |

Reconciliation of Plan Assets

| Item | September 30 | |
|--|---------------------|---------------------|
| | 2017 | 2016 |
| A. Market Value of Assets at Beginning of Year | \$ 28,740,140 | \$ 27,671,000 |
| B. Revenues and Expenditures | | |
| 1. Contributions | | |
| a. Employee Contributions | \$ 381,489 | \$ 353,736 |
| b. Employer Contributions | 678,763 | 703,169 |
| c. State Contribution | 120,798 | 120,954 |
| d. Purchased Service Credit | - | - |
| e. Total | <u>\$ 1,181,050</u> | <u>\$ 1,177,859</u> |
| 2. Investment Income | | |
| a. Interest, Dividends, and Other Income | \$ 627,148 | \$ 653,163 |
| b. Net Realized/Unrealized Gains/(Losses) | 2,892,670 | 2,245,513 |
| c. Investment Expenses | <u>(187,829)</u> | <u>(145,664)</u> |
| d. Net Investment Income | \$ 3,331,989 | \$ 2,753,012 |
| 3. Benefits and Refunds | | |
| a. Regular Monthly Benefits | \$ (1,714,260) | \$ (1,512,614) |
| b. Refunds | (103,048) | (9,940) |
| c. Lump Sum Benefits Paid | - | - |
| d. DROP Distributions | <u>(1,026,201)</u> | <u>(1,224,735)</u> |
| e. Total | \$ (2,843,509) | \$ (2,747,289) |
| 4. Administrative and Miscellaneous Expenses | \$ (76,677) | \$ (114,442) |
| 5. Transfers | \$ - | \$ - |
| C. Market Value of Assets at End of Year | \$ 30,332,993 | \$ 28,740,140 |
| D. Reserves | | |
| 1. DROP Accounts | \$ (622,983) | \$ (1,246,884) |
| 2. State Contribution Reserve | <u>(77,112)</u> | <u>(71,527)</u> |
| 3. Total Reserves | \$ (700,095) | \$ (1,318,411) |
| E. Market Value Net of Reserves | \$ 29,632,898 | \$ 27,421,729 |

Development of Actuarial Value of Assets

| Valuation Date – September 30 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
|---|---------------|---------------|------------|------------|------------|------------|
| A. Actuarial Value of Assets Beginning of Year | \$ 26,750,057 | \$ 27,848,563 | | | | |
| B. Market Value End of Year | 28,740,140 | 30,332,993 | | | | |
| C. Market Value Beginning of Year | 27,671,000 | 28,740,140 | | | | |
| D. Non-Investment/Administrative Net Cash Flow | (1,683,872) | (1,739,136) | | | | |
| E. Investment Income | | | | | | |
| E1. Actual Market Total: B-C-D | 2,753,012 | 3,331,989 | | | | |
| E2. Assumed Rate of Return | 7.50% | 7.50% | 7.00% | 7.00% | 7.00% | 7.00% |
| E3. Assumed Amount of Return | 1,969,478 | 2,048,878 | | | | |
| E4. Amount Subject to Phase-In: E1–E3 | 783,534 | 1,283,111 | | | | |
| F. Phased-In Recognition of Investment Income | | | | | | |
| F1. Current Year: 0.2 x E4 | 156,707 | 256,622 | | | | |
| F2. First Prior Year | (128,755) | 156,707 | \$ 256,622 | | | |
| F3. Second Prior Year | 232,392 | (128,755) | 156,707 | \$ 256,622 | | |
| F4. Third Prior Year | 186,228 | 232,392 | (128,755) | 156,707 | \$ 256,622 | |
| F5. Fourth Prior Year | 366,328 | 186,228 | 232,396 | (128,756) | 156,706 | \$ 256,623 |
| F6. Total Phase-Ins | 812,900 | 703,194 | 516,970 | 284,573 | 413,328 | 256,623 |
| G. Actuarial Value of Assets End of Year | | | | | | |
| G1. Preliminary Actuarial Value of Assets End of Year: A+D+E3+F6 | \$ 27,848,563 | \$ 28,861,499 | | | | |
| G2. Upper Corridor Limit: 120%*B | 34,488,168 | 36,399,592 | | | | |
| G3. Lower Corridor Limit: 80%*B | 22,992,112 | 24,266,394 | | | | |
| G4. Actuarial Value of Assets End of Year | 27,848,563 | 28,861,499 | | | | |
| G5. DROP Accounts | (1,246,884) | (622,983) | | | | |
| G6. State Contribution Reserve | (71,527) | (77,112) | | | | |
| G7. Final Actuarial Value of Assets End of Year | 26,530,152 | 28,161,404 | | | | |
| H. Difference between Market & Actuarial Value of Assets | 891,577 | 1,471,494 | | | | |
| I. Actuarial Rate of Return | 10.60% | 10.07% | | | | |
| J. Market Value Rate of Return | 10.13% | 11.81% | | | | |
| K. Ratio of Actuarial Value of Assets to Market Value | 96.90% | 95.15% | | | | |

