



**Cavanaugh Macdonald**  
CONSULTING, LLC

*The experience and dedication you deserve*



**CITY OF POMPANO BEACH**  
**GENERAL EMPLOYEES' RETIREMENT SYSTEM**

**Actuarial Valuation Report**  
**as of**  
**October 1, 2018**





## **TABLE OF CONTENTS**

---

|   | <b><u>Page<br/>Number</u></b> |
|---|-------------------------------|
| <b><u>Letter to the Board of Trustees</u></b>                 | 1                             |
| <b><u>Liabilities</u></b>                                     |                               |
| Table I Summary of Valuation Results                          | 4                             |
| Table II Gain and Loss Analysis                               | 6                             |
| Table III Additional Disclosures                              | 8                             |
| Table IV Present Value of Accrued Benefits (Plan Assumptions) | 9                             |
| Table V Information Req. by Florida Statute (Chap.112)        | 10                            |
| Table Va Unfunded Liability Bases                             | 13                            |
| <b><u>Assets</u></b>  |                               |
| Table VIa Development of Market Asset (Gain)/Loss             | 16                            |
| Table VIb Market Asset Reconciliation                         | 18                            |
| Table VII Historical Asset Information                        | 19                            |
| Table VIIa Revenues By Source and Expenses by Type            | 20                            |
| Table VIII Contributions vs. Fund Payouts                     | 21                            |
| <b><u>Data</u></b>  |                               |
| Table IX Summary of Member Data                               | 22                            |
| Table IXa Active Data   | 23                            |
| Table IXb Retiree Data  | 26                            |
| Table IXc Data Reconciliation                                 | 27                            |
| Table IXd Age-Service Salary Table                            | 28                            |
| Table X Historical Contributions                              | 29                            |
| <b><u>Plan Assumptions</u></b>                                |                               |
| Table XI Plan Assumptions and Methods                         | 30                            |
| <b><u>Plan Provisions</u></b>                                 |                               |
| Table XII Plan Provisions                                     | 34                            |
| Table XIIa Plan Amendments                                    | 42                            |



# Cavanaugh Macdonald

CONSULTING, LLC

*The experience and dedication you deserve*

January 31, 2019

Board of Trustees

City of Pompano Beach General Employees' Retirement System

555 South Andrews Avenue, Suite 106

Pompano Beach, Florida 33069

Dear Members of the Board:

This report presents the results of the actuarial valuation of the City of Pompano Beach General Employees' Retirement System ("Plan") for the plan year. The purpose of this report is to provide a summary of the funded status of the plan as of October 1, 2018 and to determine the minimum required contribution amount for the 2019/2020 fiscal year. In addition, this report provides a record of any plan amendments or other plan changes affecting the financial status of the fund. Our calculations were prepared based on member data and financial information provided by the Retirement System.

## **Summary of Valuation Results**

The Retirement System receives contributions from the City of Pompano Beach, Broward Sheriff's Office (BSO) and from active members. Members hired prior to June 8, 2011 contribute 10.0% of compensation, while members hired on or after June 8, 2011 contribute 7.0% of compensation. In addition, the City contributes the required member contributions on behalf of the elected/appointed members who participate in the System. These contributions are considered member contributions and are not reflected in the required minimum City contribution. In determining the City's and the County's contribution requirement we have included two alternatives. The first includes interest to reflect that the City will make quarterly contributions throughout the fiscal year. The second reflects that the City will contribute a single lump sum payment on December 31, 2019. Both contribution alternatives anticipate that the BSO will make bi-weekly contributions throughout the fiscal year.

## **Quarterly Contributions**

The total required annual contribution for the 2019/2020 fiscal year from all sources payable based on a quarterly payment schedule beginning October 1, 2018 is \$13,061,820. The amount of the City/BSO contributions varies from year to year. Member contributions are equal to 8.87% employees' projected payroll. After taking into account expected member contributions of \$2,831,902, the total required contribution from the City/BSO is \$10,229,918 or 32.04% of projected payroll. Of this amount the City is expected to contribute \$10,026,634 and BSO is expected to contribute \$203,284. In comparison, the required City/BSO contribution for the 2018/2019 fiscal year was \$9,425,226, or 31.19% of projected payroll.

3550 Busbee Pkwy, Suite 250, Kennesaw, GA 30144

Phone (678) 388-1700 • Fax (678) 388-1730

[www.CavMacConsulting.com](http://www.CavMacConsulting.com)

Offices in Kennesaw, GA • Bellevue, NE



### **Single Lump Sum Payment**

The total required annual contribution for the 2019/2020 fiscal year from all sources payable as a single lump sum payment on December 31, 2019 is \$12,944,764. The amount of the City/BSO contributions varies from year to year. Member contributions are equal to 8.87% of employees' projected payroll. After taking into account expected member contributions of \$2,831,902, the total required contribution from the City/BSO is \$10,112,862 or 31.68% of projected payroll. Of this amount the City is expected to contribute \$9,910,087 and the BSO is expected to contribute \$202,775.

For members hired before June 8, 2011, the plan provides a 2% COLA each year and an additional 1% COLA if certain conditions are met. They are: if there is a cumulative net experience gain for the year, and the City's cost for the year is \$0 after payment of the additional COLA. In addition, the present value of the additional COLA cannot be more than the cumulative gains that occurred since inception of the COLA. Since there was a cumulative net experience loss for the year and a required City contribution is due, no variable COLA will be paid to these members this year.

For members hired on or after June 8, 2011, a member is eligible for a COLA on their fifth anniversary of retirement. No increase is given for eligible retirees under 55 on October 1<sup>st</sup>. A 1% increase is given for eligible retirees between 55 and 64. A 2% increase is given for eligible retirees 65 or older. A variable increase (of not more than one percent) will be granted when the plan is sufficiently funded. Since there is no cumulative actuarial gain, no variable increase will be paid to these members this year.

Actuarial gains and losses result when the actual experience of the plan (such as asset return, pay increases, turnover, deaths, etc.) is different from that expected by the actuarial assumptions. The plan's unfunded liability was projected to be \$75,588,455 as of October 1, 2018, taking into account contributions from the City and the County of \$8,301,969. The actual unfunded liability is \$83,231,944. The increase of \$7,643,489 is due to an experience loss for the 2017/2018 plan year and reducing the assumed investment return from 7.90% to 7.65%. This assumption change accounted for \$7,032,129 of the increase. A detailed analysis of the gain and loss is presented in Table II. The total increase in City/County contribution to amortize the unfunded liability is \$398,951 per year. A summary of the amortization payments is presented in Table Va. The unfunded liability is amortized over a level percentage of payroll assuming a payroll growth assumption of 2.40% for amortization bases established prior to October 1, 2017. Amortization bases established on or after October 1, 2017 are amortized on a level dollar basis.

The valuation is based on a series of actuarial assumptions, including an interest rate of 7.65% per year and an annual payroll growth assumption of 2.40%. Total payroll for the ten year period ending with the valuation date averaged 2.70% which is greater than the current payroll growth assumption of 2.40%. Table XI outlines the mortality assumptions used in the report.



A summary of the results of the valuation and the contribution requirements is presented in Table I. The disclosure information required by Chapter 112, Florida Statutes, is presented in Table V. Tables VII and X provide information about the fund's assets and historical contributions. Table VIb provides an asset reconciliation between October 1, 2017 and October 1, 2018. Table VI provides a breakdown of the fund assets by investment type and the calculation of the actuarial value of assets. Tables VII, VIIa, VIII provide a historical record of the growth, expenses, revenues, annual returns and contributions of the fund. Tables IX and IXa through IXd provide a variety of useful information concerning the participant population. The assumptions used in the valuation are outlined in Table XI. Provisions of the plan are set forth in Table XII.

This actuarial valuation 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 and, in our opinion, the techniques and assumptions used are reasonable and meet the requirements and intent of Part VII, Chapter 112, Florida Statutes. There is no benefit or expense to be provided by the plan and/or paid from the plan's assets for which liabilities or current costs have not been established or otherwise taken into account in the valuation. All known events or trends which may require a material increase in plan costs or required contribution rates have been taken into account in the valuation.

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

Respectfully submitted,

A handwritten signature in blue ink that reads 'Todd B. Green' followed by a horizontal flourish.

Todd B. Green, ASA, FCA, MAAA  
Principal and Consulting Actuary

A handwritten signature in blue ink that reads 'Micki R. Taylor'.

Micki R. Taylor, ASA, EA, FCA, MAAA  
Senior Actuary  
Enrolled Actuary No. 17-5975

TBG:cc

**SUMMARY OF VALUATION RESULTS****TABLE I**

|  | <b>As of<br/>October 1, 2017</b> | <b>As of<br/>October 1, 2018</b> |
|--|----------------------------------|----------------------------------|
| <b>1. Number of Participants</b>                         |                                  |                                  |
| a. Active Participants                                   |                                  |                                  |
| i. City and BSO Employees                                | 453                              | 462                              |
| ii. Elected and Appointed Officials                      | 8                                | 9                                |
| iii. Senior Management                                   | 16                               | 17                               |
| iv. Sub-total  | <u>477</u>                       | <u>488</u>                       |
| b. Deferred Vested Participants                          | <u>27</u>                        | <u>28</u>                        |
| c. Retired Participants:                                 |                                  |                                  |
| i. Participants in DROP                                  | 51                               | 51                               |
| ii. Non-disabled   | 313                              | 330                              |
| iii. Disabled  | 18                               | 17                               |
| iv. Beneficiaries  | 48                               | 43                               |
| v. Sub-total   | <u>430</u>                       | <u>441</u>                       |
| d. Total Participants                                    | <u>934</u>                       | <u>957</u>                       |
| <b>2. Total Annual Payroll</b>                           |                                  |                                  |
| a. Elected Officers                                      | \$677,710                        | \$879,419                        |
| b. Non-elected members (Plan 1)                          | \$19,487,116                     | \$18,575,666                     |
| c. Non-elected members (Plan 2)                          | \$9,341,725                      | \$11,723,374                     |
| d. Total   | <u>\$29,506,551</u>              | <u>\$31,178,459</u>              |
| <b>3. Total Projected Payroll</b>                        | <b>\$30,214,708</b>              | <b>\$31,926,742</b>              |
| <b>4. Total Retired Member Benefits</b>                  | <b>\$13,447,617</b>              | <b>\$14,241,123</b>              |
| <b>5. Derivation of Unfunded Accrued Liability (UAL)</b> |                                  |                                  |
| a. Present Value of Future Benefits                      | \$283,686,213                    | \$306,181,217                    |
| b. Present Value of Future Normal Cost                   | (\$34,264,405)                   | (\$37,815,135)                   |
| <i>City Portion</i>                                      | (\$16,365,422)                   | (\$19,058,835)                   |
| <i>Member Portion</i>                                    | (\$17,898,983)                   | (\$18,756,300)                   |
| c. Actuarial Accrued Liability (AAL)                     | \$249,421,808                    | \$268,366,082                    |
| d. Actuarial Value of Assets                             | (\$173,854,154)                  | (\$185,134,138)                  |
| e. Unfunded Accrued Liability (c. + d.)                  | <u>\$75,567,654</u>              | <u>\$83,231,944</u>              |



SUMMARY OF VALUATION RESULTS

TABLE I

|   | Fiscal Year<br>2019 | Fiscal Year<br>2020 |
|---|---------------------|---------------------|
| <b>6. Annual Cost (Payable Quarterly 1<sup>st</sup> Payment 10/1)</b> |                     |                     |
| a. Normal Cost  | \$4,718,048         | \$5,162,674         |
| b. Payment to Amortize Unfunded Liability                             | \$5,736,061         | \$6,135,012         |
| c. Administrative Expenses  | \$500,955           | \$507,602           |
| d. Interest Adjustment  | \$1,204,593         | \$1,256,532         |
| e. Total (a. + b.+ c.+ d.)  | <b>\$12,159,657</b> | <b>\$13,061,820</b> |
| f. Expected Member Contributions                                      | \$2,734,431         | \$2,831,902         |
| g. Expected City/County Contribution                                  | \$9,425,226         | \$10,229,918        |
| h. Total (f. + g.)  | <b>\$12,159,657</b> | <b>\$13,061,820</b> |
| <b>7. Annual Cost (Payable as a Single Lump Sum on 12/31)</b>         |                     |                     |
| a. Normal Cost  | \$4,718,048         | \$5,162,674         |
| b. Payment to Amortize Unfunded Liability                             | \$5,736,061         | \$6,135,012         |
| c. Administrative Expenses  | \$500,955           | \$507,602           |
| d. Interest Adjustment  | \$1,092,291         | \$1,139,476         |
| e. Total (a. + b.+ c.+ d.)  | <b>\$12,047,355</b> | <b>\$12,944,764</b> |
| f. Expected Member Contributions                                      | \$2,734,431         | \$2,831,902         |
| g. Expected City/County Contribution                                  | \$9,312,924         | \$10,112,862        |
| h. Total (f. + g.)  | <b>\$12,047,355</b> | <b>\$12,944,764</b> |
| <b>8. Annual Cost (as a % of projected payroll)</b>                   |                     |                     |
| <b>a. Quarterly Basis</b>   |                     |                     |
| i. Total Required Contribution  | 40.24%              | 40.91%              |
| ii. Expected Member Contributions *                                   | 9.05%               | 8.87%               |
| iii. Expected City/County Contribution                                | 31.19%              | 32.04%              |
| <b>b. Single Lump Sum Basis</b>                                       |                     |                     |
| i. Total Required Contribution  | 39.87%              | 40.55%              |
| ii. Expected Member Contributions *                                   | 9.05%               | 8.87%               |
| iii. Expected City/County Contribution                                | 30.82%              | 31.68%              |

\*Non-Elected members in Plan 1 contribute 10.0% of payroll, and 7.0% of payroll if in Plan 2. The City contributes 10.0% of payroll on behalf of elected/appointed members.



