

# City of Pompano Beach Police & Firefighters' Retirement Plan

October 1, 2020 Actuarial Valuation Report

# **Table of Contents**

Actuarial Certification	3
Executive Summary	5
Summary Results	5
Changes Since Prior Valuation and Key Notes	6
Five Year Valuation Summary	7
Identification of Risks	8
Plan Maturity Measures	9
Assets and Liabilities	10
Present Value of Future Benefits	10
Funding Liabilities	11
Asset Information	12
Reconciliation of Gain/Loss	13
Contribution Requirements	15
Development of Recommended Contribution	15
Demographic Information	16
Participant Reconciliation	18
Plan Provisions	20
Actuarial Assumptions	28
Appendix	31
Reconciliation of Unfunded Actuarial Liability	32
Asset Information	33
Schedule of Amortizations	35
Florida State Requirements	41
Reserve Account under 99-1/SB172	55



#### **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.



#### **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

Heath W Mark

## Feburary 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:

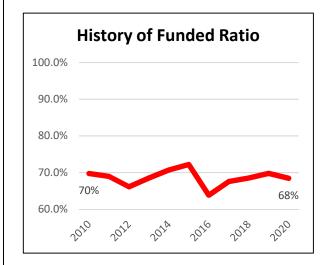
Mr. Stephen Bardin Benefits Administrator Municipal Police Officers' & Firefighters' Trust Funds Division of Retirement Post Office Box 3010 Tallahassee, FL 32315-3010

Mr. Keith Brinkman Bureau & Chief Local Retirement Systems Division of Retirement Department of Management Services P. O. Box 9000 Tallahassee, FL 32315-9000



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





## **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.



# **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



#### **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



## 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.

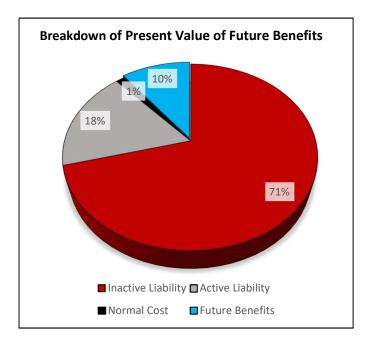


## **Present Value of Future Benefits**

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	\$113,085,984
Inactive members	
Retired members	\$235,866,862
Beneficiaries	11,446,108
Disableds	25,466,721
Terminated vested members	1,699,447
Total inactive	\$274,479,138
Total	\$387,565,122
Present value of future payrolls	\$155,574,166



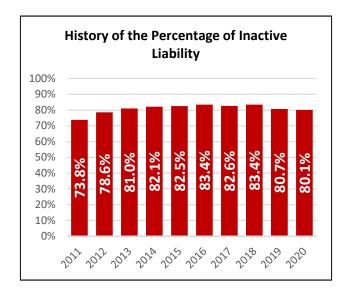


# **Accrued Liability**

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	\$68,175,901
Inactive members	
Retired members	\$235,866,862
Beneficiaries	11,446,108
Disableds	25,466,721
Terminated vested members	1,699,447
Total Inactive	\$274,479,138
Total	\$342,655,039
Normal Cost	\$4,935,230





## **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
<ol> <li>Expected actuarial value of assets         <ul> <li>(a) Actuarial value of assets, beginning of prior year</li> <li>(b) Contributions</li> <li>(c) Benefit payments</li> <li>(d) Expenses</li> <li>(e) Expected return</li> <li>(f) Expected actuarial value of assets, beginning of current year</li> </ul> </li> </ol>	\$247,388,589 15,689,858 (22,981,366) (604,803) 17,776,227 \$257,268,505
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)
<ul> <li>5. Phase in of asset gain/(loss)</li> <li>(a) Current year (20% x (\$2,444,237))</li> <li>(b) First prior year (20% x (\$7,963,610))</li> <li>(c) Second prior year (20% x \$2,395,231)</li> <li>(d) Third prior year (20% x \$6,827,672)</li> <li>(e) Fourth prior year (20% x (\$127,551))</li> <li>(f) Total phase-in</li> </ul>	\$(488,847) (1,592,722) 479,046 1,365,534 (25,510) \$(262,499)
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%



# **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

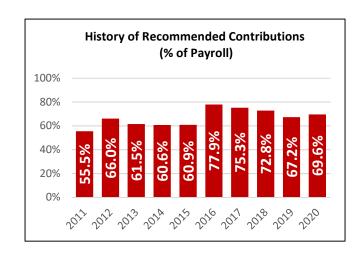


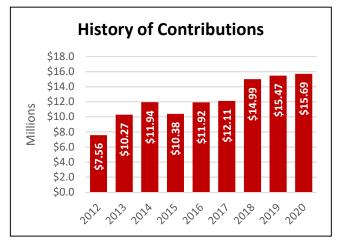
# **Development of Recommended Contribution**

