



City of Pompano Beach Police & Firefighters' Retirement Plan

October 1, 2020
Actuarial Valuation Report

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Actuarial Certification

At the request of the plan sponsor, this report summarizes the Police and Firefighters' Retirement System for the City of Pompano Beach as of October 1, 2020. The purpose of this report is to communicate the following results of the valuation:

- Determine Funded Status; and
- Determine Actuarial Contribution for the fiscal year October 1, 2021 through September 30, 2022

This report has been prepared in accordance with the laws and accounting standards indicated above and their applicable regulations. Consequently, it may not be appropriate for other purposes. Please contact Nyhart prior to disclosing this report to any other party or relying on its content for any purpose other than that explained above. Failure to do so may result in misrepresentation or misinterpretation of this report.

The results in this report were prepared using information provided to us by other parties. The census information has been provided to us by the employer. Asset information has been provided to us by the trustee. We have reviewed the provided data for reasonableness when compared to prior information provided, but have not audited the data. Where relevant data may be missing, we have made assumptions we believe to be reasonable. We are not aware of any significant issues with and have relied on the data provided. Any errors in the data provided may result in a different result than those provided in this report. A summary of the data used in the valuation is included in this report.

The actuarial assumptions and methods were chosen by the Board. In our opinion, all actuarial assumptions and methods are individually reasonable and in combination represent our best estimate of anticipated experience of the plan. Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following:

- plan experience differing from that anticipated by the economic or demographic assumptions;
- changes in economic or demographic assumptions;
- 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) and;
- changes in plan provisions or applicable law.

We did not perform an analysis of the potential range of future measurements due to the limited scope of our engagement. This report has been prepared in accordance with generally accepted actuarial principles and practice.

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

City of Pompano Beach Police & Firefighters' Retirement System
Actuarial Valuation as of October 1, 2020

Actuarial Certification

With respect to reporting standards for defined benefit retirement plans or systems contained in Section 112.664(1), F.S., the actuarial disclosures required under this section were prepared and completed by me or under my direct supervision, and I acknowledge responsibility for the results. To the best of my knowledge, the results are complete and accurate, and in my opinion, meet the requirements of Section 112.664 (1), Florida Statutes, and Rule 60T-1.0035, Florida Administrative Code.

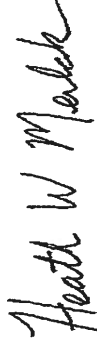
Neither Nyhart nor any of its employees have any relationship with the plan or its sponsor which could impair or appear to impair the objectivity of this report. To the extent that this report or any attachment concerns tax matters, it is not intended to be used and cannot be used by a taxpayer for the purpose of avoiding penalties that may be imposed by law.

The undersigned are compliant with the continuing education requirements of the Qualification Standards for Actuaries Issuing Statements of Actuarial Opinion in the United States and are available for any questions.

Nyhart



Lawrence Watts, Jr., FSA, CFA, EA, MAAA
Enrolled Actuary No. 20-8496



Heath W. Merlak, FSA, EA, MAAA
Enrolled Actuary No. 20-5967

February 18, 2021

Date

Copies of this Report are to be furnished to the Division of Retirement within 60 days of receipt from the actuary at the following addresses:

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Benefits Administrator
Municipal Police Officers' &
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Post Office Box 3010
Tallahassee, FL 32315-3010

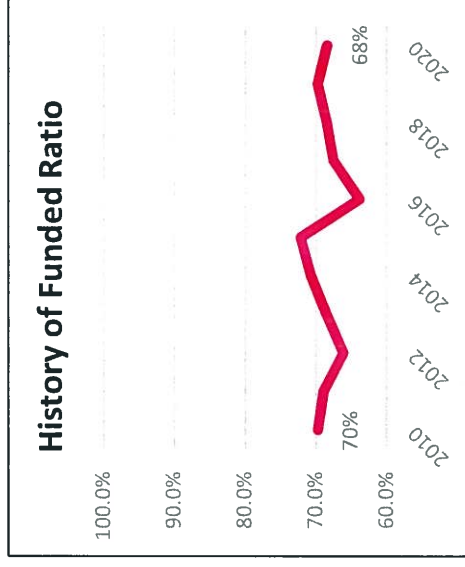
Mr. Keith Brinkman
Bureau & Chief
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City of Pompano Beach Police & Firefighters' Retirement System
Actuarial Valuation as of October 1, 2020

Executive Summary

The actuarial valuation's primary purpose is to produce a scorecard measure displaying the funding progress of the plan toward the ultimate goal of paying benefits at retirement. The accrued liability is based on an entry age level percentage of pay.

| | October 1, 2019 | October 1, 2020 |
|---|------------------------|------------------------|
| Funded Status Measures | | |
| Accrued Liability | \$333,397,561 | \$342,655,039 |
| Actuarial Value of Assets | 232,629,949 | 234,435,540 |
| Unfunded Accrued Liability | \$100,767,612 | \$108,219,499 |
| Funded Percentage (AVA) | 69.8% | 68.4% |
| Funded percentage (MVA) | 69.1% | 67.1% |
| Cost Measures | | |
| Recommended Contribution | \$11,023,272 | \$11,915,364 |
| Recommended Contribution (as a percentage of payroll) | 67.2% | 69.6% |
| Asset Performance | | |
| Market Value of Assets | \$230,401,768 | \$230,025,621 |
| Actuarial Value of Assets | 232,629,949 | 234,435,540 |
| Actuarial Value/Market Value | 101.0% | 101.9% |
| Member Information | | |
| Active Members | 186 | 181 |
| Terminated Vested Members | 3 | 5 |
| Retirees, Beneficiaries, and Disabled Members | 379 | 383 |
| DROP Participants | 23 | 25 |
| Total | 591 | 594 |
| Expected Payroll | \$16,107,844 | \$16,818,135 |



Executive Summary

Changes Since Prior Valuation and Key Notes

There have been several updates to the ordinances governing the plan since the last valuation: implementation of the State's presumptive line-of-duty disability cancer legislation, integration of SECURE Act language, and the Ground Zero disability election provision. These changes did not affect the liability calculations presented in this report.

The assumed rate of return remains at 7.30% in this valuation report, in light of the unique COVID-19 pandemic circumstances, as determined by the Board in concert with the City of Pompano Beach. It is our understanding that the Board intends to return to their prior policy of lowering the rate in 10 basis point increments until reaching 7.00% with the October 1, 2021 valuation report.

The assumed mortality rates for disabled participants have been updated to reflect rates without generational mortality improvement, in order to more precisely match the assumptions used by the Florida Retirement System (FRS). We learned after the publication of the 2019 draft report that the FRS mortality tables used by Milliman do not utilize MP-18 improvement for disabled mortality rates; Milliman's report initially described the mortality tables imprecisely in the 2019 FRS valuation report.

Assets associated with allocated Share Plan balances are reflected as reserves in this report for the first time, as discussed with the Board.

City of Pompano Beach Police & Firefighters' Retirement System
Actuarial Valuation as of October 1, 2020

Executive Summary

Five Year Valuation Summary

| | 10/01/2016 | 10/01/2017 | 10/01/2018 | 10/01/2019 | 10/01/2020 |
|---------------------------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| Funding | | | | | |
| Accrued Liability | \$318,200,086 | \$325,074,421 | \$331,499,780 | \$333,397,561 | \$342,655,039 |
| Actuarial Value of Assets | \$213,099,980 | \$219,680,159 | \$227,193,975 | \$232,629,949 | \$234,435,540 |
| Unfunded Actuarial Accrued Liability | \$105,100,106 | \$105,394,262 | \$104,305,805 | \$100,767,612 | \$108,219,499 |
| Funded Percentage | 66.97% | 67.58% | 68.54% | 69.78% | 68.42% |
| Total Normal Cost (NC) | \$4,117,315 | \$4,342,954 | \$4,367,560 | \$4,782,737 | \$4,935,230 |
| NC as a Percent of Covered Payroll | 30.44% | 30.26% | 29.70% | 29.69% | 29.99% |
| Actual Employer Contribution | \$10,775,021 | \$11,050,554 | \$10,943,984 | TBD | TBD |
| Recommended Contribution | \$10,734,952 | \$11,001,636 | \$10,902,279 | \$11,023,272 | \$11,915,364 |
| Recommended Contribution (% of Pay) | 79.36% | 76.65% | 74.14% | 68.43% | 70.85% |
| Interest Rate | 7.50% | 7.50% | 7.40% | 7.30% | 7.30% |
| Expense Load Assumption | \$596,249 | \$567,376 | \$578,530 | \$624,922 | \$613,939 |
| Rate of Return | | | | | |
| Actuarial Value of Assets | 8.54% | 7.91% | 7.19% | 5.84% | 7.21% |
| Market Value of Assets | 7.63% | 10.88% | 8.59% | 4.04% | 6.37% |
| Demographic Information | | | | | |
| Active Participants | 162 | 170 | 179 | 186 | 181 |
| Terminated Vested Participants | 4 | 4 | 3 | 3 | 5 |
| Retirees, Beneficiaries, and Disabled | 364 | 366 | 374 | 379 | 383 |
| DROP Participants | 35 | 33 | 29 | 23 | 25 |
| Total Participants | 565 | 573 | 585 | 591 | 594 |
| Covered Payroll | \$13,527,197 | \$14,353,623 | \$14,705,355 | \$16,107,844 | \$16,818,135 |
| Average Covered Pay | \$83,501 | \$84,433 | \$82,153 | \$86,601 | \$92,918 |

Executive Summary

Identification of Risks

The results presented in this report are shown as single point values. However, these values are derived using assumptions about future markets and demographic behavior. If actual experience deviates from our assumptions, the actual results for the plan will consequently deviate from those presented in this report. Therefore, it is critical to understand the risks facing this pension plan. The following table shows the risks we believe are most relevant to the City of Pompano Beach Police & Firefighters' Retirement System. The risks are generally ordered with those we believe to have the most significance at the top. Also shown are possible methods by which a more detailed assessment of the risk can be performed.

| Type of Risk | Additional Information |
|-----------------------|---|
| Investment Return | Portfolio risk and substantial equity position leave the plan open to adverse market results, which could increase costs in the future. |
| Participant Longevity | The plan has adopted FRS' most recent mortality tables for valuation purposes. These tables are modified from the standard tables, and, compared to the previous tables used by FRS, project a slightly shorter participant longevity overall. There is no guarantee FRS' anticipated mortality experience will mirror your plan's future experience. Deviation from expected mortality rates could impact long-term liabilities and plan cost. |
| Early Retirement | The plan has a relatively generous unreduced early retirement provision; if more employees than expected avail themselves of the early retirement option, then this could impact estimated plan liabilities. |
| Salary Growth | The plan has experienced volatility in observed salary increases in the recent past; as benefits are based on final average salary, the salary growth assumption is key to accurately calculating liabilities and future costs. |

| Type of Risk | Method to Assess Risk |
|-----------------------|--|
| Investment Return | Scenario testing; asset/liability study |
| Participant Longevity | Benefit projections and contribution strategy |
| Early Retirement | Scenario testing; review population and retirement rates |
| Salary Growth | Review salary history and future budgets; scenario testing |

Executive Summary

Plan Maturity Measures - October 1, 2020

Each pension plan has a distinct life-cycle. New plans promise future benefits to active employees and then accumulate assets to pre-fund those benefits. As the plan matures, benefits are paid and the pre-funded assets begin to decumulate until ultimately, the plan pays out all benefits. A plan's maturity has a dramatic influence on how risks should be viewed. The following maturity measures illustrate where the City of Pompano Beach Police & Firefighters' Retirement System falls in its life-cycle.