**GAIN AND LOSS ANALYSIS**

**TABLE II**

**A. UNFUNDED ACCRUED ACTUARIAL LIABILITY (GAIN) / LOSS ANALYSIS**

|  |                     |
|--|---------------------|
| 1. Actual Unfunded Accrued Actuarial Liability as of October 1, 2017                                       | \$75,567,654        |
| 2. Plan Sponsor Normal Cost for this Plan Year (including expenses)  | \$2,484,572         |
| 3. Interest on items 1 and 2 [(1+2) x 7.9%]  | \$6,166,126         |
| 4. Plan Sponsor Contribution for this Plan Year:   | (\$8,301,969)       |
| 5. Interest on item 4 [4 x 7.9% x .5]  | (\$327,928)         |
| 6. Changes due to:   |                     |
| a. Assumption changes  | \$7,032,130         |
| b. Plan amendments   | \$0                 |
| c. Funding Method  | \$0                 |
| d. Actuarial (Gain) / Loss   | \$611,359           |
| <b>7. Actual Unfunded Accrued Liability as of October 1, 2018:</b><br><b>(1. + 2. + 3. + 4. + 5. + 6.)</b> | <b>\$83,231,944</b> |

**8. Items Affecting Calculation of Unfunded Accrued Actuarial Liability:**

- a. Plan provisions reflected in the unfunded accrued liability (see Table XII)
- b. Plan amendments reflected in item 4.c. above (see Table XIIa)
- c. Actuarial assumptions and methods used to determine actuarial accrued liability (see Table XI)

**B. ASSET (GAIN) / LOSS ANALYSIS**

|  |                    |
|--|--------------------|
| 1. Actuarial Value of Assets as of October 1, 2017               | \$173,854,154      |
| 2. Interest on item [1a. x 7.9%]                                 | \$13,734,478       |
| 3. Contributions for the 2017/2018 Plan Year                     | \$10,965,265       |
| 4. Interest on item [1c. x 7.9% x .5]                            | \$433,128          |
| 5. Benefit Payments for 2017/2018 Plan Year (Including Expenses) | (\$14,106,611)     |
| 6. Interest on item [1e. x 7.9% x .5]                            | (\$557,211)        |
| 7. Expected Actuarial Value of Assets as of October 1, 2018      | \$184,323,203      |
| 8. Actuarial Value of Assets as of October 1, 2018               | \$185,134,138      |
| 9. <b>(Gain) / Loss</b>  | <b>(\$810,935)</b> |





**GAIN AND LOSS ANALYSIS**

**TABLE II**

|   |             |             |
|---|-------------|-------------|
| <b>1. Unfunded Accrued Liability Contribution as of October 1, 2017:</b>                    |             | \$5,736,061 |
| <b>2. Net Actuarial (Gains)/Losses During the 2017/2018 Plan Year:</b>                      |             |             |
| a. Due to Salary  | \$18,459    |             |
| b. Due to Investment Performance  | (\$64,717)  |             |
| c. Due to Turnover/Mortality  | \$72,799    |             |
| d. Due to New Retirements   | \$15,107    |             |
| e. Due to Difference and Timing in Contributions  | \$99,084    |             |
| f. Due to Data/Service Adjustments/Benefit Payments   | (\$192,659) |             |
| g. Due to New Members   | \$9,581     |             |
| h. Total  |             | (\$42,346)  |
| <b>3. Change in Unfunded Accrued Liability Contribution During the 2017/2018 Plan Year:</b> |             |             |
| a. Assumption changes   | \$561,204   |             |
| b. Method changes   | \$0         |             |
| c. Plan changes   | \$0         |             |
| d. Total change   |             | \$561,204   |
| <b>4. Other Effects</b>   |             | (\$119,907) |
| <b>5. Unfunded Accrued Liability Contribution as of October 1, 2018</b>                     |             | \$6,135,012 |

**6. Comments on Change in Unfunded Accrued Liability Contribution:**

**Salary/Service:** Actual average salary increase of 6.3% compared to expected increases of 5.8%.

**Investment Performance:** 8.4% actual vs. 7.9% expected return on the actuarial value of assets.

**Turnover:** Net effect on the valuation liabilities of actual deaths, terminations of employment and disabilities different from what was anticipated in the aggregate by the assumptions related to those events.

**New retirements:** Net effect of differences in expected vs. actual numbers of, and benefits for, new retirements and refund of employee contributions.

**Due to Differences and Timing of Contributions:** Due to the one year lag of when the required contribution is determined and when it is deposited into the fund.

**Data/Service Adjustments:** Effect of service adjustments for service purchases.

**Assumption Changes:** Assumed investment return reduced from 7.9% to 7.65%.

**Method Changes:** None.

**Plan Changes:** None.

**Other Effects:** Assumed growth in the unfunded actuarial accrued liability contribution.



**A. Schedule of Funding Progress**

(\$'s in thousands)

| Actuarial Valuation Date | Actuarial Value of Assets<br>(1) | Actuarial Accrued Liability (AAL)<br>(2) | Unfunded AAL (UAAL)<br>(2) - (1) | Funded Ratio<br>(1)/(2) | Covered Payroll<br>(3) | UAAL as % of Covered Payroll<br>[(2) - (1)]/(3) |
|--------------------------|----------------------------------|--|----------------------------------|-------------------------|------------------------|---|
| 10/1/2011                | \$125,170                        | \$179,688                                | \$54,518                         | 69.7%                   | \$26,238               | 207.8%  |
| 10/1/2012                | \$123,425                        | \$185,014                                | \$61,589                         | 66.7%                   | \$25,833               | 238.4%  |
| 10/1/2013                | \$132,248                        | \$191,554                                | \$59,306                         | 69.0%                   | \$25,923               | 228.8%  |
| 10/1/2014                | \$144,640                        | \$200,747                                | \$56,107                         | 72.1%                   | \$26,048               | 215.4%  |
| 10/1/2015                | \$153,292                        | \$209,453                                | \$56,162                         | 73.2%                   | \$27,016               | 207.9%  |
| 10/1/2016                | \$163,312                        | \$231,707                                | \$68,395                         | 70.5%                   | \$27,957               | 244.6%  |
| 10/1/2017                | \$173,854                        | \$249,422                                | \$75,568                         | 69.7%                   | \$29,507               | 256.1%  |
| 10/1/2018                | \$185,134                        | \$268,366                                | \$83,232                         | 69.0%                   | \$31,178               | 267.0%  |

**Additional Information**

|                                |   |   |
|--------------------------------|---|---|
| Valuation date :               | October 1, 2017                               | October 1, 2018                               |
| Actuarial cost method:         | Entry Age Normal                              | Entry Age Normal                              |
| Amortization method:           | Bases prior to 2017<br>Level Percent Closed   | Bases prior to 2017<br>Level Percent Closed   |
|                                | Bases on or after 2017<br>Level Dollar Closed | Bases on or after 2017<br>Level Dollar Closed |
| Remaining amortization period: | 1 to 30 years                                 | 1 to 30 years                                 |
| Asset valuation method:        | 5 - Year Smoothed Market                      | 5 - Year Smoothed Market                      |
| Actuarial assumptions:         |   |   |
| Investment rate of return      | 7.90%   | 7.65%   |
| Projected salary increases     | 4.25 to 7.50%                                 | 4.25 to 7.50%                                 |
| Includes inflation at          | 3.50%   | 3.50%   |
| Cost of living adjustments     | 2.00%   | 2.00%   |



**PRESENT VALUE OF ACCRUED BENEFITS**

**TABLE IV**

Shown below is the development of the Total Present Value of Accrued Benefit for the Plan. The calculations were performed using the Plan’s discount rate of 7.65%.

**1. Actuarial Present Value of Accrued Benefits**

|                                       | <u>As of<br/>October 1, 2017</u> | <u>As of<br/>October 1, 2018</u> |
|---------------------------------------|----------------------------------|----------------------------------|
| a. Vested Accrued Benefits:           |                                  |                                  |
| i. Inactive members and beneficiaries | \$160,236,984                    | \$173,361,527                    |
| ii. Active members                    | \$63,398,778                     | \$67,905,039                     |
| iii. Sub-total                        | <u>\$223,635,762</u>             | <u>\$241,266,566</u>             |
| b. Non-vested Accrued Benefits        | <u>\$447,139</u>                 | <u>\$293,956</u>                 |
| c. Total Benefits                     | <b><u>\$224,082,901</u></b>      | <b><u>\$241,560,522</u></b>      |
| d. Market Value of Assets             | \$177,325,805                    | \$191,219,657                    |
| c. Percentage Funded                  | 79.1%                            | 79.2%                            |

**2. Statement of Changes in Total Actuarial Present Value of All Accrued Benefits**

|  |                                    |
|--|------------------------------------|
| a. Actuarial Present Value as of October 1, 2017:                  | <b>\$224,082,901</b>               |
| b. Increase (Decrease) During 2017/2018 Plan Year Attributable to: |                                    |
| i. Interest  | \$17,166,649                       |
| ii. Benefits accumulated/experience                                | \$7,723,347                        |
| iii. Benefits paid   | (\$13,567,082)                     |
| iv. Plan amendments  | \$0                                |
| v. Changes in actuarial assumptions or methods                     | \$6,154,707                        |
| vi. Net increase (decrease)  | <u><b>\$17,477,621</b></u>         |
| c. Actuarial Present Value as of October 1, 2018:                  | <b><u><u>\$241,560,522</u></u></b> |

**3. Items Affecting Calculation of Actuarial Present Value of Accrued Benefits**

- a. Plan provisions reflected in the accrued benefits (see Table XII on page 34)
- b. Plan amendments reflected in item 2.b.iv. above
- c. Actuarial assumptions and methods used to determine present values (see Table XI on page 30)
- d. Changes in actuarial assumptions and methods reflected in item 2.b.v. above

**INFORMATION REQUIRED BY FLORIDA STATUTE (CHAP. 112)****TABLE V**

|   | Actuarial valuation prepared as of: |                 |                 |
|---|-------------------------------------|-----------------|-----------------|
|   | October 1, 2017                     | October 1, 2018 | October 1, 2018 |
| <b>1. Participant Data:</b>                               |                                     |                 |                 |
| a. Active members:  |                                     |                 |                 |
| i. Number   | 477                                 | 488             | 488             |
| ii. Total annual payroll                                  | \$29,506,551                        | \$31,178,459    | \$31,178,459    |
| iii. Projected annual payroll                             | \$30,214,708                        | \$31,926,742    | \$31,926,742    |
| b. Retirees and beneficiaries:                            |                                     |                 |                 |
| i. Number   | 361                                 | 373             | 373             |
| ii. Total annualized benefit                              | \$11,052,854                        | \$11,813,789    | \$11,813,789    |
| c. Disabled members receiving benefits:                   |                                     |                 |                 |
| i. Number   | 18                                  | 17              | 17              |
| ii. Total annualized benefit                              | \$434,803                           | \$435,062       | \$435,062       |
| d. Members in DROP:                                       |                                     |                 |                 |
| i. Number   | 51                                  | 51              | 51              |
| ii. Total annualized benefit                              | \$1,959,960                         | \$1,992,273     | \$1,992,273     |
| e. Terminated vested members:                             |                                     |                 |                 |
| i. Number   | 27                                  | 28              | 28              |
| ii. Total annualized benefit                              | \$529,667                           | \$510,741       | \$510,741       |
| <b>2. Assets:</b>   |                                     |                 |                 |
| a. Actuarial value of assets                              | \$173,854,154                       | \$185,134,138   | \$185,134,138   |
| b. Market value of assets                                 | \$177,325,805                       | \$191,219,657   | \$191,219,657   |
| <b>3. Liabilities:</b>                                    |                                     |                 |                 |
| a. Present value of all future expected benefit payments: |                                     |                 |                 |
| i. Active members:  |                                     |                 |                 |
| Retirement benefits                                       | \$114,846,829                       | \$118,248,922   | \$123,629,963   |
| Vesting benefits  | \$3,035,591                         | \$3,042,327     | \$3,242,855     |
| Disability benefits                                       | \$3,332,491                         | \$3,449,416     | \$3,575,818     |
| Death benefits  | \$1,756,317                         | \$1,785,462     | \$1,834,360     |
| Return of member contributions                            | \$478,000                           | \$533,819       | \$536,696       |
| Sub-total   | \$123,449,228                       | \$127,059,946   | \$132,819,692   |
| ii. Terminated vested members                             | \$4,655,960                         | \$4,807,303     | \$4,988,170     |
| iii. Retired members and beneficiaries:                   |                                     |                 |                 |
| Retirees, members in DROP, and beneficiaries              | \$151,183,872                       | \$160,569,229   | \$163,995,571   |
| Disabled members  | \$4,397,153                         | \$4,290,966     | \$4,377,786     |
| Sub-total   | \$155,581,025                       | \$164,860,195   | \$168,373,357   |
| iv. Total present value of all future expected ben. pmts. | \$283,686,213                       | \$296,727,444   | \$306,181,219   |