Reconciliation of DROP Accounts

| Year Ended 9/30 | Balance at Beginning of Year | Adjustment to DROP Account | Credits | Interest | Distributions | Balance at End of Year |
|------------------------|-------------------------------------|-----------------------------------|----------------|-----------------|----------------------|-------------------------------|
| 2010 | \$ - | \$ - | \$ 66,019 | \$ 2,245 | \$ - | \$ 68,264 |
| 2011 | 68,264 | - | 160,403 | (12,212) | (83,472) | 132,983 |
| 2012 | 132,983 | - | 295,363 | 44,469 | - | 472,815 |
| 2013 | 472,815 | - | 736,302 | 93,784 | - | 1,302,901 |
| 2014 | 1,302,901 | - | 737,613 | 170,310 | (255,624) | 1,955,200 |
| 2015 | 1,955,200 | (5,366) | 705,639 | 97,070 | (845,401) | 1,907,142 |
| 2016 | 1,907,142 | - | 406,279 | 158,198 | (1,224,735) | 1,246,884 |
| 2017 | 1,246,884 | - | 296,708 | 105,592 | (1,026,201) | 622,983 |

| Year Ended September 30th | Investment Rate of Return | |
|------------------------------|---------------------------|-----------------|
| | Market Value | Actuarial Value |
| 1978 | 4.9 % | 7.1 % |
| 1979 | 5.8 | --- |
| 1980 | 5.7 | 10.2 |
| 1981 | 6.2 | 7.6 |
| 1982 | 19.0 | 10.0 |
| 1983 | 14.4 | 13.3 |
| 1984 | 5.7 | 7.1 |
| 1985 | 16.8 | 12.8 |
| 1986 | 23.3 | 19.5 |
| 1987 | 11.5 | 17.3 |
| 1988 | 4.0 | 2.6 |
| 1989 | 19.1 | 19.1 |
| 1990 | (0.7) | (0.7) |
| 1991 | 22.3 | 22.3 |
| 1992 | 13.6 | 13.6 |
| 1993 | 9.7 | 9.7 |
| 1994 | 0.7 | 0.7 |
| 1995 | 19.6 | 19.6 |
| 1996 | 12.3 | 12.3 |
| 1997 | 28.2 | 12.7 |
| 1998 | 5.9 | 11.9 |
| 1999 | 12.8 | 12.6 |
| 2000 | 8.7 | 12.4 |
| 2001 | 1.9 | 10.4 |
| 2002 | (3.8) | 5.1 |
| 2003 | 15.3 | 6.4 |
| 2004 | 8.9 | 5.5 |
| 2005 | 9.2 | 5.6 |
| 2006 | 6.9 | 6.5 |
| 2007 | 13.5 | 9.9 |
| 2008 | (12.7) | 4.7 |
| 2009 | (2.6) | 0.9 |
| 2010 | 7.5 | 4.3 |
| 2011 | (3.6) | (0.9) |
| 2012 | 19.0 | 2.1 |
| 2013 | 12.0 | 5.5 |
| 2014 | 12.0 | 8.3 |
| 2015 | 4.6 | 8.1 |
| 2016 | 10.1 | 10.6 |
| 2017 | 11.8 | 10.1 |
| Average Returns: | | |
| Last 5 Years | 10.1 % | 8.5 % |
| Last 10 Years | 5.4 % | 5.3 % |
| All Years | 9.2 % | 9.0 % |

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.