Duration of Liabilities: 10.2

Duration is the most common measure of plan maturity. It is defined as the sensitivity of the liabilities to a change in the interest rate assumption. The metric also approximates the weighted average length of time, in years, until benefits are expected to be paid. A plan with high duration is, by definition, more sensitive to changes in interest rates. A plan with low duration is more susceptible to risk if asset performance deviates from expectations as there would be less time to make up for market losses in adverse market environments while more favorable environments could result in trapped surplus from gains. Conversely, high duration plans can often take on more risk when investing, and low duration plans are less sensitive to interest rate fluctuations.

Demographic Distribution - Ratio of Actively Accruing Participants to All Participants: 30.5%

A plan with a high ratio is more sensitive to fluctuations in salary (if a salary-based plan) and statutory changes. A plan with a low ratio is at higher risk from demographic experience. Such a plan should pay close attention to valuation assumptions as there will be less opportunity to realize future offsetting gains or losses when current experience deviates from assumptions. Plans with a low ratio also have limited opportunities to make alterations to plan design to affect future funded status.

Asset Leverage - Ratio of Payroll for Plan Participants to Market Value of Assets: 7.3%

Younger plans typically have a large payroll base from which to draw in order to fund the plan while mature plans often have a large pool of assets dedicated to providing benefits to a population primarily consisting of members no longer on payroll. Plans with low asset leverage will find it more difficult to address underfunding, as the contributions needed to make up the deficit will represent a higher percentage of payroll than for a plan with high asset leverage.

Benefit Payment Percentage - Ratio of Annual Benefit Payments to Market Value of Assets: 9.1%

As a plan enters its decumulation phase, a larger percentage of the pre-funded assets are paid out each year to retirees. A high percentage is not cause for alarm as long as the plan is nearly fully funded. However, such a plan is more sensitive to negative asset performance, especially if cash contributions are not an option to make up for losses.

**City of Pompano Beach Police & Firefighters' Retirement System
Actuarial Valuation as of October 1, 2020**

Assets and Liabilities

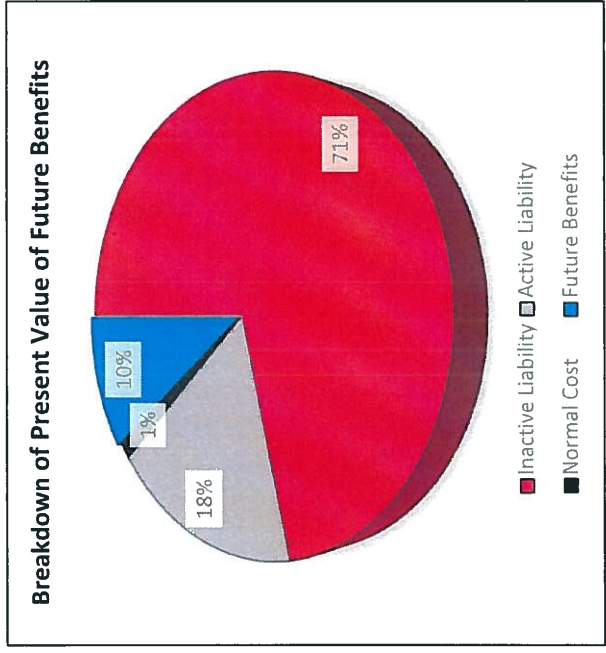
Present Value of Future Benefits

The Present Value of Future Benefits represents the discounted value of all future benefits expected to be payable to current members, considering future service and compensation not yet earned.

October 1, 2020

Present Value of Future Benefits

| | |
|----------------------------------|----------------------|
| Active members | |
| Retirement | \$101,107,668 |
| Disability | 7,338,742 |
| Death | 1,982,855 |
| Termination | 2,182,460 |
| Return of contributions | 474,259 |
| Total active | <u>\$113,085,984</u> |
| Inactive members | |
| Retired members | \$235,866,862 |
| Beneficiaries | 11,446,108 |
| Disableds | 25,466,721 |
| Terminated vested members | 1,699,447 |
| Total inactive | <u>\$274,479,138</u> |
| Total | \$387,565,122 |
| Present value of future payrolls | \$155,574,166 |



**City of Pompano Beach Police & Firefighters' Retirement System
Actuarial Valuation as of October 1, 2020**

Assets and Liabilities

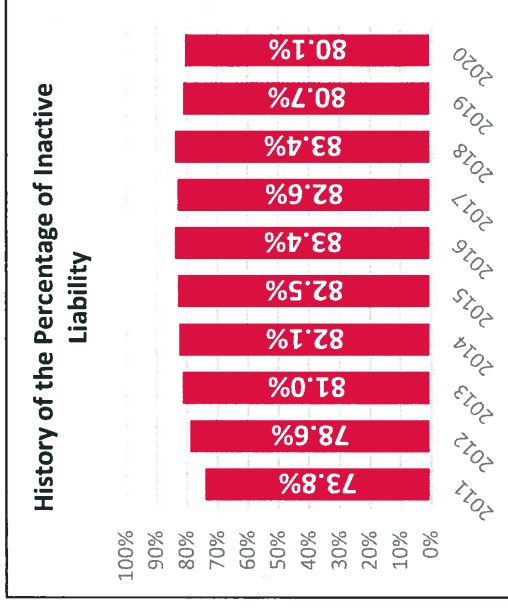
Accrued Liability

The Accrued Liability measures the present value of benefits earned as of the valuation date, using a specified set of actuarial assumptions. It is not a long-term snapshot of the liabilities.

October 1, 2020

Accrued Liabilities

| | |
|---------------------------|---------------------|
| Active members | |
| Retirement | \$64,701,792 |
| Disability | 2,200,650 |
| Death | 421,192 |
| Termination | 768,714 |
| Refund of contributions | 83,553 |
| Total Active | <u>\$68,175,901</u> |
| Inactive members | |
| Retired members | \$235,866,862 |
| Beneficiaries | 11,446,108 |
| Disableds | 25,466,721 |
| Terminated vested members | <u>1,699,447</u> |
| Total Inactive | \$274,479,138 |
| Total | \$342,655,039 |
| Normal Cost | \$4,935,230 |



City of Pompano Beach Police & Firefighters' Retirement System
Actuarial Valuation as of October 1, 2020

Assets and Liabilities

Asset Information

The amount of assets backing the pension promise is the most significant driver of volatility and future costs within a pension plan. The investment performance of the assets directly offsets the ultimate cost.

October 1, 2020

Market Value Reconciliation

| | |
|---|---------------|
| Market value of assets, beginning of prior year | \$245,160,408 |
| Employer contributions (incl. discounted accrued items) | 10,943,984 |
| Member contributions | 1,995,263 |
| Non-employer contributing entity | 2,750,611 |
| Investment income | 16,680,715 |
| Investment expenses | (1,348,725) |
| Benefit payments | (22,981,366) |
| Administrative expenses | (604,803) |
| Other expenses | 0 |
| Market value of asset, beginning of current year | \$252,596,087 |
| Return on Market Value | 6.37% |
| Reserve assets | \$7,511,722 |
| DROP account | \$15,058,744 |
| Market value of assets available for pension benefits | \$230,025,621 |
| Actuarial value of plan assets | |
| Value at beginning of current year | \$234,435,540 |

Assets and Liabilities

Asset Information (continued)

Plan Assets are used to develop funded percentages and contribution requirements.

| | October 1, 2020 |
|---|----------------------|
| 1. Expected actuarial value of assets | |
| (a) Actuarial value of assets, beginning of prior year | \$247,388,589 |
| (b) Contributions | 15,689,858 |
| (c) Benefit payments | (22,981,366) |
| (d) Expenses | (604,803) |
| (e) Expected return | 17,776,227 |
| (f) Expected actuarial value of assets, beginning of current year | <u>\$257,268,505</u> |
| 2. Market value of assets, beginning of current year | \$252,596,087 |
| 3. Actual return on market value | \$15,331,990 |
| 4. Amount subject to phase in [(3)-(1e)] | \$(2,444,237) |
| 5. Phase in of asset gain/(loss) | |
| (a) Current year (20% x (\$2,444,237)) | \$(488,847) |
| (b) First prior year (20% x (\$7,963,610)) | (1,592,722) |
| (c) Second prior year (20% x \$2,395,231) | 479,046 |
| (d) Third prior year (20% x \$6,827,672) | 1,365,534 |
| (e) Fourth prior year (20% x (\$127,551)) | (25,510) |
| (f) Total phase-in | <u>\$(262,499)</u> |
| 6. Preliminary actuarial value of assets, beginning of current year [(1f)+(5f)] | \$257,006,006 |
| 7. 80% Market value of assets | \$202,076,870 |
| 8. 120% Market value of assets | \$303,115,304 |
| 9. Adjusted actuarial value of assets | \$257,006,006 |
| 10. Reserved Assets | (\$22,570,466) |
| 11. Final actuarial value of assets [(9+10)] | \$234,435,540 |
| 12. Return on actuarial value of assets | 7.21% |

City of Pompano Beach Police & Firefighters' Retirement System
Actuarial Valuation as of October 1, 2020

Contribution Requirements

Reconciliation of Gain/Loss

October 1, 2020

Liability (gain)/loss

| | |
|---|---------------|
| Actuarial liability, beginning of prior year | \$333,397,561 |
| Normal cost | 4,782,737 |
| Total benefit payments | (22,981,366) |
| Benefit payments attributable to DROP and Share Plan | 2,019,756 |
| Interest | 23,935,539 |
| 1-year lag adjustment | 1,456,229 |
| Assumption Changes | (966,445) |
| Expected actuarial liability, beginning of current year | \$341,644,011 |
| Actual actuarial liability | \$342,655,039 |
| Liability (gain)/loss | \$1,011,028 |

Asset (gain)/loss

| | |
|---|---------------|
| Actuarial value of assets, beginning of prior year | \$232,629,949 |
| Contributions | 15,689,858 |
| Total benefit payments and expenses | (23,586,169) |
| Benefit payments attributable to DROP and Share Plan | 2,019,756 |
| Investment return | 16,771,268 |
| Expected actuarial value of assets, beginning of current year | \$243,524,662 |
| Actual actuarial value of assets, beginning of current year (before accumulated reserve adjustment) | \$234,435,540 |
| Asset (gain)/loss | \$9,089,122 |

Total (gain)/loss

\$10,100,150

Contribution Requirements

Development of Recommended Contribution

The minimum recommended contribution is the annual amount necessary to fund the plan according to funding policies and/or applicable laws. The recommended contribution is composed of the normal cost, administrative expenses, plus an amortization charge.