|   | Actuarial valuation prepared as of: |                 |                 |
|---|-------------------------------------|-----------------|-----------------|
|   | Prior to Assumption Changes         |                 |                 |
|   | October 1, 2017                     | October 1, 2018 | October 1, 2018 |
| b. Liabilities due and unpaid   | \$0                                 | \$0             | \$0             |
| c. Active actuarial accrued liability   | \$89,184,823                        | \$91,666,454    | \$95,004,557    |
| d. Inactive actuarial accrued liability   | \$160,236,985                       | \$169,667,497   | \$173,361,525   |
| e. Total actuarial accrued liability  | \$249,421,808                       | \$261,333,951   | \$268,366,082   |
| f. Unfunded actuarial accrued liability<br>(please reference Table Va for details concerning the unfunded liability bases and amortization periods) | \$75,567,654                        | \$76,199,813    | \$83,231,944    |
| <b>4. Actuarial Present Value of Accrued Benefits:</b><br>(please reference Table IV for details concerning the present value of accrued benefits)  | \$233,769,266                       | \$235,405,815   | \$241,560,522   |
| <b>5. Pension Cost (as a % of annual payroll):</b>  |                                     |                 |                 |
| a. Normal cost plus projected administrative expenses   | 17.27%                              | 16.95%          | 17.76%          |
| Dollar amount   | \$5,219,003                         | \$5,411,492     | \$5,670,276     |
| b. Payment to amortize unfunded liability   | 18.98%                              | 17.81%          | 19.22%          |
| Dollar amount   | \$5,736,061                         | \$5,685,591     | \$6,135,012     |
| c. Interest adjustment  | 3.99%                               | 3.77%           | 3.93%           |
| Dollar amount   | \$1,204,593                         | \$1,204,583     | \$1,256,532     |
| d. Amount to be contributed by members  | 9.05%                               | 8.87%           | 8.87%           |
| Dollar amount   | \$2,734,431                         | \$2,831,902     | \$2,831,902     |
| e. City Minimum Contribution  | 31.19%                              | 29.66%          | 32.04%          |
| Dollar amount   | \$9,425,226                         | \$9,469,764     | \$10,229,918    |

**INFORMATION REQUIRED BY FLORIDA STATUTE (CHAP. 112)****TABLE V**

|  | <b>Fiscal Year<br/>2016/2017</b> | <b>Fiscal Year<br/>2017/2018</b> | <b>Fiscal Year<br/>2017/2018</b> |
|--|----------------------------------|----------------------------------|----------------------------------|
| <b>6. Past Contributions:</b>  |                                  |                                  |                                  |
| a. Required City & County contribution   | \$6,755,068                      | \$8,301,969                      | \$8,301,969                      |
| b. Actual contribution made by:  |                                  |                                  |                                  |
| i. City  | \$6,417,918                      | \$7,953,196                      | \$7,953,196                      |
| ii. County   | \$337,150                        | \$348,773                        | \$348,773                        |
| iii. Members   | \$2,617,652                      | \$2,663,296                      | \$2,663,296                      |
| <b>Actuarial valuation prepared as of:</b>   |                                  |                                  |                                  |
| <b>Prior to<br/>Assumption<br/>Changes</b>   |                                  |                                  |                                  |
|  | <b>October 1, 2017</b>           | <b>October 1, 2018</b>           | <b>October 1, 2018</b>           |
| <b>7. Net actuarial (gain) / loss:</b>   | 3,502,220                        | 611,359                          | 611,359                          |
| <b>8. Other disclosures:</b>   |                                  |                                  |                                  |
| a. Present value of active members':   |                                  |                                  |                                  |
| i. Future salaries:  |                                  |                                  |                                  |
| at attained age  | \$204,447,241                    | \$216,593,507                    | \$219,746,237                    |
| at entry age   | N/A                              | N/A                              | N/A                              |
| ii. Future contributions:  |                                  |                                  |                                  |
| at attained age  | \$17,898,983                     | \$18,497,101                     | \$18,756,300                     |
| at entry age   | N/A                              | N/A                              | N/A                              |
| b. Present value of future normal contributions from City                            | \$16,365,422                     | \$16,896,392                     | \$19,058,835                     |
| c. Present value of future expected benefit payments for active members at entry age | N/A                              | N/A                              | N/A                              |
| d. Amount of active members' accumulated contributions                               | \$26,776,216                     | \$27,245,015                     | \$27,245,015                     |



**UNFUNDED LIABILITY BASES**

**TABLE Va**

| <u>Description</u>          | <u>Original Amount</u> | <u>Outstanding Balance as of October 1, 2017</u> | <u>BOY 2017/2018 Amortization Payment</u> | <u>Outstanding Balance as of October 1, 2018</u> | <u>BOY 2018/2019 Amortization Payment</u> | <u>Years Remaining October 1, 2018</u> |
|-----------------------------|------------------------|--|---|--|---|--|
| 1988 Experience (Gain)/Loss | (\$3,460,275)          | \$190,376  | \$190,376                                 | \$0  | \$0                                       | 0 years                                |
| 1989 Experience (Gain)/Loss | \$1,662,787            | (\$39,590)                                       | (\$20,313)                                | (\$20,800)                                       | (\$20,800)                                | 1 years                                |
| 1990 Experience (Gain)/Loss | (\$180,749)            | (\$123,924)                                      | (\$43,487)                                | (\$86,792)                                       | (\$44,481)                                | 2 years                                |
| 1991 Experience (Gain)/Loss | (\$376,257)            | \$78,844   | \$21,284                                  | \$62,107   | \$21,746                                  | 3 years                                |
| 1992 Experience (Gain)/Loss | \$180,600              | (\$132,515)                                      | (\$29,346)                                | (\$111,319)                                      | (\$29,950)                                | 4 years                                |
| 1993 Experience (Gain)/Loss | (\$248,979)            | (\$190,123)                                      | (\$35,971)                                | (\$166,330)                                      | (\$36,673)                                | 5 years                                |
| 1994 Experience (Gain)/Loss | (\$304,735)            | \$210,797  | \$35,039                                  | \$189,643  | \$35,685                                  | 6 years                                |
| 1995 Experience (Gain)/Loss | \$290,132              | (\$928,032)                                      | (\$138,319)                               | (\$852,100)                                      | (\$140,723)                               | 7 years                                |
| 1996 Experience (Gain)/Loss | (\$1,175,801)          | (\$1,216,149)                                    | (\$165,073)                               | (\$1,134,111)                                    | (\$167,772)                               | 8 years                                |
| 1997 Experience (Gain)/Loss | (\$1,384,333)          | (\$5,025,993)                                    | (\$628,892)                               | (\$4,744,472)                                    | (\$638,541)                               | 9 years                                |
| 1998 Experience (Gain)/Loss | (\$4,825,881)          | (\$3,465,783)                                    | (\$403,728)                               | (\$3,303,957)                                    | (\$409,523)                               | 10 years                               |
| 1999 Experience (Gain)/Loss | (\$3,450,637)          | (\$4,841,311)                                    | (\$529,286)                               | (\$4,652,675)                                    | (\$536,372)                               | 11 years                               |
| 2000 Experience (Gain)/Loss | (\$4,863,161)          | (\$1,467,000)                                    | (\$151,540)                               | (\$1,419,381)                                    | (\$153,425)                               | 12 years                               |
| 2001 Experience (Gain)/Loss | (\$1,480,206)          | \$7,928,654                                      | \$778,297                                 | \$7,715,235                                      | \$787,258                                 | 13 years                               |
| 2002 Experience (Gain)/Loss | \$7,815,513            | \$10,320,309                                     | \$967,417                                 | \$10,091,770                                     | \$977,678                                 | 14 years                               |
| 2003 Experience (Gain)/Loss | \$9,987,004            | \$4,694,823                                      | \$422,040                                 | \$4,610,333                                      | \$426,142                                 | 15 years                               |
| 2004 Experience (Gain)/Loss | \$4,483,179            | \$5,251,464                                      | \$454,393                                 | \$5,176,040                                      | \$458,415                                 | 16 years                               |
| 2005 Experience (Gain)/Loss | \$4,956,483            | \$6,944,400                                      | \$580,248                                 | \$6,866,920                                      | \$584,892                                 | 17 years                               |
| 2006 Experience (Gain)/Loss | \$6,499,426            | (\$3,833,139)                                    | (\$310,176)                               | (\$3,801,277)                                    | (\$312,401)                               | 18 years                               |
| 2007 Experience (Gain)/Loss | (\$3,577,856)          | \$367,988  | \$28,912                                  | \$365,863  | \$29,096                                  | 19 years                               |
| 2008 Experience (Gain)/Loss | \$343,924              | \$2,393,282                                      | \$182,983                                 | \$2,384,913                                      | \$184,003                                 | 20 years                               |
| 2009 Experience (Gain)/Loss | \$2,246,447            | \$15,570,454                                     | \$1,160,887                               | \$15,547,923                                     | \$1,166,460                               | 21 years                               |
| 2010 Experience (Gain)/Loss | \$14,709,552           | \$1,592,601                                      | \$116,004                                 | \$1,593,248                                      | \$116,473                                 | 22 years                               |
| 2011 Experience (Gain)/Loss | \$1,517,167            | \$10,831,936                                     | \$772,107                                 | \$10,854,555                                     | \$774,663                                 | 23 years                               |
| 2012 Experience (Gain)/Loss | \$10,387,585           | \$6,734,237                                      | \$470,466                                 | \$6,758,609                                      | \$471,686                                 | 24 years                               |
| 2013 Experience (Gain)/Loss | \$6,483,132            | (\$3,109,260)                                    | (\$213,192)                               | (\$3,124,857)                                    | (\$213,595)                               | 25 years                               |
| 2014 Experience (Gain)/Loss | (\$3,009,142)          | (\$3,844,653)                                    | (\$259,058)                               | (\$3,868,857)                                    | (\$259,370)                               | 26 years                               |
| 2015 Experience (Gain)/Loss | (\$3,745,256)          | (\$414,905)                                      | (\$27,506)                                | (\$418,004)                                      | (\$27,520)                                | 27 years                               |
| 2016 Experience (Gain)/Loss | (\$407,300)            | (\$3,851,367)                                    | (\$251,468)                               | (\$3,884,291)                                    | (\$251,441)                               | 28 years                               |
| 2017 Experience (Gain)/Loss | (\$3,814,042)          | \$4,344,887                                      | \$354,318                                 | \$4,305,824                                      | \$346,894                                 | 29 years                               |
| 2018 Experience (Gain)/Loss | \$851,524              |  |   | \$851,524  | \$67,956                                  | 30 years                               |