SECTION D

FINANCIAL ACCOUNTING INFORMATION

FASB NO. 35 INFORMATION

| A. Valuation Date | October 1, 2017 | October 1, 2016 |
|---|--------------------|--------------------|
| B. Actuarial Present Value of Accumulated Plan Benefits | | |
| 1. Vested Benefits | | |
| a. Members Currently Receiving Payments | \$ 23,465,895 | \$ 22,122,399 |
| b. Terminated Vested Members | 515,729 | 447,641 |
| c. Other Members | 6,860,725 | 6,557,151 |
| d. Total | <u>30,842,349</u> | <u>29,127,191</u> |
| 2. Non-Vested Benefits | 2,551 | 348,508 |
| 3. Total Actuarial Present Value of Accumulated Plan Benefits: 1d + 2 | 30,844,900 | 29,475,699 |
| 4. Accumulated Contributions of Active Members | 3,002,989 | 2,716,252 |
| C. Changes in the Actuarial Present Value of Accumulated Plan Benefits | | |
| 1. Total Value at Beginning of Year | 29,475,699 | 28,720,128 |
| 2. Increase (Decrease) During the Period Attributable to: | | |
| a. Plan Amendment | 0 | 0 |
| b. Change in Actuarial Assumptions | 971,954 | 9,161 |
| c. Latest Member Data, Benefits Accumulated and Decrease in the Discount Period | 2,511,263 | 2,675,243 |
| d. Benefits Paid (including DROP credits) | <u>(2,114,016)</u> | <u>(1,928,833)</u> |
| e. Net Increase | 1,369,201 | 755,571 |
| 3. Total Value at End of Period | 30,844,900 | 29,475,699 |
| D. Market Value of Assets | 29,632,898 | 27,421,729 |
| E. Funded Ratio: D/C3 | 96.1% | 93.0% |
| F. Actuarial Assumptions - See 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, | 2018* | 2017 | 2016 |
|--|---------------------|---------------------|---------------------|
| Total Pension Liability | | | |
| Service Cost | \$ 590,707 | \$ 590,908 | \$ 517,936 |
| Interest | 2,286,864 | 2,262,208 | 2,265,414 |
| Benefit Changes | - | - | - |
| Difference between actual & expected experience | 110,907 | (56,808) | (103,859) |
| Assumption Changes | 1,342,516 | (11,268) | - |
| Benefit Payments | (2,064,115) | (2,740,461) | (2,737,349) |
| Refunds | (15,750) | (103,048) | (9,940) |
| Other (adjustments to Excess State Contribution Reserve) | (5,741) | 5,585 | 189 |
| Net Change in Total Pension Liability | 2,245,388 | (52,884) | (67,609) |
| Total Pension Liability - Beginning | 30,940,740 | 30,993,624 | 31,061,233 |
| Total Pension Liability - Ending (a) | \$33,186,128 | \$30,940,740 | \$30,993,624 |
| Plan Fiduciary Net Position | | | |
| Contributions – Employer (from city) | \$ 620,084 | \$ 678,763 | \$ 703,169 |
| Contributions – Employer (from state) | 120,798 | 120,798 | 120,954 |
| Contributions – Non-Employer contributing entity | - | - | - |
| Contributions – Member (including buyback contributions) | 329,668 | 381,489 | 353,736 |
| Net Investment Income | 2,102,114 | 3,331,989 | 2,753,012 |
| Benefit Payments | (2,064,115) | (2,740,461) | (2,737,349) |
| Refunds | (15,750) | (103,048) | (9,940) |
| Administrative Expense | (95,560) | (76,677) | (114,442) |
| Other | - | - | - |
| Net Change in Plan Fiduciary Net Position | 997,239 | 1,592,853 | 1,069,140 |
| Plan Fiduciary Net Position - Beginning | 30,332,993 | 28,740,140 | 27,671,000 |
| Plan Fiduciary Net Position - Ending (b) | \$31,330,232 | \$30,332,993 | \$28,740,140 |
| Net Pension Liability - Ending (a) - (b) | 1,855,896 | 607,747 | 2,253,484 |
| Plan Fiduciary Net Position as a Percentage | | | |
| of Total Pension Liability | 94.41 % | 98.04 % | 92.73 % |
| Covered Payroll | \$ 2,637,346 | \$ 2,543,260 | \$ 2,358,240 |
| Net Pension Liability as a Percentage | | | |
| of Covered Payroll | 70.37 % | 23.90 % | 95.56 % |

* These figures are estimates only. Actual figures will be provided after the end of the fiscal year. Note that only three years are shown here for summary purposes. The actual September 30, 2018 GASB 67 disclosure report will include all years (up to 10) beginning with the first year GASB 67 was implemented (fiscal year 2014).