October 1, 2020

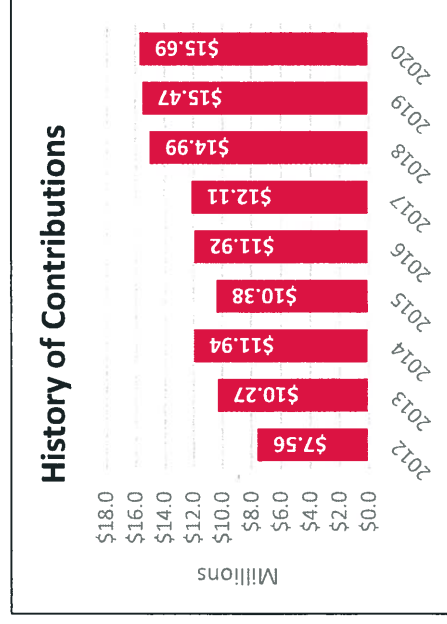
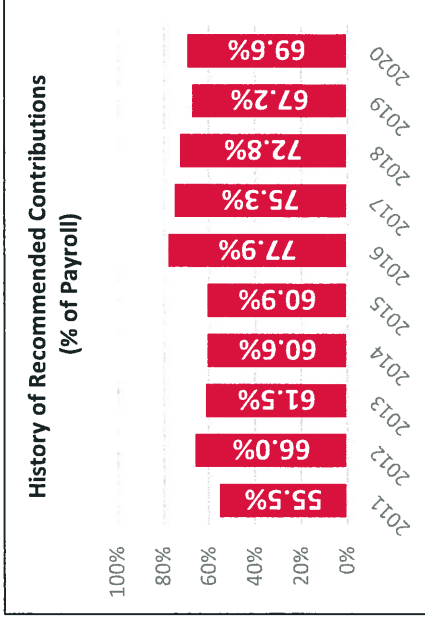
Funded Position

| | |
|--|---------------|
| 1. Entry age accrued liability | \$342,655,039 |
| 2. Actuarial value of assets | 234,435,540 |
| 3. Unfunded actuarial accrued liability (UAAL) | \$108,219,499 |

Employer Contributions

| | |
|--|-------------|
| 1. Normal Cost | |
| (a) Total normal cost | \$4,935,230 |
| (b) Expected participant contributions | 2,024,758 |
| (c) Net normal cost | \$2,910,472 |
| 2. Administrative expenses | 613,939 |
| 3. Amortization of UAAL | 9,226,291 |
| 4. Applicable interest | 930,802 |

| | |
|---|--------------|
| 5. Total required contribution | \$13,681,504 |
| 6. Expected non-employer contributions | 1,973,481 |
| 7. Total recommended contribution | \$11,708,023 |
| As a percentage of expected payroll | 69.62% |
| 8. Recommended contributions to be paid on 12/31/2020 | \$11,915,364 |



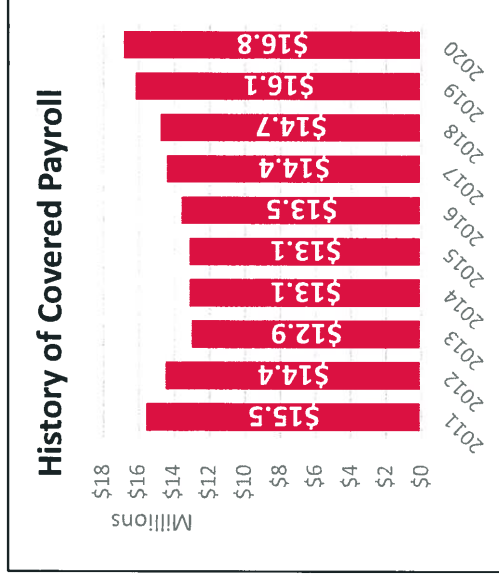
**City of Pompano Beach Police & Firefighters' Retirement System
Actuarial Valuation as of October 1, 2020**

Demographic Information

The foundation of a reliable actuarial report is the participant information provided by the plan sponsor. Monitoring trends in demographic information is crucial for long-term pension planning.

October 1, 2020

| Participant Counts | Police | Fire | Total |
|--|----------|-----------|--------------|
| Active Participants | 2 | 179 | 181 |
| Retired Participants | 187 | 126 | 313 |
| Beneficiaries | 21 | 13 | 34 |
| Disabled Participants | 18 | 18 | 36 |
| Terminated Vested Participants | 0 | 5 | 5 |
| DROP Participants | <u>1</u> | <u>24</u> | <u>25</u> |
| Total Participants | 229 | 365 | 594 |
| Active Participant Demographics | | | |
| Average Age | | | 38.76 |
| Average Service | | | 10.51 |
| Average Compensation | | | \$92,918 |
| Covered Payroll | | | \$16,818,135 |



City of Pompano Beach Police & Firefighters' Retirement System
Actuarial Valuation as of October 1, 2020

Demographic Information

October 1, 2020

Retiree Statistics

Average Age 66.35
 Average Monthly Benefit \$4,836

Beneficiary Statistics

Average Age 70.79
 Average Monthly Benefit \$2,863

Disabled Participants Statistics

Average Age 61.51
 Average Monthly Benefit \$5,128

Terminated Participants Statistics

Average Age 42.45
 Average Monthly Benefit \$3,236

DROP Participants Statistics

Average Age 54.22
 Average Monthly Benefit \$5,647

City of Pompano Beach Police & Firefighters' Retirement System
Actuarial Valuation as of October 1, 2020

Participant Reconciliation

| | Active | Terminated Vested | Disabled | Retired | Beneficiaries | DROP | Totals |
|--------------------------|---------------|--------------------------|-----------------|----------------|----------------------|-------------|---------------|
| Prior Year | 186 | 3 | 35 | 312 | 32 | 23 | 591 |
| Active | | | | | | | |
| To Terminated Vested | (2) | 2 | | | | | |
| To Disabled | | | | | | | |
| To Retired | | | | | | 7 | |
| To DROP | (7) | | | | | | (1) |
| To Death | (1) | | | | | | (4) |
| To Lump Sum | (4) | | | | | | |
| Terminated Vested | | | | | | | |
| To Retired | | | | | | | |
| Retired | | | | | | | |
| To Forfeiture | | | | | | | |
| To Disabled | | | 1 | (1) | | | |
| To Death | | | | (3) | | | (3) |
| Beneficiaries | | | | | | | |
| To Death | | | | | | | |
| To End of Certain Period | | | | | | | |
| DROP | | | | | | | |
| To Retired | | | | 5 | | (5) | |
| To Disabled | | | | | 2 | | 11 |
| Additions | 9 | | | | | | |
| Departures | | | | | | | |
| Current Year | 181 | 5 | 36 | 313 | 34 | 25 | 594 |

Participant Reconciliation

Active Participant Schedule

Active participant information grouped based on age and service.

| Age Group | Years of Service | | | | | | | | | | | Total | Average Pay | |
|--------------|------------------|-----------|-----------|-----------|-----------|-----------|----------|----------|----------|---------|--|-------|-------------|---------------|
| | 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 | | | | |
| Under 25 | 3 | 3 | | | | | | | | | | | 6 | 62,386 |
| 25 to 29 | 3 | 17 | 3 | | | | | | | | | | 23 | 69,832 |
| 30 to 34 | 1 | 14 | 12 | 5 | | | | | | | | | 32 | 83,432 |
| 35 to 39 | 2 | 11 | 10 | 10 | 9 | 1 | | | | | | | 43 | 90,923 |
| 40 to 44 | | 3 | 6 | 5 | 17 | 4 | | | | | | | 35 | 101,855 |
| 45 to 49 | | | | 4 | 15 | 11 | 1 | | | | | | 31 | 110,800 |
| 50 to 54 | | 1 | | | 6 | 1 | | | | | | | 8 | 108,014 |
| 55 to 59 | | | 1 | 1 | 1 | | | | | | | | 3 | 131,447 |
| 60 to 64 | | | | | | | | | | | | | | |
| 65 to 69 | | | | | | | | | | | | | | |
| 70 & up | | | | | | | | | | | | | | |
| Total | 9 | 49 | 32 | 25 | 48 | 17 | 1 | | | | | | 181 | 92,918 |

Plan Provisions

Plan Status

Plan established under the Code of Ordinances for the City of Pompano Beach, Florida, Sections 34.045-34.073 and was most recently stated under Ordinance No. 2018-23, passed and adopted on January 9, 2018. The Plan is also governed by certain provisions of Chapters 175 and 185, Florida Statutes, Part VII, Chapter 112, Florida Statutes and the Internal Revenue Code.

Eligibility for Participation

- (1) All Police Officers and Dispatchers who were participants of the prior Employees' Pension Plan and
- (2) Police Officers and Dispatchers who elected to remain in the Plan prior to the takeover of the police department by the Broward Sheriff's Office on 8/1/99.
- (3) All Firefighters who were participants in the prior Employees' Pension Plan; and
- (4) All regular, full time Firefighters (20 hours per week and 5 months per year) from age 18, upon date of employment.

Benefits

Normal Retirement

Eligibility

A member hired before May 27, 2014 may retire on the first day of the month coincident with or next following the earlier of:
(1) age 47 with 20 years of Continuous Service, or
(2) age 55 with 10 years of Continuous Service.

A Firefighter member hired on or after May 27, 2014 may retire on the first day of the month coincident with or next following the earlier of:

- (1) age 50 with 20 years of Continuous Service, or
- (2) age 55 with 10 years of Continuous Service.

Police Benefit:

3.0% of Average Monthly Earnings (AME) multiplied by years of Continuous Service up to a maximum of 25 years, plus 2.0% of AME multiplied by years of Continuous Service in excess of 37.5.

Firefighter Benefit:

3.0% of AME multiplied by the first 10 years Continuous Service, plus 4.0% of AME multiplied by the next 10 years, plus 2.0% of AME multiplied by the next 5 years with a maximum benefit equal to 80% of AME; plus 2% of AME multiplied by each year of service in excess of 40.

Normal Form of Benefit

10 Years Certain and Life; other options are also available.

COLA

Beginning five years after benefit payments begin, retirees receive an automatic annual increase of 2% on each October 1. An additional annual increase of up to 1% is payable if certain conditions are met

Plan Provisions

Early Retirement

- Eligibility** A member may elect to retire earlier than the Normal Retirement Eligibility upon the completion of 20 years of Continuous Service or the attainment of age 50 with 10 years of Continuous Service.
- Benefit** The member's accrued Normal Retirement Benefit based upon the member's AME and Continuous Service as of the date of termination. Benefit is actuarially reduced for each year by which the Early Retirement date precedes the member's Normal Retirement date. The Early Retirement reduction is 3% per year if early retirement occurs after age 50.
- Normal Form of Benefit** 10 Years Certain and Life; other options are also available.
- COLA** Beginning five years after benefit payments begin, retirees receive an automatic annual increase of 2% on each October 1. An additional annual increase of up to 1% is payable if certain conditions are met.

Late Retirement

- Eligibility** Same as Normal Retirement taking into account compensation earned and service credited until the date of actual retirement.
- Benefit** Accrued Benefit
- Normal Form of Benefit** 10 Years Certain and Life; other options are also available.
- COLA** Beginning five years after benefit payments begin, retirees receive an automatic annual increase of 2% on each October 1. An additional annual increase of up to 1% is payable if certain conditions are met.

Plan Provisions

Ordinary Death before Retirement

| | |
|------------------------|--|
| Eligibility | Any member with 1 or more years of Continuous Service who dies while employed by the City is eligible for survivor benefits. |
| Benefit | <p>(A) For members with less than 1 year of Continuous Service, no survivor benefits are payable.</p> <p>(B) For members with 1 year, but less than 5 years, of Continuous Service, the designated beneficiary will be paid a \$5,000 lump sum.</p> <p>(C) For members with 5 years, but less than 10 years, of Continuous Service:</p> <p>(1) \$5,000 lump sum paid to the member's designated beneficiary; plus</p> <p>(2) Member's spouse will receive 65% of member's accrued pension as of the date of death subject to a minimum of 20% of AME; plus</p> <p>(3) Each unmarried child under age 18 (22 if full-time student) will receive 7 ½% of member's Earnings. If there is no spouse, benefits increase to 15% of member's Earnings per child.</p> <p>Maximum benefit to spouse and children is 50% of earnings.</p> <p>(D) For members with 10 or more years of Continuous Service, the designated beneficiary can elect to receive benefits described under subsection (C) above or the member's accrued benefit as of the date of death. Benefits are payable at the member's Normal or Early Retirement date and will be reduced for Early Retirement, when applicable.</p> |
| Normal Form of Benefit | Spouse's benefits are paid until death or remarriage; children's benefits are paid until the earlier of age 18 (22 if full-time student), marriage or death. |
| COLA | Beginning five years after benefit payments begin, beneficiaries receive an automatic annual increase of 2% on each October 1. An additional annual increase of up to 1% is payable if certain conditions are met. |

Plan Provisions

Accidental Death before Retirement

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

Benefit

- (1) \$5,000 lump sum paid to the member's designated beneficiary; plus
- (2) Member's spouse will receive 75% of member's Earnings; plus
- (3) Each unmarried child under age 18 (22 if full-time student) will receive 7 ½% of member's Earnings. If there is no spouse, benefits increase to 15% per child.