UNFUNDED LIABILITY BASES

TABLE Va

| <u>Description</u>                                       | <u>Original Amount</u> | <u>Outstanding Balance as of October 1, 2017</u> | <u>BOY 2017/2018 Amortization Payment</u> | <u>Outstanding Balance as of October 1, 2018</u> | <u>BOY 2018/2019 Amortization Payment</u> | <u>Years Remaining October 1, 2018</u> |
|--|------------------------|--|---|--|---|--|
| 1988 Plan Amendment 10 Year Cliff Vesting                | \$417,435              | \$47,792   | \$47,792                                  | \$0  | \$0                                       | 0 years                                |
| 1990 Plan Amendment 10 Year Svc for Non-Svc Disability   | \$62,149               | \$20,474   | \$7,185                                   | \$14,339   | \$7,349                                   | 2 years                                |
| 1992 Plan Amendment Tax Compliance/Pick-Up Plan          | (\$132,092)            | (\$70,303)                                       | (\$15,569)                                | (\$59,058)                                       | (\$15,890)                                | 4 years                                |
| 1994 Plan Amendment Change Pre-Retirement Death Benefits | \$91,138               | \$66,217   | \$11,007                                  | \$59,572   | \$11,210                                  | 6 years                                |
| 2000 Plan Amendment COLA                                 | \$13,628,631           | \$13,453,268                                     | \$1,389,710                               | \$13,016,579                                     | \$1,406,999                               | 12 years                               |
| 2004 Plan Amendment DROP                                 | \$2,820,380            | \$2,988,233                                      | \$258,563                                 | \$2,945,314                                      | \$260,851                                 | 16 years                               |
| 2004 Plan Amendment Elected Officials/Appointees         | \$1,220,245            | \$1,292,868                                      | \$111,868                                 | \$1,274,299                                      | \$112,858                                 | 16 years                               |
| 2006 Plan Amendment 2.75% Multiplier                     | \$6,510,457            | \$6,974,983                                      | \$564,413                                 | \$6,917,005                                      | \$568,462                                 | 18 years                               |
| 2008 Plan Amendment Senior Managers                      | \$383,377              | \$408,434  | \$31,228                                  | \$407,005  | \$31,402                                  | 20 years                               |
| 2009 Plan Amendment Senior Managers                      | \$134,409              | \$141,215  | \$10,529                                  | \$141,010  | \$10,579                                  | 21 years                               |
| 2015 Plan Amendment 7 Year Vesting                       | \$50,515               | \$51,458   | \$3,411                                   | \$51,843   | \$3,413                                   | 27 years                               |
| 1992 Assumption Change                                   | (\$806,413)            | (\$429,196)                                      | (\$95,047)                                | (\$360,547)                                      | (\$97,005)                                | 4 years                                |
| 1994 Assumption Change                                   | \$1,260,489            | \$915,794  | \$152,226                                 | \$823,890  | \$155,032                                 | 6 years                                |
| 1995 Assumption Change                                   | \$697,180              | \$550,262  | \$82,014                                  | \$505,240  | \$83,440                                  | 7 years                                |
| 1996 Assumption Change                                   | \$365,331              | \$320,943  | \$43,563                                  | \$299,293  | \$44,275                                  | 8 years                                |
| 1997 Assumption Change                                   | \$73,638               | \$76,692   | \$9,596                                   | \$72,397   | \$9,744                                   | 9 years                                |
| 2000 Assumption Change                                   | (\$10,001,095)         | (\$9,872,407)                                    | (\$1,019,810)                             | (\$9,551,952)                                    | (\$1,032,497)                             | 12 years                               |
| 2002 Assumption Change                                   | \$1,136,132            | \$1,174,046                                      | \$110,054                                 | \$1,148,047                                      | \$111,221                                 | 14 years                               |
| 2008 Assumption Change                                   | (\$117,474)            | (\$125,154)                                      | (\$9,569)                                 | (\$124,716)                                      | (\$9,622)                                 | 20 years                               |
| 2016 Assumption Change                                   | \$15,767,946           | \$15,922,255                                     | \$1,039,615                               | \$16,058,369                                     | \$1,039,502                               | 28 years                               |
| 2017 Assumption Change                                   | \$2,649,056            | \$2,649,056                                      | \$216,026                                 | \$2,625,239                                      | \$211,499                                 | 29 years                               |
| 2018 Assumption Change                                   | \$7,032,129            |  |   | \$7,032,129                                      | \$561,204                                 | 30 years                               |





**UNFUNDED LIABILITY BASES**

**TABLE Va**

| <u>Description</u>    | <u>Original Amount</u> | <u>Outstanding Balance as of October 1, 2017</u> | <u>BOY 2017/2018 Amortization Payment</u> | <u>Outstanding Balance as of October 1, 2018</u> | <u>BOY 2018/2019 Amortization Payment</u> | <u>Years Remaining October 1, 2018</u> |
|-----------------------|------------------------|--|---|--|---|--|
| 2002 Method Change    | (\$5,539,505)          | (\$5,724,376)                                    | (\$536,598)                               | (\$5,597,612)                                    | (\$542,289)                               | 14 years                               |
| 2010 Method Change    | (\$696,223)            | (\$730,838)                                      | (\$53,234)                                | (\$731,135)                                      | (\$53,449)                                | 22 years                               |
| 2000 Variable Benefit | \$226,471              | \$217,577  | \$22,476                                  | \$210,514  | \$22,755                                  | 12 years                               |
| 2001 Variable Benefit | \$280,869              | \$277,053  | \$27,196                                  | \$269,596  | \$27,509                                  | 13 years                               |
| <b>Total</b>          |                        | <b>\$75,567,654</b>                              | <b>\$5,736,061</b>                        | <b>\$83,231,944</b>                              | <b>\$6,135,012</b>                        |  |

| <u>Date</u>     | <u>Projected Unfunded Liability</u> |
|-----------------|-------------------------------------|
| October 1, 2018 | \$83,231,944                        |
| October 1, 2019 | \$82,994,847                        |
| October 1, 2020 | \$82,588,864                        |
| October 1, 2021 | \$81,978,469                        |
| October 1, 2049 | \$0                                 |

\* The total experience loss/(gain) for the 2017/2018 plan year of \$611,359 is adjusted by contribution timing differences adjusted with interest equal to \$240,165.



DEVELOPMENT OF MARKET ASSET (GAIN)/LOSS

TABLE VIa

|  | As of<br><u>October 1, 2017</u> | As of<br><u>October 1, 2018</u> |
|--|---------------------------------|---------------------------------|
| <b>1. Market Value of Assets</b>         |                                 |                                 |
| a. Cash and cash equivalents (2.15%)     | \$6,110,152                     | \$4,109,578                     |
| b. U.S. government bonds (6.21%)         | \$10,874,090                    | \$11,865,270                    |
| c. Equity securities* (64.46%)           | \$111,566,893                   | \$123,267,287                   |
| d. Corporate bonds and notes (6.1%)      | \$12,321,623                    | \$11,665,257                    |
| e. Private equity funds (7.6%)           | \$14,738,384                    | \$14,531,768                    |
| f. Real estate (13.44%)                  | \$21,527,766                    | \$25,692,099                    |
| g. Net receivables and other (0.14%)     | \$328,787                       | \$258,728                       |
| h. Accrued expenses payable (-0.09%)     | (\$141,890)                     | (\$170,330)                     |
| i. Payable for securities purchased (0%) | \$0                             | \$0                             |
| j. Market value of assets (100%)         | <b>\$177,325,805</b>            | <b>\$191,219,657</b>            |

\*In prior years, "Equity securities" were divided in to "Common stock" and "Equity Funds."

2. Actuarial Value of Assets

|  |                      |                       |
|--|----------------------|-----------------------|
| a. Market Value of Assets  | \$177,325,805        | \$191,219,657         |
| b. 5-year phase-in of gain/(losses) on Actuarial Value of Assets:          |                      |                       |
| i. 2013/2014   | \$1,064,565          | x 20% = \$212,913     |
| ii. 2014/2015  | (\$12,427,208)       | x 40% = (\$4,970,883) |
| iii. 2015/2016   | \$2,433,768          | x 20% = (\$2,485,442) |
| iv. 2016/2017  | \$8,461,700          | x 40% = \$973,507     |
| v. 2017/2018   | \$3,150,542          | x 60% = \$5,077,020   |
| vi. Total unrecognized (losses)/gains                                      | \$3,471,651          | x 80% = \$2,520,434   |
| c. Preliminary Actuarial Value of Assets<br>(Item a. minus item e.vi.)     | <b>\$173,854,154</b> | <b>\$185,134,138</b>  |
| d. Corridor around Actuarial Value of Assets                               |                      |                       |
| i. 80% of Market Value (item a.)   | \$141,860,644        | \$152,975,726         |
| ii. 120% of Market Value (item a.)   | \$212,790,966        | \$229,463,588         |
| e. Actuarial Value of Assets<br>(Item c., but within items d.i. and d.ii.) | <b>\$173,854,154</b> | <b>\$185,134,138</b>  |

**DEVELOPMENT OF MARKET ASSET (GAIN)/LOSS****TABLE VIa**

|                                      | <u>As of<br/>October 1, 2017</u> | <u>As of<br/>October 1, 2018</u> |
|--------------------------------------|----------------------------------|----------------------------------|
| 1. Beginning of Year Market Value    | \$160,422,298                    | \$177,325,805                    |
| 2. Expected Interest on Assets       | \$12,833,784                     | \$14,008,739                     |
| 3. Contributions                     | \$9,372,720                      | \$10,965,265                     |
| 4. Benefit Payments                  | (\$13,120,101)                   | (\$13,567,082)                   |
| 5. Administrative Expenses           | (\$475,674)                      | (\$539,529)                      |
| 6. Interest on 3, 4, and 5           | <u>(\$168,922)</u>               | <u>(\$124,083)</u>               |
| 7. Expected End of Year Market Value | \$168,864,105                    | \$188,069,115                    |
| 8. Actual End of Year Market Value   | \$177,325,805                    | \$191,219,657                    |
| 9. Gain/(Loss) for Plan Year         | \$8,461,700                      | \$3,150,542                      |

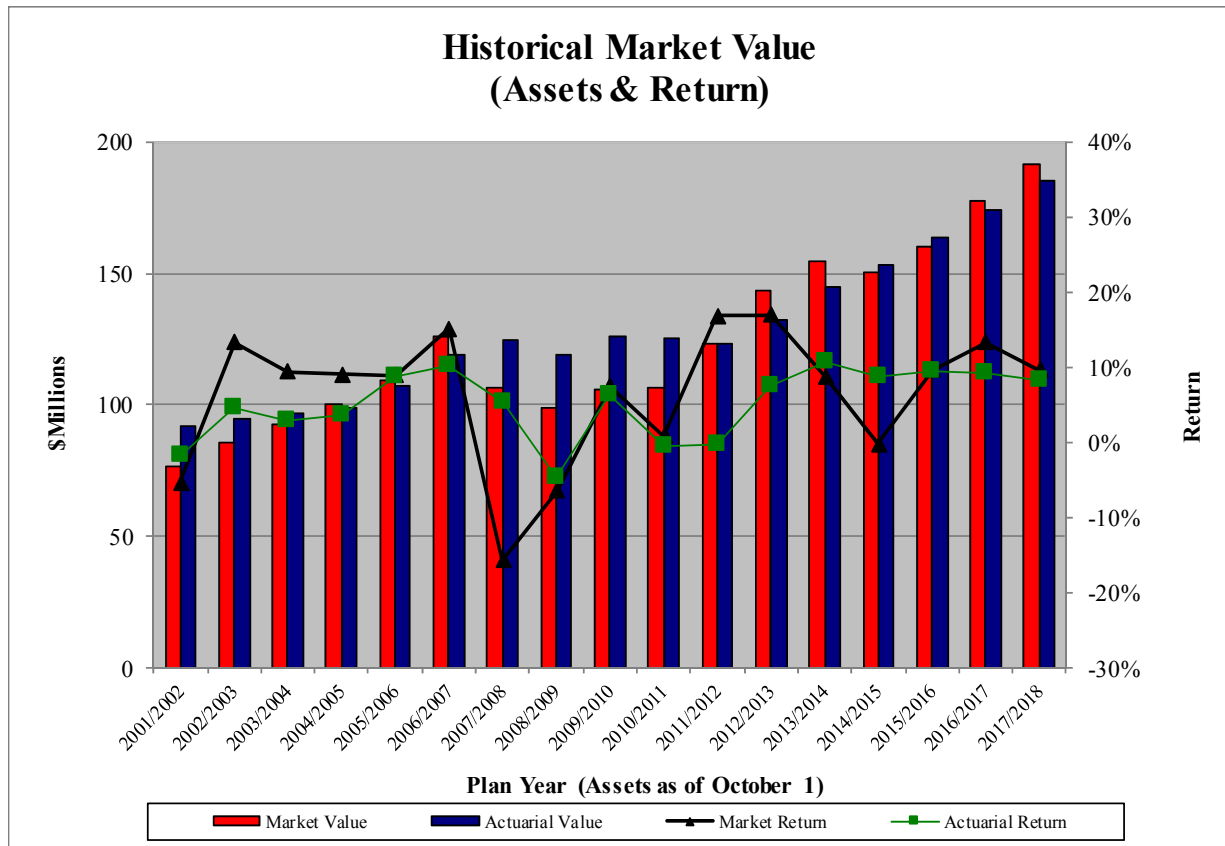
**MARKET ASSET RECONCILIATION****TABLE VIb**

|   | <u>As of<br/>October 1, 2017</u> | <u>As of<br/>October 1, 2018</u> |
|---|----------------------------------|----------------------------------|
| <b>1. Beginning of Year Market Value:</b> | <b>\$160,422,298</b>             | <b>\$177,325,805</b>             |
| <b>2. Increases Due to:</b>               |                                  |                                  |
| a. Contributions:                         |                                  |                                  |
| i. City                                   | \$6,417,918                      | \$7,953,196                      |
| ii. County                                | \$337,150                        | \$348,773                        |
| iii. Employee                             | \$2,617,652                      | \$2,663,296                      |
| iv. Total                                 | <u>\$9,372,720</u>               | <u>\$10,965,265</u>              |
| b. Investment income                      | \$21,126,562                     | \$17,035,198                     |
| c. Total increases                        | <u><u>\$30,499,282</u></u>       | <u><u>\$28,000,463</u></u>       |
| <b>3. Decreases Due to:</b>               |                                  |                                  |
| a. Benefit payments                       | \$12,997,314                     | \$13,342,113                     |
| b. Refund of member contributions         | \$122,787                        | \$224,969                        |
| c. Administrative expenses                | \$475,674                        | \$539,529                        |
| d. Miscellaneous                          | \$0                              | \$0                              |
| e. Total decreases                        | <u><u>\$13,595,775</u></u>       | <u><u>\$14,106,611</u></u>       |
| <b>4. End of Year Market Value:</b>       | <b>\$177,325,805</b>             | <b>\$191,219,657</b>             |