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	
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	
<ol> <li>Normal Cost         <ul> <li>(a) Total normal cost</li> <li>(b) Expected participant contributions</li> <li>(c) Net normal cost</li> </ul> </li> </ol>	\$4,935,230 2,024,758 \$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





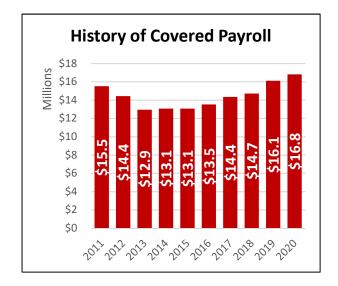


# **Demographic Information**

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.

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Participant Counts	<u>Police</u>	<u>Fire</u>	<u>Total</u>	
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	1	24	<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	





	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



	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							
To DROP	(7)					7	
To Death	(1)						(1)
To Lump Sum	(4)						(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							
Additions	9				2		11
Departures							
Current Year	181	5	36	313	34	25	594



# **Active Participant Schedule**

Active participant information grouped based on age and service.

					Years o	f Service						
Age Group	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	Total	Average Pay
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 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



## **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.



## **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

- (A) For members with less than 1 year of Continuous Service, no survivor benefits are payable.
- (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.
- (C) For members with 5 years, but less than 10 years, of Continuous Service:
  - (1) \$5,000 lump sum paid to the member's designated beneficiary; plus
  - (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
  - (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.

Maximum benefit to spouse and children is 50% of earnings.

(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.

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.



#### **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**

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

below).

% of Normal Years of Credited Service **Retirement Benefits** Less Than 10 0% 100%

The member's accrued Normal Retirement Benefit as of the date of termination. Benefit begins on the member's Normal Benefit

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.

10 or more

**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



## **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.



## 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.



#### **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.



# **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** 

**Asset Valuation Method** 

**Interest Rates** 

**Annual Pay Increases** 

**Expense and/or Contingency Loading** 

**Mortality Rates** 

Pre-Retirement:

Post-Retirement:

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.

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.

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.

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.

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

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

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



Disability

**Retirement Rates** 

**Disability Rates** 

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.

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

After First Eligibility		
for Normal Retirement	<u>Police</u>	Fire
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.

Specimen rates for all groups are shown below:

Sample	% Becoming Disabled
<u>Ages</u>	Within Next Year
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.



Type of Disability or Death:

**Workers' Compensation Offsets** 

**Withdrawal Rates** 

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

Current offsets are assumed to continue.

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

Fire

For firefighters,

	FILE
<u>Service</u>	Withdrawal Rate
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.

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

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

Assumed to be the same as in the prior year

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.

# Withdrawal of Employee Contributions

**Marital Status and Ages** 

**State Contributions** 

**Changes Since Prior Report** 



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
   Corporative 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



# **Reconciliation of Unfunded Actuarial Liability**

	October 1, 2020
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	1,456,229
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	10,100,150
(e) Total	\$9,133,705
12. Unfunded Actuarial Liability beginning of current year	\$108,219,499



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
<b>Deductions</b> 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



Distribution of Assets	September 30, 2019	September 30, 2020
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 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



# **Schedule of Amortizations - Police**

					October 1, 2020
			Total	\$54,953,546	\$4,997,000
<u>Date Established</u>	<u>Description</u>	<u>Original Amount</u>	Remaining Period <u>Years</u>	Remaining <u>Balance</u>	Annual <u>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)



# **Schedule of Amortizations - Police**

					October 1, 2020
Date Established	<u>Description</u>	<u>Original Amount</u>	Remaining Period <u>Years</u>	Remaining <u>Balance</u>	Annual <u>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



#### **Schedule of Amortizations - Police**

Octo	ber	1.	2020

Date Established	<u>Description</u>	Original Amount	Remaining Period <u>Years</u>	Remaining <u>Balance</u>	Annual <u>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)



#### **Schedule of Amortizations - Fire**

					October 1, 2020
			Total	\$53,265,953	\$4,229,291
Date Established	<u>Description</u>	<u>Original Amount</u>	Remaining Period <u>Years</u>	Remaining <u>Balance</u>	Annual <u>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)



#### **Schedule of Amortizations - Fire**

October 1, 2020

Date Established	<u>Description</u>	<u>Original Amount</u>	Remaining Period <u>Years</u>	Remaining <u>Balance</u>	Annual <u>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)



#### **Schedule of Amortizations - Fire**

October 1, 2020

Date Established	<u>Description</u>	<u>Original Amount</u>	Remaining Period <u>Years</u>	Remaining <u>Balance</u>	Annual <u>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)