Maximum benefit to spouse and children is 90% of earnings; if no spouse, maximum for children is 50% of Earnings.

Normal Form of Benefit Spouse's benefits are paid until death or remarriage; children's benefits are paid until the earlier of age 18 (22 if full-time student), marriage or death.

COLA

Beginning five years after benefit payments begin, beneficiaries receive an automatic annual increase of 2% on each October 1. An additional annual increase of up to 1% is payable if certain conditions are met.

Termination Benefit

Eligibility

A member has earned a non-forfeitable right to Plan benefits after the completion of 10 years of Credited Service (See vesting table below).

| | |
|--------------------------------------|--|
| <u>Years of Credited Service</u> | <u>% of Normal Retirement Benefits</u> |
| Less Than 10 | 0% |
| 10 or more | 100% |

Benefit

The member's accrued Normal Retirement Benefit as of the date of termination. Benefit begins on the member's Normal Retirement date. Alternatively, members may elect to receive an actuarially reduced Early Retirement Benefit.

Normal Form of Benefit

10 Years Certain and Life thereafter; other options are also available.

COLA

Beginning five years after benefit payments begin, beneficiaries receive an automatic annual increase of 2% on each October 1. An additional annual increase of up to 1% is payable if certain conditions are met.

Plan members with less than 10 years of Credited Service will receive a refund of accumulated contributions with interest

Plan Provisions

Ordinary Disability Benefit

| | |
|------------------------|--|
| Eligibility | Any member who becomes totally and permanently disabled and unable to perform regular duties or any other duties available in the Department from an act occurring in the performance of duty for the City is eligible for a disability benefit. |
| Benefit | 75% of rate of Earnings in effect on the date of disability (for Firefighters, not to be less than the accrued benefit). |
| Normal Form of Benefit | Benefits begin on the first day of the month following the date the Board approves the disability and are payable until death or recovery from disability. If the member dies before receiving payments for 10 years, the member's designated beneficiary will receive the same monthly benefit for the remainder of the 10 year period. Other options are also available. |
| COLA | Beginning five years after benefit payments begin, retirees receive an automatic annual increase of 2% on each October 1. An additional annual increase of up to 1% is payable if certain conditions are met. |

Accidental Disability Benefit

| | |
|------------------------|--|
| Eligibility | Any active member with 10 or more years of Continuous Service who becomes totally and permanently disabled and unable to perform regular duties or any other duties available in the Department from an act not directly caused by the performance of duty for the City is eligible for a disability benefit. |
| Benefit | 3.0% of AME multiplied by years of Continuous Service subject to a maximum of 60% of the rate of Earnings on the date of disability, plus 2.0% of AME multiplied by years of Continuous Service in excess of 25. Disability benefit is guaranteed to be no less than 25% of AME. |
| Normal Form of Benefit | Benefits begin on the first day of the month following the date the Board approves the disability and are payable until death or recovery from disability. If the member dies before receiving payments for 10 years, the member's designated beneficiary will receive the same monthly benefit for the remainder of the 10 year period. Other options are also available. |
| COLA | Beginning five years after benefit payments begin, retirees receive an automatic annual increase of 2% on each October 1. An additional annual increase of up to 1% is payable if certain conditions are met. |

Plan Provisions

Compensation

Earnable Compensation

Police Officers: Basic compensation and regular longevity pay, increased for temporary upgrade pay. Also includes up to 25 hours per year of overtime pay.
Firefighters: Basic compensation and regular longevity pay, increased for temporary upgrade pay.

Average Monthly Earnings (AME)

For members hired before May 27, 2014:

The average of Earnings during the highest 3 years preceding termination; not including lump sum payments of unused leave

For members hired after May 27, 2014:

The average of Earnings during the highest 5 years preceding termination; not including lump sum payments of unused leave

Continuous Service

For Vesting and Benefit Accrual, total number of years and completed months from date of employment to date of termination or retirement
No service is credited for any periods of employment for which a member received a refund of contributions.

Employee Contributions

Police: 8.6% of Earnings, paid by BSO.

Firefighters: 11.6% of Earnings "picked up" by the City, reduced to 0.5% after 25 years of service and reaching maximum benefit of 80%, reverting back to 11.6% if member does not enter DROP.

Plan Provisions

DROP

Eligibility

Plan members hired before May 27, 2014 are eligible for the DROP on the first day of the month coincident with or next following the earlier of:

- (1) age 47 with 20 years of Continuous Service, or
- (2) age 55 with 10 years of Continuous Service.

Plan members hired after May 27, 2014 are eligible for DROP on the first day of the month coincident with or next following the earlier of:

- (1) age 50 with 20 years of Continuous Service, or
- (2) age 55 with 10 years of Continuous Service.

Members who meet eligibility must submit a written election to participate in the DROP.

Benefit

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

In addition, the members accumulated sick and annual leave pay will be paid in 5 equal annual installments on the member's DROP participation anniversary dates.

Maximum Period

60 months (police) & 96 months (firefighters)

Interest Credited

The member's DROP account is credited or debited quarterly at a rate equal to one of the following elected by the member:

- (1) the actual net rate of investment return realized by the Plan for that quarter, or
- (2) a rate set quarterly by the Board of Trustees, or
- (3) the actual net rate of investment return realized by a separate investment account made available by the Board of Trustees but the investment proportions designated by the member.

Normal Form of Benefit

The member's DROP account is paid out under one of the following options as elected by the member:

- (1) a full single lump sum payment, or
- (2) annual installments in amounts as requested by the member by June 30th of each year, or
- (3) equal monthly installments as requested by the member by June 30th of each year, or
- (4) a single lump sum of the remaining balance after any annual or monthly installments have been made under options (2) or (3) above.

COLA

Beginning five years after benefit payments begin, retirees receive an automatic annual increase of 2% on each October 1. An additional increase of up to 1% is payable if certain conditions are met. For Firefighters, if participant leaves the DROP after five years, the COLA begins when participant leaves the DROP.

Plan Provisions

Payment Forms

Normal Form: 10 Years Certain and Life Annuity

Optional Forms: Single Life Annuity
Joint and 100% Contingent Survivor Annuity
Joint and 75% Contingent Survivor Annuity
Joint and 66 2/3% Contingent Survivor Annuity
Joint and 50% Contingent Survivor Annuity
Any Board-approved, actuarially equivalent benefit

Plan Provisions Not Included

We are not aware of any plan provisions not included in the valuation.

Adjustments Made for Subsequent Events

We are not aware of any event following the measurement date and prior to the date of this report that would materially impact the results.

Changes Since Prior Report

None

Actuarial Assumptions

Cost Method

Individual Entry Age Normal Cost Method; all new bases are to be amortized over 20 years from the date established using a level dollar amortization for police and a level percentage of pay amortization, with a 2.75% payroll growth assumption, for firefighters.

Asset Valuation Method

20% Phase-In Method: Actuarial value of assets is equal to expected value phase in the difference between the expected investment earnings and actual investment earnings at the rate of 20% per year. The result cannot be greater than 120% of market value or less than 80% of market value.

Interest Rates

7.3%, compounded annually, net of investment expenses. Nyhart's professional judgment is that the rate is reasonable and has no significant bias. Support for the interest rate assumption has been provided in the experience study report dated August 19, 2019.

Annual Pay Increases

2.0%, compounded annually for inflation plus a seniority/merit scale using the following representative rates.

| Years of Service | Merit and Seniority |
|------------------|---------------------|
| 1 | 9.03% |
| 2 | 8.03% |
| 3 | 7.52% |
| 4 | 6.52% |
| 5 | 5.01% |
| 6 | 5.01% |
| 7 | 4.01% |
| 8-20 | 2.00% |
| 21 and Higher | 0.99% |

The assumed rates of pay increase are based on a study of actual experience for the plan from 2012-2018. See the experience study report dated August 19, 2019.

Expense and/or Contingency Loading

One-year term cost method; average of prior two years' expenses.

Mortality Rates

Pre-Retirement:

Pub-2010 Generational using scale MP-2018, Females, Headcount Weighted Safety Employee Female Table, set forward 1 year; Males, Headcount Weighted Safety Below Median Employee Male Table, set forward 1 year

Post-Retirement:

Pub-2010 Generational using scale MP-2018, Females, Headcount Weighted Safety Healthy Retiree Female Table, set forward 1 year; Males, Headcount Weighted Safety Below Median Healthy Retiree Male Table, set forward 1 year

Actuarial Assumptions

Disability

Pub-2010, Females, 80% Headcount Weighted General Disabled Retiree Female Table / 20% Headcount Weighted Safety Disabled Retiree Female Table; Males, 80% Headcount Weighted General Disabled Retiree Male Table / 20% Headcount Weighted Safety Disabled Retiree Male Table

These are the same mortality rates used by FRS in the July 1, 2019 Actuarial Valuation Report; these rates are prescribed by state law.

We learned after the publication of Pompano's 2019 report draft that the FRS mortality tables used by Milliman do not utilize MP-18 improvement for disabled mortality. This was due to an error by Milliman's actuary in their FRS report description. This year we used the correct disabled mortality table.

Retirement Rates

If eligible for Retirement, the following decrements apply, based on service:

| <u>After First Eligibility for Normal Retirement</u> | <u>Police</u> | <u>Fire</u> |
|--|---------------|-------------|
| 0 | 80% | 50% |
| 1 | 50 | 20 |
| 2 | 75 | 30 |
| 3 | 100 | 40 |
| 4 | | 50 |
| 5+ | | 100 |

The assumed rates of retirement are based on a study of actual experience for the plan from 2012-2018. See the experience study report dated August 19, 2019.

Disability Rates

Specimen rates for all groups are shown below:

| <u>Sample Ages</u> | <u>% Becoming Disabled Within Next Year</u> |
|------------------------|---|
| 25 | 0.15% |
| 30 | 0.18 |
| 35 | 0.23 |
| 40 | 0.30 |
| 45 | 0.51 |
| 50 | 1.00 |
| 55 | 1.59 |

The assumed rates of disability are based on a study of actual experience for the plan from 2012-2018. See the experience study report dated August 19, 2019.

Actuarial Assumptions

Type of Disability or Death:

75% of disabilities and deaths are assumed to be service-related

Workers' Compensation Offsets

Current offsets are assumed to continue.

Withdrawal Rates

0.5% per year for the remaining active police officers in the plan

For firefighters,

| <u>Service</u> | <u>Fire Withdrawal Rate</u> |
|----------------|---------------------------------|
| 0 | 5.00% |
| 1 | 5.00 |
| 2 | 4.00 |
| 3 | 4.00 |
| 4 | 4.00 |
| 5 | 2.00 |
| 6 | 2.00 |
| 7 | 2.00 |
| 8 | 1.25 |
| 9 | 1.25 |
| 10 | 1.25 |
| 11 | 1.25 |
| 12 | 1.25 |
| 13+ | 0.50 |

The assumed rates of withdrawal are based on a study of actual experience for the plan from 2012-2018. See the experience study report dated August 19, 2019.

Withdrawal of Employee Contributions

Non-vested terminated employees are assumed to withdraw their contribution balances upon termination. Vested terminated employees are assumed to defer commencement of benefits.

Marital Status and Ages

100% of employees are assumed to be married. Females are assumed to be 3 years younger than males.

State Contributions

Assumed to be the same as in the prior year

Changes Since Prior Report

We learned after the publication of Pompano's 2019 report draft that the FRS mortality tables used by Milliman do not utilize MP-18 improvement for disabled mortality. This was due to an error by Milliman's actuary in their FRS report description. This year we used the correct disabled mortality table.

Other Measurements

The actuarial report also shows the necessary items required for plan reporting and the any state requirements.