**HISTORICAL ASSET INFORMATION**

**TABLE VII**



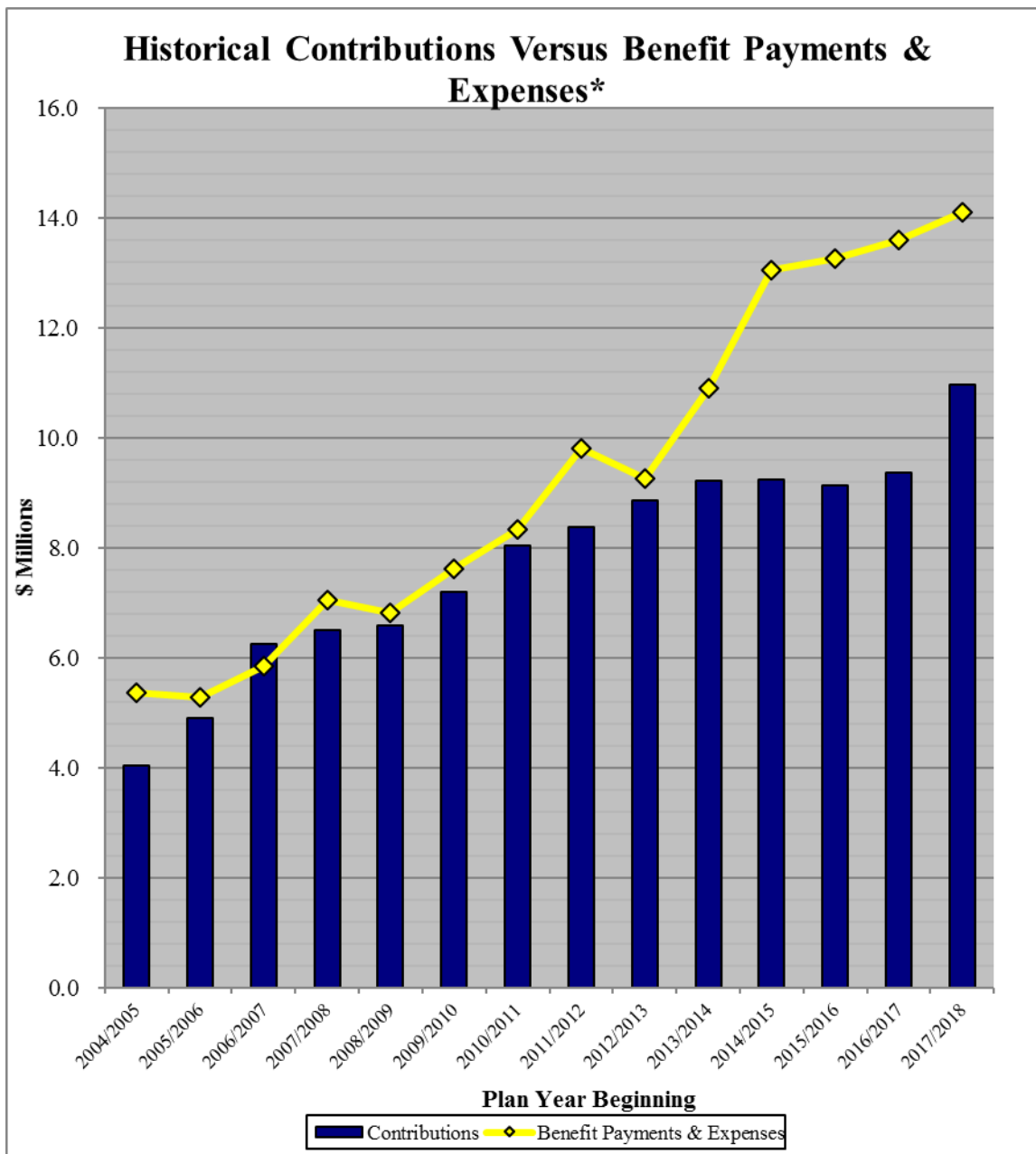
| Plan Year | Market Value as of October 1 | Actuarial Value as of October 1 | Benefit Payments | Administrative Expenses | City, County, and Member Contributions | Market Return | Actuarial Return |
|-----------|------------------------------|---------------------------------|------------------|-------------------------|--|---------------|------------------|
| 2001/2002 | \$76,424,845                 | \$91,709,814                    | \$3,254,038      | \$250,351               | \$2,140,762                            | (5.30)%       | (1.80)%          |
| 2002/2003 | \$85,458,520                 | \$94,741,607                    | \$3,556,707      | \$282,053               | \$2,803,247                            | 13.30%        | 4.50%            |
| 2003/2004 | \$92,735,898                 | \$96,735,577                    | \$3,895,060      | \$330,446               | \$3,481,462                            | 9.40%         | 2.90%            |
| 2004/2005 | \$99,890,915                 | \$98,980,085                    | \$4,967,607      | \$387,998               | \$4,039,559                            | 9.10%         | 3.70%            |
| 2005/2006 | \$109,249,514                | \$107,334,005                   | \$4,862,124      | \$425,926               | \$4,905,164                            | 8.90%         | 8.80%            |
| 2006/2007 | \$126,184,449                | \$118,772,822                   | \$5,376,897      | \$482,702               | \$6,246,138                            | 15.10%        | 10.30%           |
| 2007/2008 | \$106,187,212                | \$124,869,067                   | \$6,521,687      | \$531,899               | \$6,506,416                            | (15.70)%      | 5.30%            |
| 2008/2009 | \$99,128,822                 | \$118,954,587                   | \$6,309,625      | \$517,272               | \$6,584,631                            | (6.40)%       | (4.60)%          |
| 2009/2010 | \$106,118,339                | \$126,102,821                   | \$7,081,623      | \$541,663               | \$7,207,441                            | 7.49%         | 6.37%            |
| 2010/2011 | \$106,693,934                | \$125,170,479                   | \$7,858,299      | \$483,843               | \$8,032,038                            | 0.84%         | (0.49)%          |
| 2011/2012 | \$123,122,925                | \$123,424,957                   | \$9,328,455      | \$490,142               | \$8,374,155                            | 16.87%        | (0.24)%          |
| 2012/2013 | \$143,522,730                | \$132,247,827                   | \$8,781,030      | \$479,816               | \$8,857,264                            | 16.92%        | 7.49%            |
| 2013/2014 | \$154,313,634                | \$144,640,159                   | \$10,409,529     | \$491,959               | \$9,213,527                            | 8.75%         | 10.72%           |
| 2014/2015 | \$150,255,553                | \$153,291,563                   | \$12,524,827     | \$530,248               | \$9,232,033                            | (0.15)%       | 8.74%            |
| 2015/2016 | \$160,422,298                | \$163,311,844                   | \$12,735,090     | \$526,236               | \$9,138,762                            | 9.64%         | 9.35%            |
| 2016/2017 | \$177,325,805                | \$173,854,154                   | \$13,120,101     | \$475,674               | \$9,372,720                            | 13.34%        | 9.16%            |
| 2017/2018 | \$191,219,657                | \$185,134,138                   | \$13,567,082     | \$539,529               | \$10,965,265                           | 9.69%         | 8.37%            |

**REVENUES BY SOURCE AND EXPENSES BY TYPE****TABLE VIIa**

| <b>REVENUES</b>    |                                      |                             |                     |                              |                       |
|--------------------|--------------------------------------|-----------------------------|---------------------|------------------------------|-----------------------|
| <b>Fiscal Year</b> | <b>City and County Contributions</b> | <b>Member Contributions</b> | <b>Sub-Total</b>    | <b>Net Investment Income</b> | <b>Total</b>          |
| 2002/2003          | \$1,228,956                          | \$1,574,291                 | <b>\$2,803,247</b>  | \$10,069,188                 | <b>\$12,872,435</b>   |
| 2003/2004          | \$1,849,695                          | \$1,631,767                 | <b>\$3,481,462</b>  | \$8,021,422                  | <b>\$11,502,884</b>   |
| 2004/2005          | \$2,341,224                          | \$1,698,335                 | <b>\$4,039,559</b>  | \$8,471,063                  | <b>\$12,510,622</b>   |
| 2005/2006          | \$3,144,061                          | \$1,761,103                 | <b>\$4,905,164</b>  | \$9,741,485                  | <b>\$14,646,649</b>   |
| 2006/2007          | \$4,064,240                          | \$2,181,898                 | <b>\$6,246,138</b>  | \$16,548,396                 | <b>\$22,794,534</b>   |
| 2007/2008          | \$3,416,488                          | \$3,089,928                 | <b>\$6,506,416</b>  | (\$19,450,067)               | <b>(\$12,943,651)</b> |
| 2008/2009          | \$3,706,870                          | \$2,877,761                 | <b>\$6,584,631</b>  | (\$6,816,124)                | <b>(\$231,493)</b>    |
| 2009/2010          | \$4,338,870                          | \$2,868,571                 | <b>\$7,207,441</b>  | \$7,405,362                  | <b>\$14,612,803</b>   |
| 2010/2011          | \$5,351,521                          | \$2,680,517                 | <b>\$8,032,038</b>  | \$885,699                    | <b>\$8,917,737</b>    |
| 2011/2012          | \$5,801,971                          | \$2,572,184                 | <b>\$8,374,155</b>  | \$17,873,433                 | <b>\$26,247,588</b>   |
| 2012/2013          | \$6,332,731                          | \$2,524,533                 | <b>\$8,857,264</b>  | \$20,803,387                 | <b>\$29,660,651</b>   |
| 2013/2014          | \$6,697,862                          | \$2,515,665                 | <b>\$9,213,527</b>  | \$12,478,865                 | <b>\$21,692,392</b>   |
| 2014/2015          | \$6,669,132                          | \$2,562,901                 | <b>\$9,232,033</b>  | (\$235,039)                  | <b>\$8,996,994</b>    |
| 2015/2016          | \$6,545,407                          | \$2,593,355                 | <b>\$9,138,762</b>  | \$14,289,309                 | <b>\$23,428,071</b>   |
| 2016/2017          | \$6,755,068                          | \$2,617,652                 | <b>\$9,372,720</b>  | \$21,126,562                 | <b>\$30,499,282</b>   |
| 2017/2018          | \$8,301,969                          | \$2,663,296                 | <b>\$10,965,265</b> | \$17,035,198                 | <b>\$28,000,463</b>   |

| <b>EXPENSES</b>    |                      |                       |                                 |              |
|--------------------|----------------------|-----------------------|---------------------------------|--------------|
| <b>Fiscal Year</b> | <b>Benefits Paid</b> | <b>Member Refunds</b> | <b>Administrative Expenses*</b> | <b>Total</b> |
| 2002/2003          | \$3,365,295          | \$191,412             | \$282,053                       | \$3,838,760  |
| 2003/2004          | \$3,712,048          | \$183,012             | \$330,446                       | \$4,225,506  |
| 2004/2005          | \$4,695,826          | \$271,781             | \$387,998                       | \$5,355,605  |
| 2005/2006          | \$4,641,050          | \$221,074             | \$425,926                       | \$5,288,050  |
| 2006/2007          | \$5,009,768          | \$367,129             | \$482,702                       | \$5,859,599  |
| 2007/2008          | \$6,333,970          | \$187,717             | \$531,899                       | \$7,053,586  |
| 2008/2009          | \$6,010,437          | \$299,188             | \$517,272                       | \$6,826,897  |
| 2009/2010          | \$6,991,324          | \$90,299              | \$541,663                       | \$7,623,286  |
| 2010/2011          | \$7,580,413          | \$277,886             | \$483,843                       | \$8,342,142  |
| 2011/2012          | \$9,122,607          | \$205,848             | \$490,142                       | \$9,818,597  |
| 2012/2013          | \$8,621,962          | \$159,068             | \$479,816                       | \$9,260,846  |
| 2013/2014          | \$10,047,279         | \$362,250             | \$491,959                       | \$10,901,488 |
| 2014/2015          | \$12,286,072         | \$238,755             | \$530,248                       | \$13,055,075 |
| 2015/2016          | \$12,536,330         | \$198,760             | \$526,236                       | \$13,261,326 |
| 2016/2017          | \$12,997,314         | \$122,787             | \$475,674                       | \$13,595,775 |
| 2017/2018          | \$13,342,113         | \$224,969             | \$539,529                       | \$14,106,611 |

\* Does not include investment expenses



\* Please reference Table VIIa on page 21 for the historical benefit payments, expenses, and contributions.