SCHEDULE OF THE EMPLOYER'S NET PENSION LIABILITY

GASB Statement No. 67

| FY Ending September 30, | Total Pension Liability | Plan Fiduciary Net Position | Net Pension Liability | Plan Fiduciary Net Position as a % of Total Pension Liability | Covered Payroll | Net Pension Liability as a % of Covered Payroll |
|----------------------------|-------------------------------|--------------------------------|--------------------------|---|--------------------|---|
| 2014 | \$ 30,662,066 | \$ 27,625,271 | \$ 3,036,795 | 90.10% | \$ 2,111,573 | 143.82% |
| 2015 | 31,061,233 | 27,671,000 | 3,390,233 | 89.09% | 1,995,510 | 169.89% |
| 2016 | 30,993,624 | 28,740,140 | 2,253,484 | 92.73% | 2,358,240 | 95.56% |
| 2017 | 30,940,740 | 30,332,993 | 607,747 | 98.04% | 2,543,260 | 23.90% |
| 2018* | 33,186,128 | 31,330,232 | 1,855,896 | 94.41% | 2,637,346 | 70.37% |

* These figures are estimates only. Actual figures will be provided after the end of the fiscal year.

NOTES TO SCHEDULE OF THE EMPLOYER'S NET PENSION LIABILITY

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 | 3.25% to 9.50% depending on service, including inflation |
| Investment Rate of Return | 7.00% |
| Retirement Age | Experience-based table of rates that are specific to the type of eligibility condition |
| Mortality | RP-2000 Combined Healthy Participant Mortality Table (for pre-retirement mortality) and the RP-2000 Mortality Table for Annuitants (for postretirement 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 Statutes Chapter 112.63. |

Other Information:

Notes See Discussion of Valuation Results on page 1.

SCHEDULE OF CONTRIBUTIONS GASB Statement No. 67

| FY Ending September 30, | Actuarially Determined Contribution | Actual Contribution | Contribution Deficiency (Excess) | Covered Payroll | Actual Contribution as a % of Covered Payroll |
|----------------------------|---|------------------------|--|--------------------|---|
| 2014 | \$ 650,366 | \$ 682,583 | \$ (32,217) | \$ 2,111,573 | 32.33% |
| 2015 | 712,370 | 680,547 | 31,823 * | 1,995,510 | 34.10% |
| 2016 | 752,596 | 752,596 | - | 2,358,240 | 31.91% |
| 2017 | 728,190 | 728,190 | - | 2,543,260 | 28.63% |
| 2018** | 746,623 | 746,623 | - | 2,637,346 | 28.31% |

*Note: A prepaid contribution of \$32,217 was established as of September 30, 2014 resulting from the employer contribution overpayment received during fiscal year 2014. This prepaid contribution was utilized during fiscal year 2015 to cover a portion of the actuarially determined contribution for the year.

**** These figures are estimates only. Actual figures will be provided after the end of the fiscal year.**

NOTES TO SCHEDULE OF CONTRIBUTIONS

GASB Statement No. 67

Valuation Date: October 1, 2016
Notes Actuarially determined contribution rates are calculated as of the October 1st 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 | Entry Age Normal |
| Amortization Method | Level Dollar, Closed |
| Remaining Amortization Period | 17 years (single equivalent period) |
| Asset Valuation Method | 5-year smoothed market |
| Inflation | 3.0% |
| Salary Increases | 4.0% to 10.0% depending on service, including inflation |
| Investment Rate of Return | 7.50% |
| Retirement Age | Experience-based table of rates that are specific to the type of eligibility condition |
| Mortality | RP-2000 Combined Healthy Participant Mortality Table (for pre-retirement mortality) and the RP-2000 Mortality Table for Annuitants (for postretirement 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 Statutes Chapter 112.63. |

Other Information:

Notes See Discussion of Valuation Results in the October 1, 2016 Actuarial Valuation Report and the Actuarial Impact Statement dated September 25, 2017.

SINGLE DISCOUNT RATE GASB Statement No. 67

A single discount rate of 7.0% 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 7.0%. 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 the total 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 (7.0%) 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 7.0%, 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*

| | Current Single Discount Rate Assumption | |
|----------------------|--|----------------------|
| 1% Decrease 6.00% | 7.00% | 1% Increase 8.00% |
| \$ 5,475,746 | \$ 1,855,896 | \$ (1,168,426) |

* These figures are estimates only. Actual figures will be provided after the end of the fiscal year.