- Reconciliation of unfunded actuarial liability
- Statement of changes on value of assets
- Distribution Assets
- Schedule of amortizations
- Florida State requirements
 - Corporate Summary of Principal Valuation Results
 - Separation for Police & Fire
 - Comparison of payroll growth, salary increases and investment returns
 - Requirements under Florida Statute 112.664 and F.A.C. 60T – 1.0035
 - Reserve account for benefit improvements under 99-1 and SB 172

City of Pompano Beach Police & Firefighters' Retirement System
Actuarial Valuation as of October 1, 2020

Other Measurements

Reconciliation of Unfunded Actuarial Liability

October 1, 2020

| | |
|---|----------------------|
| 1. Unfunded Actuarial Accrued Liability beginning of prior year | \$100,767,612 |
| 2. Normal Cost | 4,782,737 |
| 3. Expenses | 604,803 |
| 4. Employer Contributions | (10,943,984) |
| 5. Employee Contributions | (1,995,263) |
| 6. Non-Employer Contributions | (2,750,611) |
| 7. Interest | 7,164,271 |
| 8. 1-year lag adjustment | <u>1,456,229</u> |
| 9. Expected Unfunded Actuarial Accrued Liability, beginning of current year | \$99,085,794 |
| 10. Accumulated Reserve Adjustment | \$0 |
| 11. Liability changes due to: | |
| (a) Amendments | \$0 |
| (b) Assumptions | (966,445) |
| (c) Funding Methods | 0 |
| (d) (Gain)/Loss | <u>10,100,150</u> |
| (e) Total | \$9,133,705 |
| 12. Unfunded Actuarial Liability beginning of current year | <u>\$108,219,499</u> |

City of Pompano Beach Police & Firefighters' Retirement System
Actuarial Valuation as of October 1, 2020

Other Measurements

Statement of Changes on Value of Assets

| | September 30, 2019 | September 30, 2020 |
|---|--------------------|--------------------|
| Additions | | |
| Contributions: | | |
| Employer | \$11,050,554 | \$10,943,984 |
| Member | 1,857,469 | 1,995,263 |
| Nonemployer contributing entity | 2,559,937 | 2,750,611 |
| Total contributions | \$15,467,960 | \$15,689,858 |
| Investment income | | |
| Net increase in fair value of investments | \$5,394,048 | \$11,249,831 |
| Interest and dividends | 5,611,510 | 5,364,132 |
| Less investment expense, other than from securities lending | (1,375,399) | (1,348,725) |
| Net income other than from securities lending | \$9,630,159 | \$15,265,238 |
| Securities lending income | \$0 | \$0 |
| Less securities lending expense | 0 | 0 |
| Net income from securities lending | \$0 | \$0 |
| Net investment income | \$9,630,159 | \$15,265,238 |
| Other | 92,615 | 66,752 |
| Total additions | \$25,190,734 | \$31,021,848 |
| Deductions | | |
| Benefit payments, including refunds of member contributions | \$25,758,878 | \$22,981,366 |
| Administrative expense | 623,074 | 604,803 |
| Other | 0 | 0 |
| Total deductions | \$26,381,952 | \$23,586,169 |
| Net increase in market value | \$(1,191,218) | \$7,435,679 |
| Market Value as of | | |
| Beginning of year | 246,351,626 | 245,160,408 |
| End of year | \$245,160,408 | \$252,596,087 |

City of Pompano Beach Police & Firefighters' Retirement System
Actuarial Valuation as of October 1, 2020

Other Measurements

| | <u>September 30, 2019</u> | <u>September 30, 2020</u> |
|---|---------------------------|---------------------------|
| Distribution of Assets | | |
| Cash and deposits | \$1,868,645 | \$1,944,975 |
| Securities lending cash collateral | 0 | 0 |
| Total cash | \$1,868,645 | \$1,944,975 |
| Receivables: | | |
| Contributions | \$0 | \$0 |
| Due from broker for investments sold | 1,975,978 | 0 |
| Investment income | 358,120 | 473,092 |
| Other | 221,493 | 290,085 |
| Total receivables | \$2,555,591 | \$763,177 |
| Investments: | | |
| Equity | \$128,011,413 | \$125,033,111 |
| Fixed Income | 55,530,498 | 56,388,986 |
| Real Estate | 3,194,035 | 0 |
| Hedge Funds & Private Equity | 49,464,217 | 58,128,094 |
| Short Term Investments | 7,432,835 | 10,597,766 |
| Total investments | \$243,632,998 | \$250,147,957 |
| Sub-total | \$248,057,234 | \$252,856,109 |
| Payables: | | |
| Investment management fees | \$255,759 | \$260,022 |
| Due to broker for investments purchased | 2,641,067 | 0 |
| Collateral payable for securities lending | 0 | 0 |
| Other | 0 | 0 |
| Total liabilities | \$2,896,826 | \$260,022 |
| Total | \$245,160,408 | \$252,596,087 |

City of Pompano Beach Police & Firefighters' Retirement System
Actuarial Valuation as of October 1, 2020

Other Measurements

Schedule of Amortizations - Police

| | | Total | | October 1, 2020 | |
|-------------------------|-----------------------|------------------------|-------------------------------|--------------------------|-----------------------|
| <u>Date Established</u> | <u>Description</u> | <u>Original Amount</u> | <u>Remaining Period Years</u> | <u>Remaining Balance</u> | <u>Annual Payment</u> |
| 10/1/1991 | Assumption Change | (4,082) | 1 | (433) | (433) |
| 10/1/1991 | Actuarial Loss (Gain) | (298,306) | 1 | (31,659) | (31,659) |
| 10/1/1992 | Assumption Change | (3,250) | 2 | (650) | (336) |
| 10/1/1992 | Actuarial Loss (Gain) | (721,063) | 2 | (144,398) | (74,741) |
| 10/1/1993 | Assumption Change | (53,335) | 3 | (15,342) | (5,478) |
| 10/1/1993 | Actuarial Loss (Gain) | (301,531) | 3 | (86,731) | (30,970) |
| 10/1/1994 | Assumption Change | 768,410 | 4 | 256,471 | 71,045 |
| 10/1/1994 | Actuarial Loss (Gain) | 422,754 | 4 | 141,102 | 39,086 |
| 10/1/1995 | Assumption Change | (311,136) | 5 | (140,400) | (32,169) |
| 10/1/1995 | Actuarial Loss (Gain) | (271,042) | 5 | (122,306) | (28,024) |
| 10/1/1996 | Assumption Change | (374,561) | 6 | (201,512) | (39,766) |
| 10/1/1996 | Actuarial Loss (Gain) | (276,460) | 6 | (148,733) | (29,351) |
| 10/1/1997 | Assumption Change | 1,345,971 | 7 | 811,647 | 141,829 |
| 10/1/1997 | Actuarial Loss (Gain) | (3,074,778) | 7 | (2,067,504) | (361,280) |
| 10/1/1998 | Plan Amendment | (337,295) | 8 | (243,022) | (38,372) |
| 10/1/1998 | Actuarial Loss (Gain) | (3,155,507) | 8 | (2,273,537) | (358,977) |
| 10/1/1999 | Actuarial Loss (Gain) | (2,565,536) | 9 | (1,957,654) | (283,615) |
| 10/1/2000 | Assumption Change | (18,775,480) | 10 | (14,455,508) | (1,944,802) |
| | | | | \$54,953,546 | \$4,997,000 |

City of Pompano Beach Police & Firefighters' Retirement System
Actuarial Valuation as of October 1, 2020

Other Measurements

Schedule of Amortizations - Police

October 1, 2020

| <u>Date Established</u> | <u>Description</u> | <u>Original Amount</u> | <u>Remaining Period Years</u> | <u>Remaining Balance</u> | <u>Annual Payment</u> |
|-------------------------|-----------------------|------------------------|-------------------------------|--------------------------|-----------------------|
| 10/1/2000 | Plan Amendment | 11,651,128 | 10 | 8,970,369 | 1,206,847 |
| 10/1/2000 | Actuarial Loss (Gain) | 3,153,187 | 10 | 2,427,685 | 326,614 |
| 10/1/2001 | Variable COLA | 484,615 | 11 | 388,820 | 49,049 |
| 10/1/2001 | Plan Amendment | 377,521 | 11 | 302,895 | 38,210 |
| 10/1/2001 | Actuarial Loss (Gain) | 5,917,320 | 11 | 4,747,597 | 598,899 |
| 10/1/2002 | Actuarial Loss (Gain) | 13,547,635 | 12 | 12,032,940 | 1,434,561 |
| 10/1/2003 | Actuarial Loss (Gain) | 8,453,577 | 13 | 6,808,402 | 772,170 |
| 10/1/2004 | Actuarial Loss (Gain) | 7,733,735 | 14 | 6,169,726 | 669,359 |
| 10/1/2005 | Plan Amendment | 528,766 | 15 | 353,408 | 36,851 |
| 10/1/2005 | Actuarial Loss (Gain) | 1,811,918 | 15 | 1,452,152 | 151,419 |
| 10/1/2006 | Actuarial Loss (Gain) | (2,245,390) | 16 | (1,840,590) | (185,211) |
| 10/1/2007 | Actuarial Loss (Gain) | (3,930,059) | 17 | (3,328,434) | (324,355) |
| 10/1/2008 | Assumption Change | (2,460,748) | 18 | (2,170,420) | (205,463) |
| 10/1/2008 | Actuarial Loss (Gain) | 4,312,669 | 18 | 3,803,845 | 360,091 |
| 10/1/2009 | Assumption Change | 2,211,808 | 19 | 1,986,270 | 183,153 |
| 10/1/2009 | Actuarial Loss (Gain) | 4,953,816 | 19 | 4,448,678 | 410,210 |
| 10/1/2010 | Assumption Change | 2,351,731 | 20 | 2,115,982 | 190,508 |
| 10/1/2010 | Actuarial Loss (Gain) | 4,329,632 | 20 | 3,895,609 | 350,732 |
| 10/1/2011 | Assumption Change | 2,628,245 | 21 | 2,312,892 | 203,754 |

City of Pompano Beach Police & Firefighters' Retirement System
Actuarial Valuation as of October 1, 2020

Other Measurements

Schedule of Amortizations - Police

October 1, 2020

| <u>Date Established</u> | <u>Description</u> | <u>Original Amount</u> | <u>Remaining Period Years</u> | <u>Remaining Balance</u> | <u>Annual Payment</u> |
|-------------------------|-----------------------|------------------------|-------------------------------|--------------------------|-----------------------|
| 10/1/2011 | Actuarial Loss (Gain) | 2,882,428 | 21 | 2,536,580 | 223,459 |
| 10/1/2012 | Valuation Software | (955,577) | 22 | (856,793) | (73,994) |
| 10/1/2012 | Assumption Change | 2,734,348 | 22 | 2,451,679 | 211,732 |
| 10/1/2012 | Actuarial Loss (Gain) | 7,401,751 | 22 | 6,636,580 | 573,149 |
| 10/1/2013 | Assumption Change | (2,014,446) | 23 | (1,837,842) | (155,863) |
| 10/1/2013 | Actuarial Loss (Gain) | 1,279,029 | 23 | 1,166,900 | 98,962 |
| 10/1/2014 | Actuarial Loss (Gain) | (1,640,207) | 24 | (1,520,857) | (126,853) |
| 10/1/2015 | Actuarial Loss (Gain) | (532,193) | 25 | (501,984) | (41,236) |
| 10/1/2016 | Assumption Change | 14,723,929 | 26 | 14,078,542 | 1,140,398 |
| 10/1/2016 | Actuarial Loss (Gain) | (1,637,449) | 26 | (1,565,675) | (126,824) |
| 10/1/2017 | Actuarial Loss (Gain) | 289,192 | 27 | 279,994 | 22,390 |
| 10/1/2018 | Actuarial Loss (Gain) | (28,169) | 18 | (26,798) | (2,537) |
| 10/1/2018 | Assumption Change | 1,526,587 | 18 | 1,452,269 | 137,479 |
| 10/1/2019 | Actuarial Loss (Gain) | 2,419,119 | 19 | 2,362,015 | 217,800 |
| 10/1/2019 | Assumption Change | (4,439,151) | 19 | (4,334,364) | (399,669) |
| 10/1/2020 | Actuarial Loss (Gain) | 802,666 | 20 | 802,666 | 72,266 |
| 10/1/2020 | Assumption Change | (367,023) | 20 | (367,023) | (33,044) |