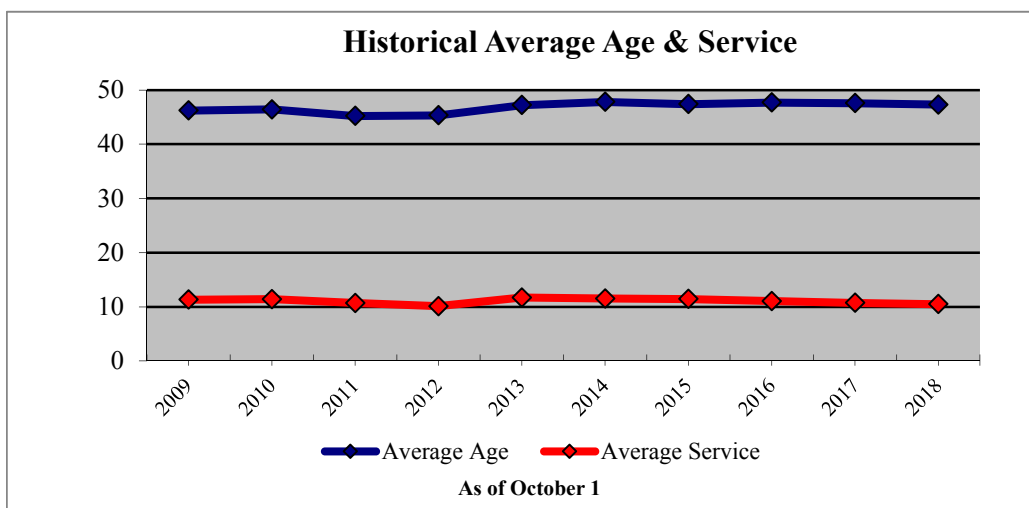


**SUMMARY OF MEMBER DATA**

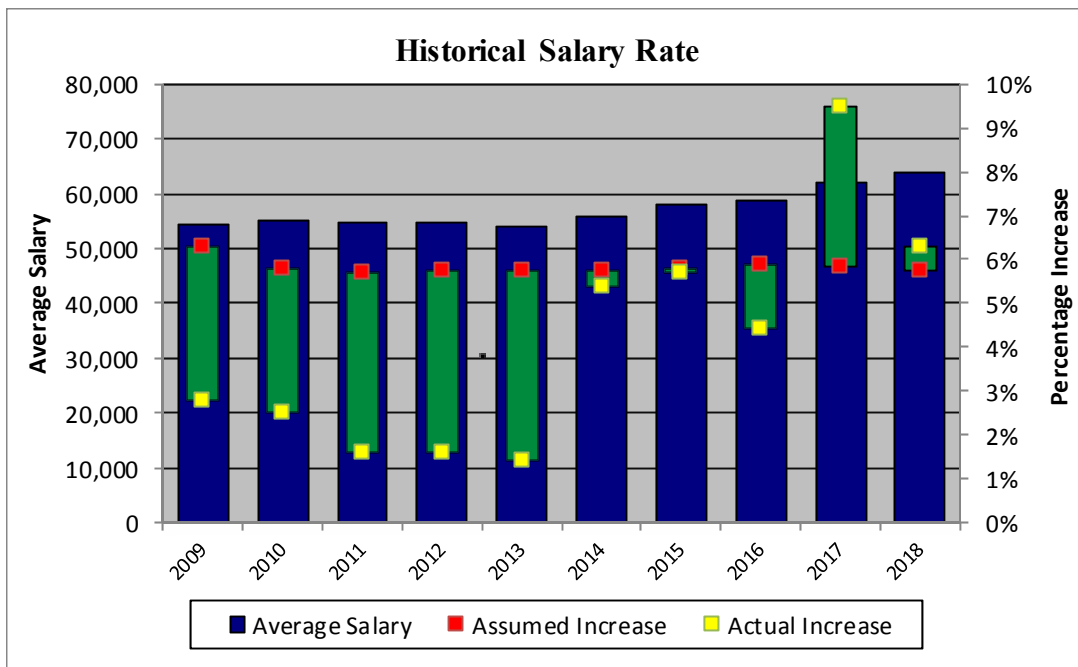
**TABLE IX**

|   | <u>As of<br/>October 1, 2017</u> | <u>As of<br/>October 1, 2018</u> |
|---|----------------------------------|----------------------------------|
| <b>1. Active Members</b>                  |                                  |                                  |
| a. Vested                                 | 290                              | 280                              |
| b. Non-vested                             | 187                              | 208                              |
| c. Sub-total                              | <u>477</u>                       | <u>488</u>                       |
| <b>2. Non-active, Non-retired Members</b> |                                  |                                  |
| a. Fully or partially vested              | 27                               | 28                               |
| <b>3. Retired Members</b>                 |                                  |                                  |
| a. Members in DROP                        | 51                               | 51                               |
| b. Retirees                               | 313                              | 330                              |
| c. Disabled                               | 18                               | 17                               |
| d. Beneficiaries                          | 48                               | 43                               |
| e. Sub-total                              | <u>430</u>                       | <u>441</u>                       |
| <b>4. Total Members</b>                   | <u><u>934</u></u>                | <u><u>957</u></u>                |





| <b>Date</b>     | <b>Average Service Earned</b> | <b>Average Attained Age</b> |
|-----------------|-------------------------------|-----------------------------|
| October 1, 2009 | 11.3                          | 46.2                        |
| October 1, 2010 | 11.4                          | 46.4                        |
| October 1, 2011 | 10.7                          | 45.2                        |
| October 1, 2012 | 10.1                          | 45.3                        |
| October 1, 2013 | 11.7                          | 47.2                        |
| October 1, 2014 | 11.5                          | 47.8                        |
| October 1, 2015 | 11.4                          | 47.4                        |
| October 1, 2016 | 11.0                          | 47.7                        |
| October 1, 2017 | 10.7                          | 47.6                        |
| October 1, 2018 | 10.5                          | 47.3                        |

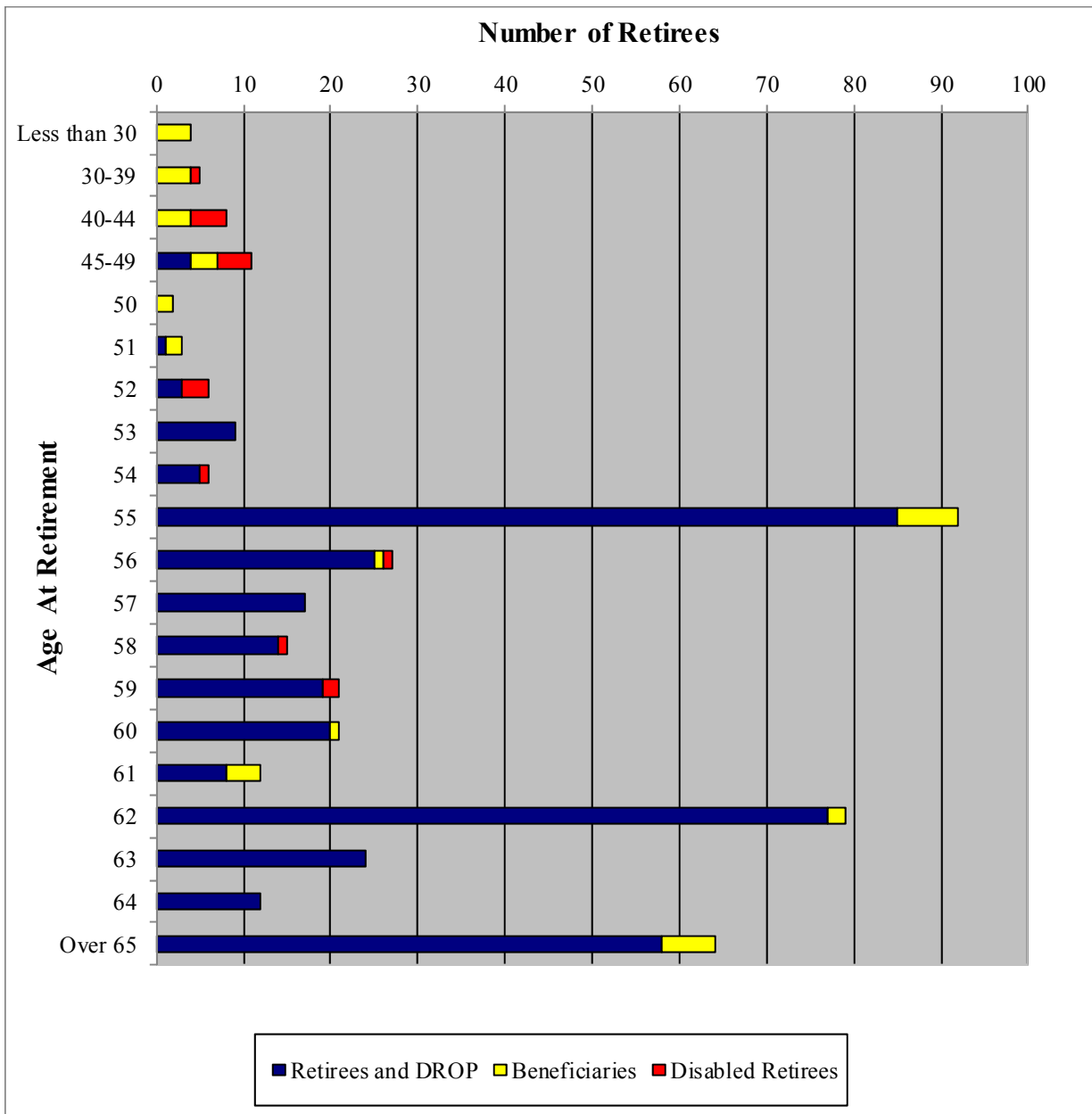


| Date            | Average Salary | Actual Salary Increase | Assumed Salary Increase |
|-----------------|----------------|------------------------|-------------------------|
| October 1, 2009 | 54,245         | 2.80%                  | 6.30%                   |
| October 1, 2010 | 54,952         | 2.50%                  | 5.80%                   |
| October 1, 2011 | 54,777         | 1.62%                  | 5.72%                   |
| October 1, 2012 | 54,732         | 1.59%                  | 5.75%                   |
| October 1, 2013 | 54,118         | 1.44%                  | 5.75%                   |
| October 1, 2014 | 55,659         | 5.38%                  | 5.75%                   |
| October 1, 2015 | 57,849         | 5.72%                  | 5.78%                   |
| October 1, 2016 | 58,611         | 4.45%                  | 5.89%                   |
| October 1, 2017 | 61,859         | 9.47%                  | 5.82%                   |
| October 1, 2018 | 63,890         | 6.30%                  | 5.75%                   |



The definition of compensation for benefit determination purposes includes base pay and regular longevity wages, and excludes overtime, bonuses and any other non-regular payments. The table on the following page illustrates the ten year pay history for the System which includes all compensation received by the members of the plan. Total compensation has increased by 2.70% per year for the ten year period ending October 1, 2018.

| <b>Valution Date</b> | <b>Total Payroll</b> | <b>Average Annual Increase Ending October 1,</b> |
|----------------------|----------------------|--|
| October 1, 2018      | \$36,485,736         | 2.7%   |
| October 1, 2017      | 33,853,007           | 2.2%   |
| October 1, 2016      | 32,096,866           | 1.7%   |
| October 1, 2015      | 30,552,268           | 1.3%   |
| October 1, 2014      | 29,419,890           | 0.9%   |
| October 1, 2013      | 29,406,608           | 1.0%   |
| October 1, 2012      | 29,235,231           | 1.1%   |
| October 1, 2011      | 28,312,236           | 0.4%   |
| October 1, 2010      | 30,401,074           | 4.3%   |
| October 1, 2009      | 28,205,419           | 0.9%   |
| October 1, 2008      | 27,945,524           |  |



Average benefit being paid to non-disabled retirees is \$2,796.0 per month.

Average benefit being paid to disabled retirees is \$2,132.66 per month.

Average benefit being paid to beneficiaries is \$1,437.24 per month.



|   | <u>Active</u> | <u>Non-Active,<br/>Non-Retired</u> | <u>Retired</u> | <u>Total</u> |
|---|---------------|------------------------------------|----------------|--------------|
| <b>1. Number of members as of<br/>October 1, 2017</b> | <b>477</b>    | <b>27</b>                          | <b>430</b>     | <b>934</b>   |
| <b>2. Change in Status during the plan year:</b>      |               |                                    |                |              |
| a. Actives who became inactive                        | (3)           | 3                                  |                |              |
| b. Actives who retired                                | (20)          |                                    | 20             |              |
| c. Inactives who became active                        | 1             | (1)                                |                |              |
| d. Inactives who retired                              |               | (2)                                | 2              |              |
| e. Retirees who became active                         |               |                                    |                |              |
| <b>3. No longer members due to:</b>                   |               |                                    |                |              |
| a. Death  | (1)           |                                    | (10)           | (11)         |
| b. Permanent break-in-service                         | (15)          |                                    |                | (15)         |
| c. Forfeiture of benefits                             |               |                                    |                |              |
| d. Expiration of certain period                       |               |                                    | (4)            | (4)          |
| e. Included in error last year                        |               |                                    |                |              |
| <b>4. New members due to:</b>                         |               |                                    |                |              |
| a. Initial membership                                 | 49            |                                    |                | 49           |
| b. Death of another member                            |               |                                    | 3              | 3            |
| c. Omitted in error last year                         |               |                                    |                |              |
| d. Correction   |               | 1*                                 |                | 1*           |
| <b>5. Number of members as of<br/>October 1, 2018</b> | <b>488</b>    | <b>28</b>                          | <b>441</b>     | <b>957</b>   |

\*- Additional records for members who vested benefits under Plan 1 and have returned to service as Plan 2 members. In the previous valuation, each member had only 1 record that reflected all service.