SECTION E

MISCELLANEOUS INFORMATION

| RECONCILIATION OF MEMBERSHIP DATA | | |
|---|------------------------------------|------------------------------------|
| | From 10/1/16 To 10/1/17 | From 10/1/15 To 10/1/16 |
| A. Active Members | | |
| 1. Number Included in Last Valuation | 35 | 29 |
| 2. New Members Included in Current Valuation | 4 | 9 |
| 3. Non-Vested Employment Terminations | (1) | (1) |
| 4. Vested Employment Terminations | 0 | 0 |
| 5. DROP Participation | (1) | (1) |
| 6. Service Retirements | 0 | (1) |
| 7. Disability Retirements | 0 | 0 |
| 8. Deaths | 0 | 0 |
| 9. Rehires | 0 | 0 |
| 10. Transfer from General Employees | 0 | 0 |
| 11. Number Included in This Valuation | <u>37</u> | <u>35</u> |
| B. Terminated Vested Members | | |
| 1. Number Included in Last Valuation | 3 | 4 |
| 2. Additions from Active Members | 0 | 0 |
| 3. Lump Sum Payments/Refund of Contributions | 0 | (1) |
| 4. Payments Commenced | 0 | 0 |
| 5. Deaths | 0 | 0 |
| 6. Other - Rehires | 0 | 0 |
| 7. Number Included in This Valuation | <u>3</u> | <u>3</u> |
| C. DROP Plan Members | | |
| 1. Number Included in Last Valuation | 6 | 9 |
| 2. Additions from Active Members | 1 | 1 |
| 3. Retirements | (3) | (4) |
| 4. Deaths Resulting in No Further Payments | 0 | 0 |
| 5. Other | 0 | 0 |
| 6. Number Included in This Valuation | <u>4</u> | <u>6</u> |
| D. Service Retirees, Disability Retirees and Beneficiaries | | |
| 1. Number Included in Last Valuation | 40 | 36 |
| 2. Additions from Active Members | 0 | 1 |
| 3. Additions from Terminated Vested Members | 0 | 0 |
| 4. Additions from DROP Plan | 3 | 4 |
| 5. Deaths Resulting in No Further Payments | (3) | (1) |
| 6. Deaths Resulting in New Survivor Benefits | 0 | 0 |
| 7. End of Certain Period - No Further Payments | 0 | 0 |
| 8. Other -- Lump Sum Distributions | 0 | 0 |
| 9. Number Included in This Valuation | <u>40</u> | <u>40</u> |