City of Pompano Beach Police & Firefighters' Retirement System
Actuarial Valuation as of October 1, 2020

Other Measurements

Schedule of Amortizations - Fire

| | | Total | | October 1, 2020 | |
|-------------------------|-----------------------|------------------------|-------------------------------|--------------------------|-----------------------|
| <u>Date Established</u> | <u>Description</u> | <u>Original Amount</u> | <u>Remaining Period Years</u> | <u>Remaining Balance</u> | <u>Annual Payment</u> |
| 10/1/1991 | Assumption Change | (3,244) | 1 | (347) | (347) |
| 10/1/1991 | Actuarial Loss (Gain) | (237,123) | 1 | (25,341) | (25,341) |
| 10/1/1992 | Assumption Change | (2,583) | 2 | (530) | (271) |
| 10/1/1992 | Actuarial Loss (Gain) | (573,171) | 2 | (117,600) | (60,074) |
| 10/1/1993 | Assumption Change | (42,396) | 3 | (12,691) | (4,415) |
| 10/1/1993 | Actuarial Loss (Gain) | (239,687) | 3 | (71,757) | (24,963) |
| 10/1/1994 | Assumption Change | 610,808 | 4 | 215,299 | 57,372 |
| 10/1/1994 | Actuarial Loss (Gain) | 336,046 | 4 | 118,447 | 31,563 |
| 10/1/1995 | Assumption Change | (247,322) | 5 | (119,451) | (26,004) |
| 10/1/1995 | Actuarial Loss (Gain) | (215,450) | 5 | (104,057) | (22,653) |
| 10/1/1996 | Assumption Change | (297,737) | 6 | (173,601) | (32,156) |
| 10/1/1996 | Actuarial Loss (Gain) | (219,757) | 6 | (128,133) | (23,734) |
| 10/1/1997 | Assumption Change | 1,069,910 | 7 | 707,435 | 114,660 |
| 10/1/1997 | Actuarial Loss (Gain) | (2,444,135) | 7 | (1,802,040) | (292,072) |
| 10/1/1998 | Plan Amendment | (268,116) | 8 | (214,148) | (30,999) |
| 10/1/1998 | Actuarial Loss (Gain) | (2,508,306) | 8 | (2,003,446) | (290,009) |
| 10/1/1999 | Plan Amendment | 114,009 | 9 | 97,442 | 12,796 |
| 10/1/1999 | Actuarial Loss (Gain) | (2,039,340) | 9 | (1,742,967) | (228,878) |
| 10/1/2000 | Assumption Change | (13,798,204) | 10 | (11,850,796) | (1,429,124) |
| | | | | \$53,265,953 | \$4,229,291 |

City of Pompano Beach Police & Firefighters' Retirement System
Actuarial Valuation as of October 1, 2020

Other Measurements

Schedule of Amortizations - Fire

October 1, 2020

| <u>Date Established</u> | <u>Description</u> | <u>Original Amount</u> | <u>Remaining Period Years</u> | <u>Remaining Balance</u> | <u>Annual Payment</u> |
|-------------------------|-----------------------|------------------------|-----------------------------------|------------------------------|---------------------------|
| 10/1/2000 | Plan Amendment | 8,646,272 | 10 | 7,425,981 | 895,522 |
| 10/1/2000 | Actuarial Loss (Gain) | 676,828 | 10 | 581,306 | 70,101 |
| 10/1/2000 | Plan Amendment | 299,541 | 10 | 257,269 | 31,025 |
| 10/1/2001 | Actuarial Loss (Gain) | 7,539,001 | 11 | 6,724,789 | 752,153 |
| 10/1/2002 | Actuarial Loss (Gain) | 9,466,755 | 12 | 11,120,026 | 1,162,989 |
| 10/1/2003 | Actuarial Loss (Gain) | 7,616,087 | 13 | 8,392,188 | 826,317 |
| 10/1/2004 | Actuarial Loss (Gain) | 6,692,396 | 14 | 7,276,986 | 678,477 |
| 10/1/2005 | Plan Amendment | 4,413,733 | 15 | 4,773,706 | 423,551 |
| 10/1/2005 | Actuarial Loss (Gain) | 2,591,529 | 15 | 2,802,883 | 248,688 |
| 10/1/2006 | Actuarial Loss (Gain) | (2,040,207) | 16 | (2,211,248) | (187,509) |
| 10/1/2007 | Actuarial Loss (Gain) | (868,128) | 17 | (951,059) | (77,368) |
| 10/1/2008 | Assumption Change | (2,812,893) | 18 | (3,100,596) | (242,776) |
| 10/1/2008 | Actuarial Loss (Gain) | 3,519,341 | 18 | 3,879,302 | 303,749 |
| 10/1/2009 | Assumption Change | 2,293,100 | 19 | 2,527,656 | 191,057 |
| 10/1/2009 | Plan Amendment | 23,114 | 19 | 25,479 | 1,926 |
| 10/1/2009 | Actuarial Loss (Gain) | 3,014,143 | 19 | 3,322,453 | 251,133 |
| 10/1/2010 | Assumption Change | 2,377,230 | 20 | 2,598,136 | 190,077 |
| 10/1/2010 | Actuarial Loss (Gain) | (904,732) | 20 | (988,806) | (72,340) |
| 10/1/2011 | Actuarial Loss (Gain) | (1,874,268) | 21 | (1,993,169) | (141,468) |

City of Pompano Beach Police & Firefighters' Retirement System
Actuarial Valuation as of October 1, 2020

Other Measurements

Schedule of Amortizations - Fire

October 1, 2020

| <u>Date Established</u> | <u>Description</u> | <u>Original Amount</u> | <u>Remaining Period Years</u> | <u>Remaining Balance</u> | <u>Annual Payment</u> |
|-------------------------|-----------------------|------------------------|-----------------------------------|------------------------------|---------------------------|
| 10/1/2011 | Assumption Change | 2,629,741 | 21 | 2,796,570 | 198,490 |
| 10/1/2012 | Valuation Software | (2,713,381) | 22 | (2,871,812) | (198,168) |
| 10/1/2012 | Assumption Change | 2,714,228 | 22 | 2,872,709 | 198,230 |
| 10/1/2012 | Actuarial Loss (Gain) | 1,168,034 | 22 | 1,236,234 | 85,306 |
| 10/1/2013 | Assumption Change | (3,541,424) | 23 | (3,725,301) | (250,402) |
| 10/1/2013 | Actuarial Loss (Gain) | (1,830,796) | 23 | (1,925,857) | (129,450) |
| 10/1/2014 | Actuarial Loss (Gain) | (1,597,600) | 24 | (1,675,148) | (109,872) |
| 10/1/2014 | Plan Amendment | 589 | 24 | 618 | 41 |
| 10/1/2015 | Actuarial Loss (Gain) | (1,680,516) | 25 | (1,753,655) | (112,415) |
| 10/1/2016 | Assumption Changes | 14,229,829 | 26 | 14,756,775 | 925,865 |
| 10/1/2016 | Actuarial Loss (Gain) | (228,270) | 26 | (236,722) | (14,852) |
| 10/1/2017 | Actuarial Loss (Gain) | 1,124,272 | 27 | 1,157,123 | 71,153 |
| 10/1/2018 | Actuarial Loss (Gain) | (3,291,760) | 18 | (3,248,217) | (254,335) |
| 10/1/2018 | Assumption Change | 1,994,558 | 18 | 1,968,175 | 154,108 |
| 10/1/2019 | Actuarial Loss (Gain) | 2,687,801 | 19 | 2,673,019 | 202,045 |
| 10/1/2019 | Assumption Change | (2,706,507) | 19 | (2,691,622) | (203,451) |
| 10/1/2020 | Actuarial Loss (Gain) | 9,297,486 | 20 | 9,297,486 | 680,196 |
| 10/1/2020 | Assumption Change | (599,422) | 20 | (599,422) | (43,853) |

City of Pompano Beach Police & Firefighters' Retirement System
Actuarial Valuation as of October 1, 2020

Other Measurements

Information to Comply with Florida 60T-1.003(4)(i)

Comparative Summary Of Principal Valuation Results

| | 10/1/2020 7.30% (current methods & assumptions) | 10/1/2020 7.30% (prior methods & assumptions) | 10/1/2019 7.30% |
|-------------------------------------|---|---|--------------------|
| Participant Data | | | |
| Active members | 181 | 181 | 186 |
| Total annual payroll | \$16,818,135 | \$16,818,135 | \$16,107,844 |
| Members in DROP | 25 | 25 | 23 |
| Total annualized benefit | \$1,694,077 | \$1,694,077 | \$1,585,759 |
| Retired members and beneficiaries | 347 | 347 | 344 |
| Total annualized benefit | \$19,332,950 | \$19,332,950 | \$18,742,481 |
| Disabled members receiving benefits | 36 | 36 | 35 |
| Total annualized benefit | \$2,215,392 | \$2,215,392 | \$2,092,527 |
| Terminated vested members | 5 | 5 | 3 |
| Total annualized benefit | \$194,139 | \$194,139 | \$93,824 |
| Assets | | | |
| Actuarial value of assets | \$234,435,540 | \$234,435,540 | \$232,629,949 |
| Market value of assets | \$230,025,621 | \$230,025,621 | \$230,401,768 |

**City of Pompano Beach Police & Firefighters' Retirement System
Actuarial Valuation as of October 1, 2020**

Other Measurements

Information to Comply with Florida 60T-1.003(4)(i)

| | 10/1/2020 7.30% (current methods & assumptions) | 10/1/2020 7.30% (prior methods & assumptions) | 10/1/2019 7.30% |
|---|--|--|----------------------|
| Liabilities, present value of all future expected benefit payments | | | |
| Active members | | | |
| Retirement benefits | \$101,107,668 | \$101,107,668 | \$96,313,209 |
| Vesting benefits | \$2,182,460 | \$2,182,460 | \$2,119,989 |
| Disability benefits | \$7,338,742 | \$7,677,808 | \$7,421,540 |
| Death benefits | \$1,982,855 | \$1,982,855 | \$1,918,171 |
| Return of contribution | 474,259 | 474,259 | 455,574 |
| Total | \$113,085,984 | \$113,425,050 | \$108,228,483 |
| Terminated vested members | | | |
| | \$1,699,447 | \$1,699,447 | \$1,277,448 |
| Retired members and beneficiaries | | | |
| | \$247,312,970 | \$247,312,970 | \$242,552,338 |
| Disabled members | | | |
| | \$25,466,721 | \$26,308,776 | \$25,283,725 |
| Total | \$387,565,122 | \$388,746,243 | \$377,341,994 |
| Liabilities due and unpaid | | | |
| | \$0 | \$0 | \$0 |
| Actuarial accrued liability | | | |
| | \$342,655,039 | \$343,621,483 | \$333,397,561 |
| Unfunded actuarial accrued liability | | | |
| | \$108,219,499 | \$109,185,943 | \$100,767,612 |

City of Pompano Beach Police & Firefighters' Retirement System
Actuarial Valuation as of October 1, 2020

Other Measurements

Information to Comply with Florida 60T-1.003(4)(i)