**AGE-SERVICE SALARY TABLE**

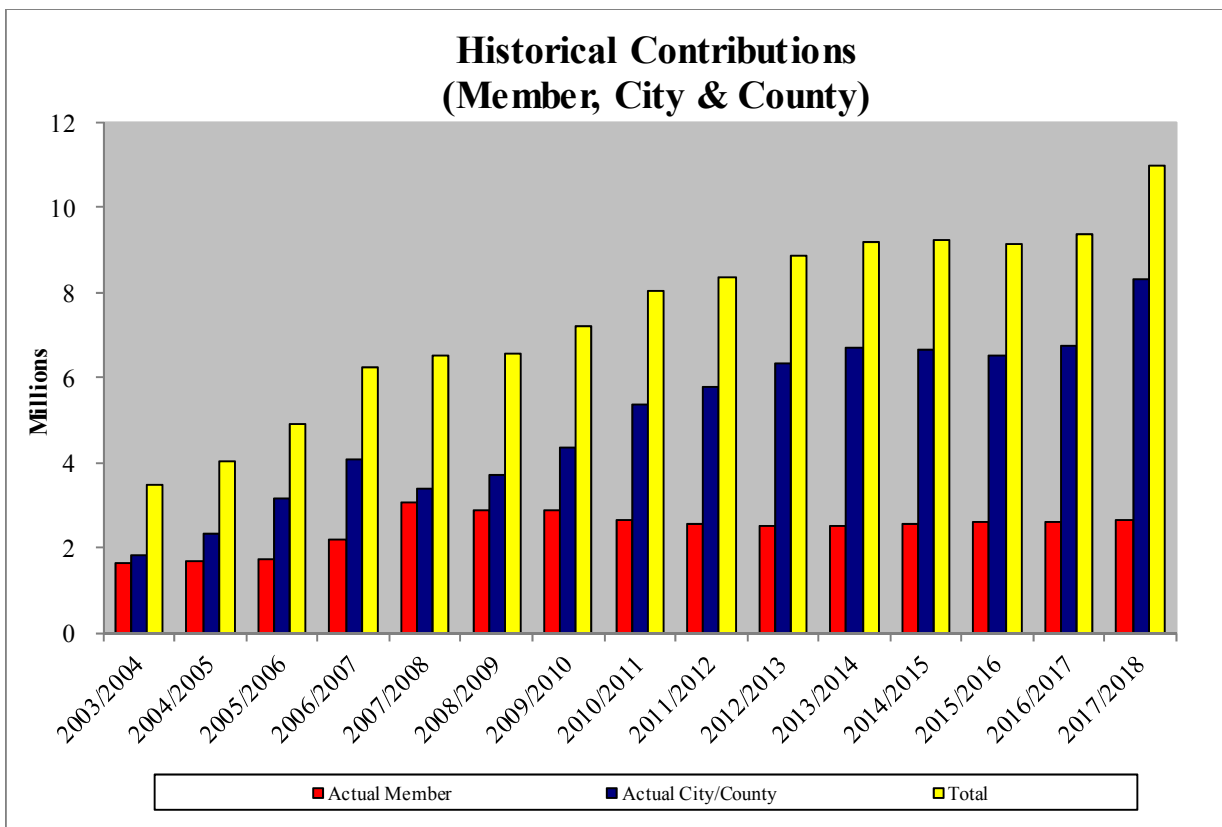
**TABLE IXd**

| Attained Age       | Completed Years of Service |            |           |            |           |           |           |           |          |          | Total      |
|--------------------|----------------------------|------------|-----------|------------|-----------|-----------|-----------|-----------|----------|----------|------------|
|                    | Under 1                    | 1 to 4     | 5 to 9    | 10 to 14   | 15 to 19  | 20 to 24  | 25 to 29  | 30 to 34  | 35 to 39 | 40 & Up  |            |
| <b>Under 25</b>    | 2                          | 4          | 0         | 0          | 0         | 0         | 0         | 0         | 0        | 0        | <b>6</b>   |
| Avg. Pay           | 36,825                     | 37,687     | 0         | 0          | 0         | 0         | 0         | 0         | 0        | 0        | 37,400     |
| <b>25 to 29</b>    | 9                          | 22         | 2         | 0          | 0         | 0         | 0         | 0         | 0        | 0        | <b>33</b>  |
| Avg. Pay           | 40,998                     | 45,487     | 45,592    | 0          | 0         | 0         | 0         | 0         | 0        | 0        | 44,269     |
| <b>30 to 34</b>    | 2                          | 23         | 14        | 4          | 0         | 0         | 0         | 0         | 0        | 0        | <b>43</b>  |
| Avg. Pay           | 36,825                     | 46,774     | 50,719    | 52,963     | 0         | 0         | 0         | 0         | 0        | 0        | 48,171     |
| <b>35 to 39</b>    | 1                          | 14         | 5         | 24         | 6         | 0         | 0         | 0         | 0        | 0        | <b>50</b>  |
| Avg. Pay           | 82,400                     | 52,957     | 60,255    | 59,856     | 67,314    | 0         | 0         | 0         | 0        | 0        | 59,310     |
| <b>40 to 44</b>    | 0                          | 12         | 9         | 17         | 17        | 3         | 1         | 0         | 0        | 0        | <b>59</b>  |
| Avg. Pay           | 0                          | 57,403     | 70,090    | 62,274     | 65,546    | 68,376    | 65,866    | 0         | 0        | 0        | 63,790     |
| <b>45 to 49</b>    | 3                          | 19         | 12        | 14         | 20        | 12        | 4         | 1         | 0        | 0        | <b>85</b>  |
| Avg. Pay           | 38,760                     | 57,779     | 68,850    | 64,658     | 73,665    | 74,127    | 84,943    | 54,407    | 0        | 0        | 67,088     |
| <b>50 to 54</b>    | 4                          | 16         | 7         | 19         | 11        | 9         | 8         | 8         | 0        | 0        | <b>82</b>  |
| Avg. Pay           | 76,614                     | 68,464     | 59,169    | 69,293     | 69,127    | 72,389    | 78,423    | 68,856    | 0        | 0        | 69,790     |
| <b>55 to 59</b>    | 4                          | 16         | 10        | 20         | 17        | 5         | 6         | 5         | 0        | 0        | <b>83</b>  |
| Avg. Pay           | 57,753                     | 56,540     | 77,111    | 60,731     | 70,375    | 111,444   | 79,016    | 102,072   | 0        | 0        | 70,596     |
| <b>60 to 64</b>    | 2                          | 9          | 6         | 6          | 5         | 2         | 1         | 0         | 0        | 0        | <b>31</b>  |
| Avg. Pay           | 82,516                     | 63,073     | 58,453    | 58,596     | 106,630   | 97,611    | 56,407    | 0         | 0        | 0        | 71,605     |
| <b>65 to 79</b>    | 0                          | 4          | 2         | 3          | 0         | 1         | 0         | 0         | 0        | 0        | <b>10</b>  |
| Avg. Pay           | 0                          | 63,925     | 73,505    | 76,154     | 0         | 61,579    | 0         | 0         | 0        | 0        | 69,275     |
| <b>70 &amp; Up</b> | 0                          | 1          | 1         | 3          | 1         | 0         | 0         | 0         | 0        | 0        | <b>6</b>   |
| Avg. Pay           | 0                          | 247,110    | 49,249    | 49,107     | 51,816    | 0         | 0         | 0         | 0        | 0        | 82,583     |
| <b>Total</b>       | <b>27</b>                  | <b>140</b> | <b>68</b> | <b>110</b> | <b>77</b> | <b>32</b> | <b>20</b> | <b>14</b> | <b>0</b> | <b>0</b> | <b>488</b> |
| Avg. Pay           | 52,498                     | 55,899     | 63,115    | 62,462     | 71,860    | 80,005    | 78,176    | 79,687    | 0        | 0        | 63,890     |



**HISTORICAL CONTRIBUTIONS**

**TABLE X**



| <b>Plan Year</b> | <b>Actual Member</b> | <b>City/County</b> | <b>Total</b> |
|------------------|----------------------|--------------------|--------------|
| 2003/2004        | \$1,631,767          | \$1,849,695        | \$3,481,462  |
| 2004/2005        | \$1,698,335          | \$2,341,224        | \$4,039,559  |
| 2005/2006        | \$1,761,103          | \$3,144,061        | \$4,905,164  |
| 2006/2007        | \$2,181,898          | \$4,064,240        | \$6,246,138  |
| 2007/2008        | \$3,089,928          | \$3,416,488        | \$6,506,416  |
| 2008/2009        | \$2,877,761          | \$3,706,870        | \$6,584,631  |
| 2009/2010        | \$2,868,571          | \$4,338,870        | \$7,207,441  |
| 2010/2011        | \$2,680,517          | \$5,351,521        | \$8,032,038  |
| 2011/2012        | \$2,572,184          | \$5,801,971        | \$8,374,155  |
| 2012/2013        | \$2,524,533          | \$6,332,731        | \$8,857,264  |
| 2013/2014        | \$2,515,665          | \$6,697,862        | \$9,213,527  |
| 2014/2015        | \$2,562,901          | \$6,669,132        | \$9,232,033  |
| 2015/2016        | \$2,593,355          | \$6,545,407        | \$9,138,762  |
| 2016/2017        | \$2,617,652          | \$6,755,068        | \$9,372,720  |
| 2017/2018        | \$2,663,296          | \$8,301,969        | \$10,965,265 |



1. Actuarial Cost Method

- Entry Age Normal Cost Method. Total normal cost is determined as a level percentage of pay which would be required annually from entry age to retirement age to fund the expected retirement benefits assuming the Plan had always been in effect. The Actuarial Accrued Liability is the amount of the Present Value of Benefits that have been accrued under the Entry Age Normal Method to date.

2. Decrements

- **Pre-Retirement Healthy Mortality**

Female: RP2000 Generational, 100% Combined Healthy White Collar, Scale BB  
 Male: RP2000 Generational, 50% Combined Healthy White Collar / 50% Combined Healthy Blue Collar, Scale BB

- **Post-Retirement Healthy Mortality**

Female: RP2000 Generational, 100% Annuitant White Collar, Scale BB  
 Male: RP2000 Generational, 50% Annuitant White Collar / 50% Annuitant Blue Collar, Scale BB

- **Post-Retirement Disabled Mortality**

Female: RP2000, 100% Disabled Female set forward two years, no projection scale  
 Male: RP2000, 100% Disabled Male setback four years, no projection scale

- **Disability**

Representative values of the assumed annual rates of disability among members in active service are as follows:

| Age | Ordinary Disability Rate | Service Disability Rate | Age | Ordinary Disability Rate | Service Disability Rate |
|-----|--------------------------|-------------------------|-----|--------------------------|-------------------------|
| 20  | .000232                  | .000058                 | 40  | .000484                  | .000121                 |
| 25  | .000232                  | .000058                 | 45  | .000868                  | .000217                 |
| 30  | .000232                  | .000058                 | 50  | .001716                  | .000429                 |
| 35  | .000260                  | .000065                 | 55  | .003564                  | .000891                 |





• Retirement

Representative values of the assumed annual rates of retirement among members in active service are as follows:

| Age   | Rate  |
|-------|-------|
| ≤54   | .0700 |
| 55    | .5000 |
| 56-60 | .3000 |
| 61-65 | .5000 |
| 66-69 | .3000 |
| ≥70   | 1.000 |

• Withdrawal from Active Status

Representative values of the assumed annual rates of withdrawal among members in active service are as follows:

| Age | Years of Service |       |       |       |       |
|-----|------------------|-------|-------|-------|-------|
|     | 0 – 1            | 1 – 2 | 2 – 3 | 3 – 4 | 4+    |
| 20  | .1800            | .1200 | .1000 | .0700 | .1071 |
| 25  | .1800            | .1200 | .1000 | .0700 | .0756 |
| 30  | .1800            | .1200 | .1000 | .0700 | .0536 |
| 35  | .1800            | .1200 | .1000 | .0700 | .0416 |
| 40  | .1800            | .1200 | .1000 | .0700 | .0321 |
| 45  | .1800            | .1200 | .1000 | .0700 | .0227 |
| 50  | .1800            | .1200 | .1000 | .0700 | .0132 |
| 55  | .1800            | .1200 | .1000 | .0700 | .0038 |

3. Interest Rates

- Used for calculating all liabilities

➤ 7.65% per annum



4. Salary Increase

• Individual Compensation:

| Service | Rate  |
|---------|-------|
| 0-10    | 7.50% |
| >10     | 4.25% |

• Aggregate Compensation

2.40% per year for unfunded liability bases established prior to October 1, 2017.  
0.00% for bases established thereafter.