ACTIVE MEMBERS AS OF OCTOBER 1, 2017

| Age Group | Years of Service to Valuation Date | | | | | | | | | | | | Totals |
|-----------|------------------------------------|---------|---------|--------|--------|---------|---------|---------|--------|-------|-------|-----|-----------|
| | 0-1 | 1-2 | 2-3 | 3-4 | 4-5 | 5-9 | 10-14 | 15-19 | 20-24 | 25-29 | 30-34 | 35+ | |
| 20-24 NO. | 3 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| TOT PAY | 150,885 | 0 | 0 | 57,358 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 208,243 |
| AVG PAY | 50,295 | 0 | 0 | 57,358 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 52,061 |
| 25-29 NO. | 0 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| TOT PAY | 0 | 103,268 | 112,093 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 215,361 |
| AVG PAY | 0 | 51,634 | 56,046 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 53,840 |
| 30-34 NO. | 0 | 2 | 1 | 0 | 1 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 8 |
| TOT PAY | 0 | 105,325 | 57,975 | 0 | 62,972 | 215,244 | 75,817 | 0 | 0 | 0 | 0 | 0 | 517,333 |
| AVG PAY | 0 | 52,662 | 57,975 | 0 | 62,972 | 71,748 | 75,817 | 0 | 0 | 0 | 0 | 0 | 64,667 |
| 35-39 NO. | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 4 |
| TOT PAY | 56,853 | 0 | 0 | 0 | 0 | 74,357 | 89,326 | 74,403 | 0 | 0 | 0 | 0 | 294,939 |
| AVG PAY | 56,853 | 0 | 0 | 0 | 0 | 74,357 | 89,326 | 74,403 | 0 | 0 | 0 | 0 | 73,735 |
| 40-44 NO. | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 2 |
| TOT PAY | 0 | 0 | 0 | 0 | 0 | 0 | 153,768 | 0 | 0 | 0 | 0 | 0 | 153,768 |
| AVG PAY | 0 | 0 | 0 | 0 | 0 | 0 | 76,884 | 0 | 0 | 0 | 0 | 0 | 76,884 |
| 45-49 NO. | 0 | 1 | 0 | 0 | 0 | 1 | 3 | 1 | 1 | 0 | 0 | 0 | 7 |
| TOT PAY | 0 | 55,346 | 0 | 0 | 0 | 74,731 | 247,708 | 75,472 | 95,670 | 0 | 0 | 0 | 548,927 |
| AVG PAY | 0 | 55,346 | 0 | 0 | 0 | 74,731 | 82,569 | 75,472 | 95,670 | 0 | 0 | 0 | 78,418 |
| 50-54 NO. | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 4 | 0 | 0 | 0 | 0 | 6 |
| TOT PAY | 0 | 0 | 65,311 | 0 | 0 | 75,672 | 0 | 323,859 | 0 | 0 | 0 | 0 | 464,842 |
| AVG PAY | 0 | 0 | 65,311 | 0 | 0 | 75,672 | 0 | 80,965 | 0 | 0 | 0 | 0 | 77,474 |
| 55-59 NO. | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 2 |
| TOT PAY | 0 | 0 | 0 | 0 | 0 | 74,780 | 81,719 | 0 | 0 | 0 | 0 | 0 | 156,499 |
| AVG PAY | 0 | 0 | 0 | 0 | 0 | 74,780 | 81,719 | 0 | 0 | 0 | 0 | 0 | 78,250 |
| 60-64 NO. | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOT PAY | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| AVG PAY | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOT NO. | 4 | 5 | 4 | 1 | 1 | 7 | 8 | 6 | 1 | 0 | 0 | 0 | 37 |
| TOT AMT | 207,738 | 263,939 | 235,379 | 57,358 | 62,972 | 514,784 | 648,338 | 473,734 | 95,670 | 0 | 0 | 0 | 2,559,912 |
| AVG AMT | 51,935 | 52,788 | 58,845 | 57,358 | 62,972 | 73,541 | 81,042 | 78,956 | 95,670 | 0 | 0 | 0 | 69,187 |

INACTIVE MEMBERS AS OF OCTOBER 1, 2017

| Age | Terminated Vested | | Disabled | | Retired | | Beneficiaries | | Total | |
|--------------|-------------------|----------------|----------|----------------|-----------|------------------|---------------|----------------|-----------|------------------|
| | Number | Total Benefits | Number | Total Benefits | Number | Total Benefits | Number | Total Benefits | Number | Total Benefits |
| Under 20 | - | - | - | - | - | - | - | - | - | - |
| 20 - 24 | - | - | - | - | - | - | - | - | - | - |
| 25 - 29 | - | - | - | - | - | - | - | - | - | - |
| 30 - 34 | - | - | - | - | - | - | - | - | - | - |
| 35 - 39 | - | - | - | - | - | - | - | - | - | - |
| 40 - 44 | - | - | - | - | - | - | - | - | - | - |
| 45 - 49 | 2 | 41,138 | - | - | 1 | 48,667 | - | - | 3 | 89,805 |
| 50 - 54 | 1 | 11,160 | - | - | 4 | 227,933 | - | - | 5 | 239,093 |
| 55 - 59 | - | - | - | - | 8 | 394,164 | 2 | 19,696 | 10 | 413,860 |
| 60 - 64 | - | - | - | - | 4 | 371,862 | - | - | 4 | 371,862 |
| 65 - 69 | - | - | - | - | 11 | 536,066 | - | - | 11 | 536,066 |
| 70 - 74 | - | - | - | - | 4 | 139,858 | - | - | 4 | 139,858 |
| 75 - 79 | - | - | - | - | 3 | 137,608 | 1 | 29,346 | 4 | 166,954 |
| 80 - 84 | - | - | - | - | 2 | 25,476 | 1 | 53,909 | 3 | 79,385 |
| 85 - 89 | - | - | - | - | - | - | 1 | 3,782 | 1 | 3,782 |
| 90 - 94 | - | - | - | - | - | - | 1 | 6,583 | 1 | 6,583 |
| 95 - 99 | - | - | - | - | 1 | 12,677 | - | - | 1 | 12,677 |
| 100 & Over | - | - | - | - | - | - | - | - | - | - |
| Total | 3 | 52,298 | - | - | 38 | 1,894,311 | 6 | 113,316 | 47 | 2,059,925 |

SECTION F

SUMMARY OF PLAN PROVISIONS

SUMMARY OF PLAN PROVISIONS

A. Ordinances

The Plan was established under the Code of Ordinances for the City of Miami Springs, Florida, Chapter 35, Article II, and was most recently amended under Ordinance No. 1095-2017 passed and adopted on October 9, 2017. The Plan is also governed by certain provisions of Chapters 175 and 185, Florida Statutes, Part VII, Chapter 112, Florida Statutes and the Internal Revenue Code.