Comparative Summary Of Principal Valuation Results (continued)

| | 10/1/2020 7.30% (current methods & assumptions) | 10/1/2020 7.30% (prior methods & assumptions) | 10/1/2019 7.30% |
|---|--|--|--------------------|
| Actuarial present value of accrued benefits | | | |
| Statement of actuarial present value of all accrued benefits | | | |
| Vested accrued benefits | | | |
| Inactive members and beneficiaries | \$289,537,882 | \$290,379,937 | \$283,211,178 |
| Active members | 55,143,565 | 55,349,597 | 45,675,164 |
| Total value of all vested accrued benefits | \$344,681,447 | \$345,729,534 | \$328,886,342 |
| Non-vested accrued benefits | 8,035,575 | 8,042,099 | 8,303,350 |
| Total actuarial present value of all accrued benefits | \$352,717,022 | \$353,771,633 | \$337,189,692 |
| Statement of changes in total actuarial present value of all accrued benefits (ASC 960) | | | |
| Actuarial present value of accrued benefits, beginning of year | \$337,189,692 | \$337,189,692 | \$321,584,365 |
| Increase (decrease) during year | | | |
| Benefits accumulated | \$9,037,912 | \$9,037,912 | \$10,645,449 |
| Plan amendment | 0 | 0 | 0 |
| Changes in actuarial assumptions | (1,054,611) | 0 | (6,901,057) |
| Interest | 23,790,802 | 23,790,802 | 22,861,173 |
| Benefits paid | (22,981,366) | (22,981,366) | (25,758,878) |
| Other changes | 6,734,593 | 6,734,593 | 14,758,640 |
| Net increase (decrease) | \$15,527,330 | \$16,581,941 | \$15,605,327 |
| Actuarial present value of accrued benefits, end of year | \$352,717,022 | \$353,771,633 | \$337,189,692 |

City of Pompano Beach Police & Firefighters' Retirement System
Actuarial Valuation as of October 1, 2020

Other Measurements

Information to Comply with Florida 60T-1.003(4)(i)

| | 10/1/2020 7.30% (current methods & assumptions) | 10/1/2020 7.30% (prior methods & assumptions) | 10/1/2019 7.30% |
|--|--|--|---------------------------|
| Pension cost | | | |
| Normal Cost | \$4,935,230 | \$4,955,805 | \$4,782,737 |
| Member contributions | \$2,024,758 | \$2,024,758 | \$1,966,312 |
| Expected plan sponsor contribution | \$11,915,364 | \$12,021,803 | \$11,023,272 |
| As % of payroll | 69.62% | 70.24% | 67.24% |
| Member Contributions as % of payroll | 12.04% | 12.04% | 12.21% |
| Past contributions | | | |
| Required plan sponsor contribution | 9/30/2020 \$13,033,622 | | 9/30/2019 \$12,677,918 |
| Required member contribution | \$1,995,263 | | \$1,857,469 |
| Actual contributions made by: | | | |
| Plan's sponsor | \$13,033,622 | | \$12,677,918 |
| Members | \$1,995,263 | | \$1,857,469 |
| Other | \$0 | | \$0 |
| Net actuarial gain (loss) (if applicable) | \$ (10,100,150) | | \$ (5,106,920) |
| Other disclosures (where applicable) | | | |
| Present value of active member | | | |
| Future salaries at attained age | \$155,574,166 | \$155,574,166 | \$150,474,736 |
| Future contributions at attained age | \$16,015,004 | \$16,015,004 | \$15,495,452 |

City of Pompano Beach Police & Firefighters' Retirement System
Actuarial Valuation as of October 1, 2020

Other Measurements

Information to Comply with Florida 60T-1.003(4)(i)

Hypothetical City Contribution Requirement for 2021/2022 Fiscal Year

| | Police | Fire | Total |
|--|---------------|---------------|---------------|
| Unfunded actuarial accrued liability | \$54,953,546 | \$53,265,953 | \$108,219,499 |
| Liabilities, present value of all future expected benefit payments | | | |
| Active members | | | |
| Retirement benefits | \$2,206,883 | \$98,900,785 | \$101,107,668 |
| Vesting benefits | 13,044 | 2,169,416 | 2,182,460 |
| Disability benefits | 43,821 | 7,294,921 | 7,338,742 |
| Death benefits | 8,258 | 1,974,597 | 1,982,855 |
| Return of contribution | 0 | 474,259 | 474,259 |
| Total | \$2,272,006 | \$110,813,978 | \$113,085,984 |
| Terminated vested members | \$0 | \$1,699,447 | \$1,699,447 |
| Retired members and beneficiaries | \$138,201,265 | \$109,111,705 | \$247,312,970 |
| Disabled members | \$11,906,861 | \$13,559,860 | \$25,466,721 |
| Total | \$152,380,132 | \$235,184,990 | \$387,565,122 |
| Entry age reserve | | | |
| Active | \$2,049,066 | \$66,126,835 | \$68,175,901 |
| Inactive | 150,108,126 | 124,371,012 | 274,479,138 |
| Total | \$152,157,192 | \$190,497,847 | \$342,655,039 |
| Accumulated Employee Contributions | \$365,516 | \$18,402,775 | \$18,768,291 |
| Present Value of Future Salaries | \$771,494 | \$154,802,672 | \$155,574,166 |
| Present Value of Future Member Contributions | \$45,544 | \$15,969,460 | \$16,015,004 |
| Annual Inactive Benefits | \$12,440,132 | \$10,802,288 | \$23,242,420 |
| Valuation Payroll | \$249,331 | \$16,568,804 | \$16,818,135 |
| ASC 960 Information | | | |
| Present Value of Vested Benefits | \$158,582,574 | \$186,098,873 | \$337,946,854 |
| Present Value of Accrued Benefits | \$159,157,026 | \$193,559,996 | \$345,982,429 |

City of Pompano Beach Police & Firefighters' Retirement System
Actuarial Valuation as of October 1, 2020

Other Measurements

Information to Comply with Florida 60T-1.003(4)(i)

Hypothetical City Contribution Requirement for 2021/2022 Fiscal Year

| | Police | Fire | Total |
|--|---------------|---------------|---------------|
| Actuarial Value at 10/1/2019 | \$104,149,075 | \$143,239,514 | \$247,388,589 |
| Contribution by | | | |
| - Members | 21,442 | 1,973,821 | 1,995,263 |
| - City | 0 | 6,019,899 | 6,019,899 |
| - BSO | 4,924,085 | 0 | 4,924,085 |
| - State | 1,428,414 | 1,322,197 | 2,750,611 |
| - Total | 6,373,941 | 9,315,917 | 15,689,858 |
| Net Earnings Recognized ¹ | \$7,241,607 | \$10,272,121 | \$17,513,728 |
| Disbursements | | | |
| - Benefit Payment | 13,105,659 | 9,835,031 | 22,940,690 |
| - Refunds | 0 | 40,676 | 40,676 |
| - Administrative Expenses ² | 250,075 | 354,728 | 604,803 |
| - Total | 13,355,734 | 10,230,435 | 23,586,169 |
| Actuarial Value at 10/1/2020 | \$104,408,889 | \$152,597,117 | \$257,006,006 |
| DROP Account Balance | \$6,641,892 | \$8,416,852 | \$15,058,744 |
| State Contribution Reserve | \$276,162 | \$500,967 | \$777,129 |
| Member Plan | \$287,189 | \$6,447,404 | \$6,734,593 |
| Adjusted Actuarial Value at 10/1/2020 | \$97,203,646 | \$137,231,894 | \$234,435,540 |
| Market Value of Assets ³ | \$95,375,168 | \$134,650,453 | \$230,025,621 |

¹Allocated based on Return of Actuarial Value of Assets

²Allocated based on Net Earnings Recognized

³Allocation based on Adjusted Actuarial Value as of 10/1/2020

City of Pompano Beach Police & Firefighters' Retirement System
Actuarial Valuation as of October 1, 2020

Other Measurements

Information to Comply with Florida 60T-1.003(4)(i)

Hypothetical City Contribution Requirement for 2021/2022 Fiscal Year

| | Police | Fire | Total |
|---|-------------|---------------|---------------|
| Employer Contributions | | | |
| Normal Cost | \$72,050 | \$4,863,180 | \$4,935,230 |
| Expected Member Contributions | (\$24,444) | (\$2,000,314) | (\$2,024,758) |
| Net Normal Cost | \$47,606 | \$2,862,866 | \$2,910,472 |
| Administrative expense ¹ | \$253,853 | \$360,086 | \$613,939 |
| Amortization of UAAL | \$4,997,000 | \$4,229,291 | \$9,226,291 |
| Applicable Interest | 386,788 | 544,014 | 930,802 |
| Total Recommended Contribution | \$5,685,247 | \$7,996,257 | \$13,681,504 |
| Expected Non-Employer Contributions | (1,152,251) | (821,230) | (1,973,481) |
| Total Recommended Contribution | \$4,532,996 | \$7,175,027 | \$11,708,023 |
| As a percentage of payroll | 1818.06% | 43.30% | 69.62% |
| Hypothetical Total | | | 11,708,023 |
| Total Recommended Contribution (paid in Lump Sum) | \$4,613,272 | \$7,302,092 | \$11,915,364 |
| Total Recommended Contribution (paid in Quarterly Installments) | \$4,736,155 | \$7,496,597 | \$12,232,752 |

¹Allocated based on Net Earnings Recognized

Other Measurements

Information to Comply with Florida 60T-1.003(3)(f)

September 30, 2020

Historical Salary Increases and Asset Performance

| Year Ending | Payroll Growth | Salary Growth | Expected Salary Growth | Asset Return (Market) | Asset Return (Actuarial) | Asset Return (Expected) |
|-------------|----------------|---------------|------------------------|-----------------------|--------------------------|-------------------------|
| 9/30/2020 | 4.41% | 9.20% | 6.26% | 6.37% | 7.21% | 7.30% |
| 9/30/2019 | 9.54% | 7.15% | 6.06% | 4.04% | 5.84% | 7.40% |
| 9/30/2018 | 2.45% | 2.52% | 5.55% | 8.59% | 7.19% | 7.50% |
| 9/30/2017 | 6.11% | 4.43% | 5.41% | 10.88% | 7.91% | 7.50% |
| 9/30/2016 | 3.56% | 6.06% | 5.27% | 7.63% | 8.54% | 7.50% |
| 9/30/2015 | (0.03%) | 4.84% | 5.41% | (1.71%) | 7.46% | 7.50% |
| 9/30/2014 | 0.90% | 5.50% | 5.20% | 10.00% | 9.60% | 7.50% |
| 9/30/2013 | (9.00%) | 1.40% | 7.00% | 13.70% | 8.00% | 7.70% |
| 9/30/2012 | (7.00%) | 1.60% | 6.90% | 16.80% | 2.80% | 7.90% |
| 9/30/2011 | (7.70%) | (1.50%) | 6.40% | 1.70% | 1.20% | 8.10% |
| 9/30/2010 | (7.60%) | 5.00% | 6.50% | 10.40% | 5.60% | 8.30% |
| 9/30/2009 | (4.00%) | 3.00% | 7.00% | 1.80% | 2.30% | 8.50% |
| 9/30/2008 | (1.40%) | 7.40% | 7.00% | (14.30%) | 3.60% | 8.50% |
| 9/30/2007 | 2.80% | 6.20% | 6.00% | 12.80% | 10.00% | 8.50% |

Averages

| | | |
|---------|-------|-------|
| 3-year | 6.32% | 6.74% |
| 5-year | 7.48% | 7.33% |
| 10-year | 7.67% | 6.55% |
| 20-year | 5.17% | 4.59% |
| 44-year | 8.21% | 7.45% |

City of Pompano Beach Police & Firefighters' Retirement System
Actuarial Valuation as of October 1, 2020

Other Measurements

Information to Comply with Florida 60T-1.003(3)(f)

September 30, 2020

Amortization of Unfunded Actuarial Accrued Liability

| | UAAL | Amortization |
|-----------|---------------|--------------|
| 10/1/2020 | \$108,219,499 | \$9,226,291 |
| 10/1/2021 | \$106,219,714 | \$9,401,076 |
| 10/1/2022 | \$103,886,395 | \$9,660,099 |
| 10/1/2023 | \$101,104,818 | \$9,853,702 |
| 10/1/2046 | \$166,441 | \$166,441 |