Comparative Summary Of Principal Valuation Results			
	10/1/2020	10/1/2020	10/1/2019
	7.30%	7.30%	7.30%
	(current methods & assumptions)	(prior methods & assumptions)	
Participant Data	-		<u> </u>
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



	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



10/1/2020	Information to Comply with Florida 60T-1.003(4)(i)			
7.30% (current methods & assumptions)   7.30% (prior methods & assumptions   7.30% (prior methods   7.30% (prior methods & assumptions   7.30% (prior methods & assumptions   7.30% (prior methods   7.30% (prior methods & assumptions   7.30% (pr	Comparative Summary Of Principal Valuation Results (continued)			
Actuarial present value of accrued benefits         (current methods & assumptions)         (prior methods & assumptions)           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           Active members         55,143,565         55,349,597         45,675,164           Active members         \$344,681,447         \$345,729,534         \$328,886,342           Non-vested accrued benefits         \$352,717,022         \$353,771,633         \$337,189,692           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)         \$337,189,692         \$337,189,692         \$321,584,365           Increase (decrease) during year         \$9,037,912         \$9,037,912         \$10,645,449           Plan amendment         0         0         0         0           Changes in actuarial assumptions         (1,054,611)         0         (6,901,057)           Interest         23,790,802         23,790,802         22,861,173				
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         8,303,555           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 </td <td></td> <td>(current methods &amp;</td> <td>(prior methods &amp;</td> <td></td>		(current methods &	(prior methods &	
Vested accrued benefits         \$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         8,303,585           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)         \$337,189,692         \$337,189,692         \$321,584,365           Vear         Increase (decrease) during year         \$9,037,912         \$9,037,912         \$10,645,449           Plan amendment         0         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)         \$15,507,330         \$16,581,941         \$15,605,327	Actuarial present value of 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   \$9,037,912   \$9,037,912   \$10,645,449     Plan amendment   \$9,037,912   \$9,037,912   \$10,645,449     Plan amendment   \$9,037,912   \$10,645,449     Plan amendment   \$1,054,611   \$0   \$6,901,057     Interest   \$23,790,802   \$23,790,802   \$22,861,173     Benefits paid   \$6,734,593   \$6,734,593   \$14,758,640     Other changes   \$6,734,593   \$15,605,327     Net increase (decrease)   \$15,527,330   \$16,581,941   \$15,605,327     \$15,605,327   \$15,605,327   \$15,605,327     \$15,605,327   \$15,605,327   \$15,605,327     \$15,605,327   \$15,605,327   \$15,605,327     \$15,605,327   \$15,605,327   \$15,605,327     \$15,605,327   \$15,605,327   \$15,605,327     \$15,605,327   \$15,605,327   \$15,605,327     \$15,605,327   \$15,605,327   \$15,605,327     \$15,605,327   \$15,605,327   \$15,605,327     \$15,605,327   \$15,605,327   \$15,605,327     \$15,605,327   \$15,605,327   \$15,605,327     \$15,605,327   \$15,605,327   \$15,605,327     \$15,605,327   \$15,605,327   \$15,605,327     \$15,605,327   \$15,605,327   \$15,605,327     \$15,605,327   \$15,605,327   \$15,605,327     \$15,605,327   \$15,605,327   \$15,605,327   \$15,605,327     \$15,605,327   \$				
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)         \$337,189,692         \$337,189,692         \$321,584,365           Actuarial present value of accrued benefits, beginning of year         \$337,189,692         \$337,189,692         \$321,584,365           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)         \$15,507,330         \$16,581,941         \$15,605,327				
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)         \$337,189,692         \$337,189,692         \$321,584,365           Increase (decrease) during year         \$9,037,912         \$9,037,912         \$10,645,449           Plan amendment         0         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				
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         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	Active members			
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 accrued benefits, beginning of year         \$337,189,692         \$337,189,692         \$321,584,365           Increase (decrease) during year         \$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	Total value of all vested accrued benefits	\$344,681,447	\$345,729,534	\$328,886,342
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       \$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	Non-vested accrued benefits	8,035,575	8,042,099	8,303,350
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       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	Total actuarial present value of all accrued benefits	\$352,717,022	\$353,771,633	\$337,189,692
Same				
Increase (decrease) during year   Senefits accumulated   Senefits	Actuarial present value of accrued benefits, beginning of	\$337 189 692	\$337 189 692	\$321 584 365
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	,	ψοστ, 100,002	ΨΟΟ1,100,002	Ψ021,004,000
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	, , , , , , , , , , , , , , , , , , , ,			
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	Benefits accumulated	\$9,037,912	\$9,037,912	\$10,645,449
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	Plan amendment	0	0	0
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	Changes in actuarial assumptions	(1,054,611)	0	(6,901,057)
Other changes       6,734,593       6,734,593       14,758,640         Net increase (decrease)       \$15,527,330       \$16,581,941       \$15,605,327	Interest	23,790,802	23,790,802	22,861,173
Net increase (decrease) \$15,527,330 \$16,581,941 \$15,605,327	Benefits paid	(22,981,366)	(22,981,366)	(25,758,878)
Net increase (decrease) \$15,527,330 \$16,581,941 \$15,605,327	Other changes	6,734,593	6,734,593	14,758,640
		\$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