B. Effective Date

December 13, 1976

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 full-time police officers; the chief of police has the option to participate.

F. Credited Service

Service is measured as the total number years and completed months from the date of employment to the date of termination, retirement, disability or death. Vacations and other paid leaves of absence are included. Unpaid leaves of absence are not included. No service is credited for any periods of employment for which the member received a refund of their contributions.

G. Compensation/Earnings

Regular basic compensation, excluding overtime or any lump sum payments of unused leave.

H. Average Monthly Earnings (AME)

For benefits earned prior to October 12, 2014, the average of Earnings over the 3 consecutive years of Credited Service prior to October 12, 2014 which produce the highest average. For benefits earned on or after October 12, 2014, the average of Earnings over the highest 5 consecutive years of Credited Service out of the last 10 which produce the highest average.

For members who were employed and within 3 years of Normal Retirement eligibility on October 12, 2014, the average of Earnings over the 3 consecutive years of Credited Service which produce the highest average.

I. Normal Retirement

Eligibility: Members hired before October 12, 2014 may retire on the first day of the month coincident with or next following the earlier of:

- (1) age 55 and 10 years of Credited Service, or
- (2) 20 years of Credited Service regardless of age.

Members hired on or after October 12, 2014 may retire on the first day of the month coincident with or next following the earlier of:

- (1) age 55 and 10 years of Credited Service, or
- (2) age 52 and 25 years of Credited Service.

Benefit: For members hired before October 12, 2014, all benefits accrued up to October 12, 2014 are frozen at 3.5% of AME as of October 12, 2014 times years of credited service as of October 12, 2014. Benefit accruals on and after October 12, 2014 are 3.50% of AME for each year of Credited Service up to twenty years and 3.0% of AME for each year thereafter. The maximum benefit is 85% of AME.

For members hired on or after October 12, 2014, the benefit is 2.5% of AME per year of Credited Service. The maximum benefit is 70% of AME. The minimum benefit is 2.0% per year of service.

Members within 3 years of Normal Retirement eligibility on October 12, 2014 continue to accrue benefits at 3.5% of AME per year of service with no cap.

Normal Form of Benefit:

Single Life Annuity, with guaranteed refund of Member contributions and amount of premium tax refund as of the effective date; other options also available.

COLA: None

J. Early Retirement

Eligibility: A member may elect to retire earlier than the Normal Retirement Eligibility upon attainment of age 50 and 10 years of Credited Service.

Benefit: The Normal Retirement Benefit is reduced by 3.0% for each year by which the Early Retirement date precedes the Normal Retirement date.

Normal Form of Benefit: Single Life Annuity, with guaranteed refund of member contributions and amount of premium tax refund as of the effective date; other options also available.

COLA: None

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: Any member who receives a service-incurred injury, disease or disability which permanently incapacitates the member from performing their regular and continuous duties is immediately eligible for a disability benefit.

Benefit: 66 2/3% of Earnings in affect as of the date of disability less Worker's Compensation and Social Security PIA.

Normal Form of Benefit: Payable for life or until recovery from disability; other options are also available.

COLA: None

M. Non-Service Connected Disability

Eligibility: Any member who has 10 or more years of Credited Service who receives a nonservice-incurred injury, disease or disability which permanently incapacitates the member from gainful employment is immediately eligible for a disability benefit.

Benefit: The accrued Normal Retirement Benefit taking into account compensation earned, service credited and the member contribution rate on the date of disability, with a minimum benefit equal to 25% AME.

Normal Form of Benefit: Payable for life or until recovery from disability.

COLA: None

N. Death in the Line of Duty

Eligibility: Any member who dies as a direct result of an occurrence arising in the performance of service to the City is eligible for survivor benefits regardless of Credited Service.

Benefit: 25% of Earnings is payable to the spouse; 7 1/2% of Earnings is payable to each eligible child.