City of Pompano Beach Police & Firefighters' Retirement System
Actuarial Valuation as of October 1, 2020

Other Measurements

Information to Comply with Florida Statute 112.664 and Florida Administrative Code 60T-1.0035¹

| | Valuation 7.30% | - 200 bp ² 5.30% | Funding Rate ² 7.30% | October 1, 2020 + 200 bp ² 9.30% |
|---|--------------------|--------------------------------|------------------------------------|---|
| Total pension liability | | | | |
| Service Cost | \$4,762,331 | \$4,762,331 | \$4,762,331 | \$4,762,331 |
| Interest | 25,164,639 | 25,164,639 | 25,164,639 | 25,164,639 |
| Benefit changes | 0 | 0 | 0 | 0 |
| Difference between expected and actual experience | 10,857,184 | 10,857,184 | 10,857,184 | 10,857,184 |
| Changes in assumptions | 0 | 72,697,103 | (4,026,722) | (70,476,571) |
| Benefit payments | (22,940,690) | (22,940,690) | (22,940,690) | (22,940,690) |
| Contribution refunds | (40,676) | (40,676) | (40,676) | (40,676) |
| Net change in pension liability | \$17,802,788 | \$90,499,891 | \$13,776,066 | (\$52,673,783) |
| Total pension liability, beginning of year | \$351,449,439 | \$351,449,439 | \$351,449,439 | \$351,449,439 |
| Total pension liability, end of year | \$369,252,227 | \$441,949,330 | \$365,225,505 | \$298,775,656 |
| Plan fiduciary net position | | | | |
| Contributions - Employer | \$10,943,984 | \$10,943,984 | \$10,943,984 | \$10,943,984 |
| Contributions - State | 2,750,611 | 2,750,611 | 2,750,611 | 2,750,611 |
| Contributions - Member | 1,995,263 | 1,995,263 | 1,995,263 | 1,995,263 |
| Net investment income | 15,361,708 | 15,361,708 | 15,361,708 | 15,361,708 |
| Benefit payments | (22,940,690) | (22,940,690) | (22,940,690) | (22,940,690) |
| Contribution refunds | (40,676) | (40,676) | (40,676) | (40,676) |
| Administrative expense | (604,803) | (604,803) | (604,803) | (604,803) |
| Other | 66,752 | 66,752 | 66,752 | 66,752 |
| Net change in plan fiduciary net position | \$7,532,149 | \$7,532,149 | \$7,532,149 | \$7,532,149 |
| Plan fiduciary net position, beginning of year | \$245,063,938 | \$245,063,938 | \$245,063,938 | \$245,063,938 |
| Plan fiduciary net position, end of year | \$252,596,087 | \$252,596,087 | \$252,596,087 | \$252,596,087 |
| Net pension liability/(asset) | \$116,656,140 | \$189,353,243 | \$112,629,418 | \$46,179,569 |
| Funded ratio | 68.41% | 57.15% | 69.16% | 84.54% |
| Years that Assets support expected benefit payments | 13 | 11 | 13 | 17 |
| Estimated city contribution | | | | |
| Annual dollar value | \$12,459,757 | \$25,333,516 | \$11,708,023 | \$0 |
| Percentage of payroll | 74.09% | 150.63% | 69.62% | 0.00% |

¹Includes DROP assets and liabilities

²Based on valuation assumption with the following changes
-interest rate (as noted)

Other Measurements

Information to Comply with Florida Statute 112.664 and Florida Administrative Code 60T-1.0035¹

October 1, 2020

Sustainment of Expected Benefit Payments

Mortality 2019 FRS Special Risk Scale MP-2018 Generational
 Interest 7.30%

| <u>Year</u> | <u>Market Value of Assets</u> | <u>Investment Return</u> | <u>Benefit Payments</u> |
|-------------|-------------------------------|--------------------------|---------------------------|
| 1 | \$252,596,087 | \$16,807,908 | \$45,502,992 ¹ |
| 2 | 223,901,003 | 15,477,435 | 24,188,710 |
| 3 | 215,189,728 | 14,818,805 | 24,821,980 |
| 4 | 205,186,553 | 14,067,377 | 25,413,125 |
| 5 | 193,840,805 | 13,212,659 | 26,151,546 |
| 6 | 180,901,918 | 12,242,383 | 26,869,319 |
| 7 | 166,274,982 | 11,152,875 | 27,475,680 |
| 8 | 149,952,177 | 9,938,881 | 28,101,178 |
| 9 | 131,789,880 | 8,592,380 | 28,677,166 |
| 10 | 111,705,094 | 7,105,314 | 29,259,381 |
| 11 | 89,551,027 | 5,473,727 | 29,659,303 |
| 12 | 65,365,451 | 3,690,234 | 30,159,805 |
| 13 | 38,895,880 | 1,749,603 | 30,392,738 |
| 14 | 10,252,745 | | 30,705,042 |

¹Benefit payments include the DROP balance and Share Plan Assets at 9/30/2020

Other Measurements

Information to Comply with Florida Statute 112.664 and Florida Administrative Code 60T-1.0035¹

October 1, 2020

Sustainment of Expected Benefit Payments

Mortality 2019 FRS Special Risk Scale MP-2018 Generational
 Interest 5.30%

| <u>Year</u> | <u>Market Value of Assets</u> | <u>Investment Return</u> | <u>Benefit Payments</u> |
|-------------|-------------------------------|--------------------------|---------------------------|
| 1 | \$252,596,087 | \$12,197,343 | \$45,502,524 ¹ |
| 2 | 219,290,906 | 10,989,736 | 24,187,063 |
| 3 | 206,093,579 | 10,273,752 | 24,818,802 |
| 4 | 191,548,529 | 9,487,459 | 25,407,760 |
| 5 | 175,628,228 | 8,624,434 | 26,143,636 |
| 6 | 158,109,026 | 7,677,222 | 26,858,294 |
| 7 | 138,927,954 | 6,644,863 | 27,460,901 |
| 8 | 118,111,916 | 5,525,367 | 28,081,942 |
| 9 | 95,555,341 | 4,314,939 | 28,652,716 |
| 10 | 71,217,564 | 3,009,964 | 29,228,920 |
| 11 | 44,998,608 | 1,610,085 | 29,621,708 |
| 12 | 16,986,985 | | 30,114,134 |

¹Benefit payments include the DROP balance and Share Plan Assets at 9/30/2020

Other Measurements

Information to Comply with Florida Statute 112.664 and Florida Administrative Code 60T-1.0035¹

October 1, 2020

Sustainment of Expected Benefit Payments

Mortality 2019 FRS Special Risk Scale MP-2018 Generational
Interest 7.30%

| <u>Year</u> | <u>Market Value of Assets</u> | <u>Investment Return</u> | <u>Benefit Payments</u> |
|-------------|-------------------------------|--------------------------|---------------------------|
| 1 | \$252,596,087 | \$16,807,924 | \$45,502,524 ¹ |
| 2 | 223,901,487 | 15,477,530 | 24,187,063 |
| 3 | 215,191,954 | 14,819,082 | 24,818,802 |
| 4 | 205,192,234 | 14,067,984 | 25,407,760 |
| 5 | 193,852,458 | 13,213,794 | 26,143,636 |
| 6 | 180,922,616 | 12,244,290 | 26,858,294 |
| 7 | 166,308,612 | 11,155,859 | 27,460,901 |
| 8 | 150,003,570 | 9,943,323 | 28,081,942 |
| 9 | 131,864,951 | 8,598,737 | 28,652,716 |
| 10 | 111,810,972 | 7,114,136 | 29,228,920 |
| 11 | 89,696,188 | 5,485,672 | 29,621,708 |
| 12 | 65,560,152 | 3,706,085 | 30,114,134 |
| 13 | 39,152,103 | 1,770,269 | 30,338,015 |
| 14 | 10,584,357 | | 30,640,316 |

¹Benefit payments include the DROP balance and Share Plan Assets at 9/30/2020

Other Measurements

Information to Comply with Florida Statute 112.664 and Florida Administrative Code 60T-1.0035¹

October 1, 2020

Sustainment of Expected Benefit Payments

Mortality 2019 FRS Special Risk Scale MP-2018 Generational
Interest 9.30%

| Year | Market Value of Assets | Investment Return | Benefit Payments |
|------|------------------------|-------------------|---------------------------|
| 1 | \$252,596,087 | \$21,422,600 | \$45,502,524 ¹ |
| 2 | 228,516,163 | 20,152,304 | 24,187,063 |
| 3 | 224,481,404 | 19,748,349 | 24,818,802 |
| 4 | 219,410,951 | 19,250,019 | 25,407,760 |
| 5 | 213,253,210 | 18,643,891 | 26,143,636 |
| 6 | 205,753,465 | 17,913,922 | 26,858,294 |
| 7 | 196,809,093 | 17,054,697 | 27,460,901 |
| 8 | 186,402,889 | 16,058,684 | 28,081,942 |
| 9 | 174,379,631 | 14,914,570 | 28,652,716 |
| 10 | 160,641,485 | 13,610,724 | 29,228,920 |
| 11 | 145,023,289 | 12,140,373 | 29,621,708 |
| 12 | 127,541,954 | 10,492,220 | 30,114,134 |
| 13 | 107,920,040 | 8,657,203 | 30,338,015 |
| 14 | 86,239,228 | 6,627,143 | 30,640,316 |
| 15 | 62,226,055 | 4,376,497 | 31,023,489 |
| 16 | 35,579,063 | 1,885,899 | 31,296,813 |
| 17 | 6,168,149 | | 31,738,378 |

¹Benefit payments include the DROP balance and Share Plan Assets at 9/30/2020

Other Measurements

Reserve Account For Future Benefit Improvements Under F.L. 99-1

1. Adjusted Base Amount at 10/1/2020

| Year | Established | Description | Ch. 185 Police | Ch. 175 Fire | Suppl. Fire | Total Fire |
|------|-------------|------------------------------------|-------------------|-----------------|----------------|---------------|
| | | Adjusted Base Amount as of 10/1/10 | | | | |
| 2012 | | Ordinances 2012-30/31 | 798,463 | 704,031 | 28,723 | 732,754 |
| 2017 | | Ordinance 2017-30 | 0 | 88,476 | 0 | 88,476 |
| | | Adjusted Base Amount | 77,625 | 0 | 0 | 0 |
| | | | 876,088 | 792,507 | 28,723 | 821,230 |

2. Reserve Account for 2019/2020

| | Ch. 185 Police | Total Fire |
|--|-------------------|---------------|
| (a) Reserve Account at September 30, 2019 | 201,642 | 459,331 |
| (b) Share Plan Allocation Paid Out | (201,642) | (459,331) |
| (c) Share Plan Allocation for Reserve | 276,162 | 500,967 |
| (d) Reserve Account at September 30, 2020 | 276,162 | 500,967 |
| (a + b + c) | | |
| (e) City Contribution Receivable for State Premium Shortfall | | |
| i. Premium Tax Distribution for 2019 | 1,428,414 | 1,322,197 |
| ii. Adjusted Base Amount | 876,088 | 821,230 |
| iii. Shortfall of State Premium Tax Distribution | 0 | 0 |

3. Allocation of Accumulated Reserve Account under SB 172

| | Ch. 185 Police | Total Fire |
|---|-------------------|---------------|
| (a) Amount allocated to contribution | (276,164) | 0 |
| (b) Amount allocated to Member Plan | 0 | 0 |
| (c) Total | (276,164) | 0 |
| (d) Final Reserve Account at September 30, 2020 | 276,162 | 500,967 |
| (e) Amount to be allocated to Member Plan | 276,162 | 500,967 |