	10/1/2020 7.30%	10/1/2020 7.30%	10/1/2019 7.30%
	(current methods <u>&amp; assumptions</u> )	(prior methods & assumptions)	
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	9/30/2020		9/30/2019
Required plan sponsor contribution	\$13,033,622		\$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



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



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

Hypothetical City Contribution Requirement for 2021/2022 Fiscal Year

Actuarial Value at 10/1/2019	Police \$104,149,075	Fire \$143,239,514	Total \$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 <sup>1</sup>	\$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 <sup>2</sup>	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 <sup>3</sup>	\$95,375,168	\$134,650,453	\$230,025,621



<sup>&</sup>lt;sup>1</sup>Allocated based on Return of Actuarial Value of Assets

<sup>&</sup>lt;sup>2</sup>Allocated based on Net Earnings Recognized

<sup>&</sup>lt;sup>3</sup>Allocation based on Adjusted Actuarial Value as of 10/1/2020

## 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 <sup>1</sup>	\$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



<sup>&</sup>lt;sup>1</sup>Allocated based on Net Earnings Recognized

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

September 30, 2020

#### **Historical Salary Increases and Asset Performance**

Year			Expected Salary	Asset Return	Asset Return	Asset Return
Ending	Payroll Growth	Salary Growth	Growth	(Market)	(Actuarial)	(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%	



# 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	



				October 1, 2020
	Valuation_	- 200 bp <sup>2</sup>	Funding Rate <sup>2</sup>	+ 200 bp <sup>2</sup>
	7.30%	5.30%	7.30%	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				

<sup>&</sup>lt;sup>1</sup>Includes DROP assets and liabilities

-interest rate (as noted)



<sup>&</sup>lt;sup>2</sup>Based on valuation assumption with the following changes

October 1, 2020

#### **Sustainment of Expected Benefit Payments**

Mortality 2019 FRS Special Risk Scale MP-2018 Generational

Interest 7.30%

<u>Year</u>	Market Value of Assets	Investment Return	Benefit Payments
1	\$252,596,087	\$16,807,908	\$45,502,992 <sup>1</sup>
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



<sup>&</sup>lt;sup>1</sup>Benefit payments include the DROP balance and Share Plan Assets at 9/30/2020

October 1, 2020

#### **Sustainment of Expected Benefit Payments**

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

<u>Year</u>	Market Value of Assets	Investment Return	Benefit Payments
1	\$252,596,087	\$12,197,343	\$45,502,524 <sup>1</sup>
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



<sup>&</sup>lt;sup>1</sup>Benefit payments include the DROP balance and Share Plan Assets at 9/30/2020

October 1, 2020

#### **Sustainment of Expected Benefit Payments**

Mortality 2019 FRS Special Risk Scale MP-2018 Generational

Interest 7.30%

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



<sup>&</sup>lt;sup>1</sup>Benefit payments include the DROP balance and Share Plan Assets at 9/30/2020

October 1, 2020

#### **Sustainment of Expected Benefit Payments**

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

<u>Year</u>	Market Value of Assets	Investment Return	Benefit Payments
1	\$252,596,087	\$21,422,600	\$45,502,524 <sup>1</sup>
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



<sup>&</sup>lt;sup>1</sup>Benefit payments include the DROP balance and Share Plan Assets at 9/30/2020

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

# 1. Adjusted Base Amount at 10/1/2020

	Year		Ch. 185	Ch. 175	Suppl.	Total
	<b>Established</b>	Description	<u>Police</u>	<u>Fire</u>	<u>Fire</u>	<u>Fire</u>
			-\$-	-\$-	-\$-	-\$-
		Adjusted Base Amount as of 10/1/10	798,463	704,031	28,723	732,754
	2012	Ordinances 2012-30/31	0	88,476	0	88,476
	2017	Ordinance 2017-30	77,625	0	0	0
		Adjusted Base Amount	876,088	792,507	28,723	821,230
2.	Reserve Acco	ount for 2019/2020				
			Ch. 185			Total
			Police			<u>Fire</u>
			-\$-			-\$-
	(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
			Ch. 185			
3.	Allocation of A	Accumulated Reserve Account under SB 172	<u>Police</u>			<u>Total</u>
			-\$-			-\$-
	(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