5. Marriage Assumptions

• Percent Married: 100% of active members assumed married at retirement.

1. **Age Differences between Spouses:** Male spouses are assumed to be three years older than female spouses.

6. Expenses:

Expenses paid out of the fund, other than investment-related expenses, are assumed to be equal to the average of actual expenses over the previous two years.

7. DROP

2. **Entry:** Of those assumed to retire using the Service Retirement rates, the proportion entering DROP is as shown in the following table.

| Age at Retirement | Proportion Entering DROP |
|-------------------|--------------------------|
| Under 55          | 0%                       |
| 55-62             | 70%                      |
| Over 62           | 10%                      |

3. **Period:** DROP participants are assumed to remain in the DROP for a total of five years.

8. Assets

The market value of assets is adjusted to recognize, over a five-year period, investment earnings greater (or less than) the assumed investment return. The resulting Actuarial Value of Assets is limited to no more than 120% of the market value of assets and no less than 80% of the market value of assets. Details are shown in the Asset Information Section of the report.



**9. Amortization Period**

New Unfunded Actuarial Accrued Liability resulting from plan amendments, changes in assumptions or methods, or actuarial gains and loss are amortized over 30 years based on the plan's assumed rate of investment return. Bases established prior to October 1, 2017 are amortized as a level percentage of expected payroll, and bases established thereafter are amortized as a level dollar payment.

**10. BSO Required Contribution**

The required contribution for the Broward Sheriff's Office (BSO) is determined by multiplying the total required contribution rate as a percentage of payroll by the payroll for BSO employees, projected to the following year.

**11. Data Sources**

**Asset Data:**

The asset information is taken from audited statements furnished by the Retirement Office, and adjusted to include DROP Accounts as liabilities of the Plan. The DROP Account balances are added to net asset amount shown in the audited statement. The valuation entry for benefits paid during the last years reflects benefit amounts explicitly paid from the Plan (including the payout of DROP Accounts) and does not reflect those paid into members' DROP accounts.

**Member Data:**

The member data is supplied by the Retirement Office. It is reviewed for reasonableness and consistency, but no audit was performed. Cavanaugh Macdonald is not aware of any errors or omissions in the data that would have a significant effect on the results of our calculations.



**Effective Date:**

**Plan 1:** December 8, 1972

**Plan 2:** June 8, 2011

**Eligibility:**

Regular full-time employment with the City (at least 26 hours per week and 5 months per year), including Elected Officials, Appointees, and Senior Managers.

**Earnings:**

Basic compensation and regular longevity pay, increased for temporary upgrade pay. Lump sum payment at termination for unused sick leave and vacation time is not included.

**Average Monthly Earnings (AME):**

**Plan 1:** Monthly average for the highest completed 78 bi-weekly pay periods during employment times 1.0048.

**Plan 2:** Monthly average for the highest completed 130 bi-weekly pay periods during employment times 1.0048.

**Credited Service:**

Total years and completed months of service from the last date of hire to the date of termination, retirement, death, or disability.

**Normal Retirement**

**Eligibility (Normal Retirement Date):**

The earlier of attainment of age 55 with 20 years of Continuous Service, or age 62 with 3 years of Credited Service as a “regular employee” with the City.

**Benefit:**

**Plan 1:** 2.75% of AME times years of service.

**Plan 2:** 2.00% of AME times years of service.

**Maximum Benefit:**

\$90,000 per year (indexed) at age 62, or 100% of AME (such earnings to exclude picked-up employee contributions per Sec. 414(h)(2), deferred compensation per Sec 457, and amounts deferred under Sec 125).



**Normal Form of Benefit:**

Life annuity to the member.

**COLA:**

**Plan 1:** Paid annually, on October 1 for retired members (or their beneficiaries) who have been retired for at least one year. Increase is 2%. An additional 1% will be payable if either there is a net experience gain for the year, or the City cost for the year is zero after payment of the variable COLA.

**Plan 2:** Paid annually, on October 1 for retired members (or their beneficiaries) who have been retired at least five years. No increase is given for eligible retirees under 55 on October 1. A 1% increase is given for eligible retirees between 55 and 64. A 2% increase is given for eligible retirees 65 or older. A “variable” increase (of not more than one percent) will be granted when the plan is sufficiently funded.

**Early Retirement**

**Eligibility:**

The attainment of 20 years of Credited Service.

**Benefit:**

**Plan 1:** 2.75% of AME times years of service.

**Plan 2:** 2.00% of AME times years of service.

**Normal Form of Benefit:**

Life annuity to the member.

**COLA:**

**Plan 1:** Paid annually, on October 1 for retired members (or their beneficiaries) who have been retired for at least one year. Increase is 2%. An additional 1% will be payable if either there is a net experience gain for the year, or the City cost for the year is zero after payment of the variable COLA.

**Plan 2:** Paid annually, on October 1 for retired members (or their beneficiaries) who have been retired at least five years. No increase is given for eligible retirees under 55 on October 1. A 1% increase is given for eligible retirees between 55 and 64. A 2% increase is given for eligible retirees 65 or older. A “variable” increase (of not more than one percent) will be granted when the plan is sufficiently funded.



**Delayed Retirement**

**Benefit:**

**Plan 1:** 2.75% of AME times years of service.

**Plan 2:** 2.00% of AME times years of service.

**Normal Form of Benefit:**

Life annuity to the member.

**COLA:**

**Plan 1:** Paid annually, on October 1 for retired members (or their beneficiaries) who have been retired for at least one year. Increase is 2%. An additional 1% will be payable if either there is a net experience gain for the year, or the City cost for the year is zero after payment of the variable COLA.

**Plan 2:** Paid annually, on October 1 for retired members (or their beneficiaries) who have been retired at least five years. No increase is given for eligible retirees under 55 on October 1. A 1% increase is given for eligible retirees between 55 and 64. A 2% increase is given for eligible retirees 65 or older. A “variable” increase (of not more than one percent) will be granted when the plan is sufficiently funded.

**Drop Retirement**

**Eligibility:**

The earlier of attainment of age 55 with 20 years of Continuous Service, or age 62 with 3 years of Credited Service as a “regular employee” with the City.

**Benefit:**

**Plan 1:** 2.75% of AME times years of service.

**Plan 2:** 2.00% of AME times years of service.

**Normal Form of Benefit:**

Life annuity to the member.



**COLA:**

Same as Normal Retirement, except that the COLA is first credited and paid on the October 1 the member is eligible to receive a COLA after leaving employment (exits DROP)

**DROP Period:**

The Member may remain in the DROP for any period up to five years.

**Contributions:**

Member contributions cease when Member enters DROP.

**DROP Interest:**

DROP account balances are credited at the beginning of each month with interest at 1/12<sup>th</sup> of the rate assumed in the actuarial valuation for that year.

**Disability Retirement – Service Incurred**

**Eligibility:**

Members are immediately eligible for a Disability Retirement Benefit where the Disability results from an act occurring in the performance of service with the City of Pompano Beach.

Disability Retirement eligibility is forfeited upon entry into the DROP.

**Disability Definition:**

Total and permanent disablement and unable to earn at least 75% of regular earnings. A member who is eligible for full primary Social Security old age benefits is not eligible.

**Benefit:**

60% of Earnings.

**Normal Form of Benefit:**

Life annuity to the member.



**COLA:**

**Plan 1:** Paid annually, on October 1 for retired members (or their beneficiaries) who have been retired for at least one year. Increase is 2%. An additional 1% will be payable if either there is a net experience gain for the year, or the City cost for the year is zero after payment of the variable COLA.

**Plan 2:** Paid annually, on October 1 for retired members (or their beneficiaries) who have been retired at least five years. No increase is given for eligible retirees under 55 on October 1. A 1% increase is given for eligible retirees between 55 and 64. A 2% increase is given for eligible retirees 65 or older. A “variable” increase (of not more than one percent) will be granted when the plan is sufficiently funded.

**Disability Retirement – Non-Service Incurred**

**Eligibility:**

Total and permanent disablement, 7 years of service, and unable to be gainfully employed. A member who is eligible for full primary Social Security old age benefits is not eligible.

Disability Retirement eligibility is forfeited upon entry into the DROP.

**Benefit:**

Accrued pension, subject to a minimum of 25% of Earnings.

**COLA:**

**Plan 1:** Paid annually, on October 1 for retired members (or their beneficiaries) who have been retired for at least one year. Increase is 2%. An additional 1% will be payable if either there is a net experience gain for the year, or the City cost for the year is zero after payment of the variable COLA.

**Plan 2:** Paid annually, on October 1 for retired members (or their beneficiaries) who have been retired at least five years. No increase is given for eligible retirees under 55 on October 1. A 1% increase is given for eligible retirees between 55 and 64. A 2% increase is given for eligible retirees 65 or older. A “variable” increase (of not more than one percent) will be granted when the plan is sufficiently funded.





**Pre-Retirement Death Benefit – Basic**

**Benefit:**

1 times annual earnings (payable in monthly installments over four years) plus a refund of contributions with interest. Alternatively, for members eligible for Early or Normal Retirement, or who have a vested benefit whether still actively employed by the City or not, the pension is payable to the beneficiary for 10 years as though retirement occurred on the date of death under Option 2, Ten Year Certain and Life (no reduction for early retirement if death occurs prior to normal retirement).

**COLA:**

**Plan 1:** Paid annually, on October 1 for retired members (or their beneficiaries) who have been retired for at least one year. Increase is 2%. An additional 1% will be payable if either there is a net experience gain for the year, or the City cost for the year is zero after payment of the variable COLA.

**Plan 2:** Paid annually, on October 1 for retired members (or their beneficiaries) who have been retired at least five years. No increase is given for eligible retirees under 55 on October 1. A 1% increase is given for eligible retirees between 55 and 64. A 2% increase is given for eligible retirees 65 or older. A “variable” increase (of not more than one percent) will be granted when the plan is sufficiently funded.

**Withdrawal – Non Vested**

**Eligibility:**

First day of work, up to the earlier of 7 years of City service or 5 years of Senior Management Service for regular employees only.

**Benefit:**

Accumulated contributions with 3% interest.

**Form of Benefit:**

Lump sum.



**Withdrawal – Vested**

**Eligibility:**

Regular employees – at least 7 years of service.

Senior Managers – earlier of 7 years of City service and 5 years of Senior Management Service.

Elected Officials and Appointees – at least 5 years of service.

**Benefit:**

A vested benefit deferred to regular normal retirement date. Alternatively, a regular employee or Senior Management participant may withdraw the accumulated contributions and forfeit the deferred vested benefit.

**Member Contributions**

**Contributions:**

**Elected Officials and Appointees**

No member contributions. However, the City will make contributions at the same rate that applies to Regular Employees on behalf of these participants. These contributions are not eligible for refund upon termination.

**Regular Employees and Senior Managers**

**Plan 1:** 10.0% of earnings.

**Plan 2:** 7.0% of earnings.

**Interest Crediting Rate:**

3% per year.

**Optional Forms of Payment**

**Option 1:**

Joint and last survivor option.

**Option 2:**

Ten-Year Certain and Life option.



**Additional Provisions**

**Reentry Provision:**

Credit for prior service is granted in full upon repayment of all monies refunded to the member with interest at the assumed interest rate for actuarial purposes.

**Second Retirement Provision:**

Members may retire and return to work as a regular employee. Prior pension payments are continued during the period of reemployment. A second benefit is earned based solely on the second period of employment, provided the employee worked at least three years during the second period of employment.



The following Plan Amendments have been adopted within the past few years. Amendment changes that have first been reflected in this valuation are shown in bold print:

1. Effective June 8, 2011

- a) For members hired on or after June 8, 2011, average monthly earnings is the average of the highest 130 bi-weekly pay periods times 1.0048.
- b) For members hired on or after June 8, 2011, the monthly retirement benefit is 2.0% times average monthly earnings.
- c) For members hired on or after June 8, 2011, the contribution rate is 7.0% of earnings.
- d) For members hired on or after June 8, 2011, a member is eligible for a COLA on their fifth anniversary of retirement. No increase is given for eligible retirees under 55 on October 1. A 1% increase is given for eligible retirees between 55 and 64. A 2% increase is given for eligible retirees 65 or older. A “variable” increase (of not more than one percent) will be granted when the plan is sufficiently funded.

2. Effective January 13, 2015

- a. Members are 100% vested upon completion of 7 years of continuous service with the City.