Maximum family benefit is 40% of Earnings. Upon death or remarriage of spouse, each child's benefit is increased from 7 1/2% to 15%, with a maximum of 30% to all children.

Normal Form

of Benefit: Spouse benefits payable until death or remarriage. Children's benefits are payable until the earlier of death, marriage or age 18 (22 if a full-time student).

COLA: None

O. Other Pre-Retirement Death

Eligibility: Any member who is eligible for Normal Retirement, but dies while still actively employed is eligible for survivor benefits.

Benefit: The designated beneficiary will receive the member's accrued Normal Retirement Benefit taking into account compensation earned and service credited as of the date of death.

Normal Form

of Benefit: Payable immediately as though the member had retired on the date of death and elected the 100% Joint & Survivor option if married or the 10 year Certain and Life option if unmarried.

COLA: None

The beneficiary of a plan member who dies prior to being eligible for Normal Retirement will receive a refund of the member's accumulated contributions with interest.

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 a 10 Year Certain and Life Annuity and the 50%, 75% and 100% Joint and Survivor options.

R. Vested Termination

Eligibility: A member has earned a non-forfeitable right to Plan benefits after the completion of 5 years of Credited Service.

Benefit: The member's accrued Normal Retirement Benefit taking into account compensation earned and service credited as of the date of termination. Benefit is payable at the member's Normal Retirement date.

Normal Form of Benefit: Single life Annuity; other options are also available.

COLA: None

Members terminating employment with less than 5 years of Credited Service will receive a refund of their own accumulated contributions with interest.

S. Refunds

Eligibility: All members terminating employment with less than 5 years of Credited Service are eligible. Optionally, vested members (those with 5 or more years of Credited Service) may elect a refund in lieu of the vested benefits otherwise due.

Benefit: Refund of the member's contributions with interest. Interest is currently credited at a rate of 4% compounded annually.

T. Member Contributions

The regular Member contribution rate is 9% of Earnings. If the combined City and Member contribution required for a year is less than 14% of covered payroll, the difference under 14% is divided in two and the resulting amount is used to reduce to the City and Member contribution rates for the year. If the combined City and Member contribution required for a year is more than 18% of covered payroll, the excess over 18% is divided in two and the resulting amount is used to increase the City and Member contribution rates for the year. For the fiscal years ending September 30, 2018 through September 30, 2020, the member contribution rate is reduced to a maximum of 12.5%. The reduction in member contribution rate will be funded using all accumulated excess and annual Chapter 185 premium tax money. The City contribution will increase to make up for anything the premium tax money does not cover.

U. Employer Contributions

Any additional amount determined by the actuary needed to fund the plan properly according to State laws. Chapter 185 monies received by the City will be deposited into the pension trust fund for the benefit of police officers in the Plan.

V. Cost of Living Increases

Not Applicable

W. 13th Check

Not Applicable

X. Deferred Retirement Option Plan

Eligibility: Plan members are eligible for the DROP upon attainment of Normal Retirement eligibility.

Members must make a written election to participate in the DROP.

Benefit: The member's Credited Service and AME are frozen upon entry into the DROP. The monthly retirement benefit as described under Normal Retirement is calculated based upon the frozen Credited Service and AME.

Maximum

DROP Period: 5 years for members with less than 27 years of service; 3 years for members with at least 27 but less than 35 years of service; 2 years for members with 35 or more years of service.

Interest

Credited: The member's DROP account is credited or debited at an interest rate equal to the actual investment return earned by the pension plan.

Normal Form

of Benefit: The plan member may elect from 1 of the 2 following options:

- (1) Lump Sum, or
- (2) An annuity based upon a retirement option selected by the participant.

COLA: None

Y. Other Ancillary Benefits

There are no ancillary retirement type benefits not required by statutes but which might be deemed a Miami Springs Police Officers and Firefighters Retirement System liability if continued beyond the availability of funding by the current funding source.

Z. Changes Since Previous Valuation

Under Ordinance No. 1094-2017, the following changes are made:

- The employee contribution rate is limited to a maximum of 12.5% for the period October 1, 2017 through September 30, 2020.
- All accumulated excess and annual Chapter 185 premium tax monies are allocated to fund the reduction in employee contributions, and to the extent that Chapter 185 premium tax revenues are not sufficient to fully fund the reduction, the City's contribution shall be increased.

The impact of these changes was measured in the September 25, 2017 Actuarial Impact Statement.