City of Boynton Beach Municipal Firefighters' Pension Trust Fund

ACTUARIAL VALUATION REPORT AS OF OCTOBER 1, 2021

ANNUAL EMPLOYER CONTRIBUTION FOR THE FISCAL YEAR ENDING SEPTEMBER 30, 2023









April 22, 2022

Board of Trustees City of Boynton Beach Municipal Firefighters' Pension Trust Fund Boynton Beach, Florida

Re: City of Boynton Beach Municipal Firefighters' Pension Trust Fund Actuarial Valuation as of October 1, 2021 and Actuarial Disclosures

Dear Board Members:

The results of the October 1, 2021 Annual Actuarial Valuation of the City of Boynton Beach Municipal Firefighters' Pension Trust Fund are presented in this report.

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

The purposes of the valuation are to measure the System's funding progress, to determine the employer contribution rate for the fiscal year ending September 30, 2023, and to determine the actuarial information for Governmental Accounting Standards Board (GASB) Statement No. 67. This report also includes estimated GASB Statement No. 67 information for the fiscal year ending September 30, 2022. This report should not be relied on for any purpose other than the purpose described herein. Determinations of financial results associated with the benefits described in this report, for purposes other than those identified above may be significantly different.

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

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

The findings in this report are based on data and other information through September 30, 2021. The valuation was based upon information furnished by the Plan Administrator concerning Retirement System benefits, financial transactions, plan provisions and active members, terminated members, retirees and beneficiaries. We checked for internal reasonability and year-to-year consistency, but did not audit the data. We are not responsible for the accuracy or completeness of the information provided by the Plan Administrator.

This report was prepared using certain assumptions approved by the Board and prescribed by the Florida Statutes as described in the section of this report entitled Actuarial Assumptions and Cost Methods. The prescribed assumptions are the assumed mortality rates detailed in the Actuarial Assumptions and Cost

Board of Trustees City of Boynton Beach Municipal Firefighters' Pension Trust Fund April 22, 2022 Page 2

Methods section in accordance with Florida Statutes Chapter 112.63. All actuarial assumptions used in this report are reasonable for purposes of this valuation.

This report was prepared using our proprietary valuation model and related software which in our professional judgment has the capability to provide results that are consistent with the purposes of the valuation and has no material limitations or known weaknesses. We performed tests to ensure that the model reasonably represents that which is intended to be modeled.

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

Peter N. Strong and Jeffrey Amrose actuaries are members of the American Academy of Actuaries. These actuaries meet the Academy's Qualification Standards to render the actuarial opinions contained herein. The signing actuaries are independent of the plan sponsor.

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

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

Respectfully submitted,

GABRIEL, ROEDER, SMITH & COMPANY

Peter N. Strong, FSA, MAAA, FCA Enrolled Actuary No. 20-06975

Jeffrey Amrose, MAAA, FCA Enrolled Actuary No. 20-06599



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SECTION A

DISCUSSION OF VALUATION RESULTS

DISCUSSION OF VALUATION RESULTS

Comparison of Required Employer Contributions

A comparison of the required employer contribution developed in this and the last actuarial valuation is shown below. The required contribution dollar amounts shown below are estimates only. The contribution policy of the City is to contribute the dollar amount determined by multiplying the required percentage of payroll determined as of the valuation date by the projected pensionable payroll for the year.

	For FYE 9/30/23 Based on 10/1/2021 Valuation if contributed on 10/1/2022		Based onBased on10/1/2021 Valuation10/1/2020 Valuationif contributed onif contributed on		on Based on Increa aluation 10/1/2020 Valuation (Decrea ted on if contributed on		lncrease (Decrease)
Required Employer/State Contribution As % of Covered Payroll	\$	6,772,144 56.42 %	\$	6,607,751 55.58 %	\$	164,393 0.84 %	
State Contribution Allocated (Including Amounts from State contribution reserve) As % of Covered Payroll	\$	1,068,298 8.90 %	\$	1,068,298 8.99 %	\$	0 (0.09) %	
Net Required Employer (City) Contribution As % of Covered Payroll	\$	5,703,846 47.52 %	\$	5,539,453 46.59 %	\$	164,393 0.93 %	

The required employer contribution has been computed under the assumption that the amount to be allocated from current and prior excess State money this year and next year will be \$1,068,298, based on the reevaluated cost of the COLA. The required employer contribution for the fiscal year ending September 30, 2022 (calculated based on the October 1, 2020 valuation) was revised to reflect this updated State allocation amount.

The employer contribution listed above is for the City's fiscal year ending September 30, 2023 and has been calculated as though payment is made in a single lump sum on October 1, 2022. The total minimum required employer contribution for the fiscal year ending September 30, 2021 was \$6,400,723. The actual employer contribution during the fiscal year ending September 30, 2021 was \$6,400,723, including the use of a prepaid City contribution of \$122,975 and excess State contribution reserves of \$67,242.

Ordinance 06-692 (adopted in 2006), which added the 2% deferred COLA and increased member contributions by 5.0% of covered payroll, was intended to be cost neutral. Under the terms of this Ordinance, the actuarial cost of the COLA must be reevaluated every three years to ensure it remains cost neutral. The last reevaluation was completed as of October 1, 2018 (applicable to State money received during the fiscal year ending September 30, 2019), so a new reevaluation has recently been completed as of October 1, 2021 (applicable to State money received during the fiscal year ending September 30, 2022). This latest reevaluation has shown that the annual actuarial cost of the COLA is \$5,913 higher than it was as of October 1, 2018.



Therefore, the base amount of regular Chapter 175 State contributions increased by this amount, from \$1,062,385 to \$1,068,298, beginning with the fiscal year ending September 30, 2022. If the actual amount received by the State is lower than this amount, the shortfall may be made up by using the Accumulated Excess Premium Tax Revenue currently being held in reserve (this amount is \$1,668,034 as of October 1, 2021).

Revisions in Benefits

There have been no changes in benefits since the prior valuation.

Revisions in Actuarial Assumptions or Methods

The assumed investment return assumption has been reduced by 0.20% from 7.35% per annum to 7.15% per annum, compounded annually and net of investment expenses. The impact of this assumption change caused an increase in the annual required employer contribution of 3.25% of covered payroll, or \$390,101.

Actuarial Experience

There was a net actuarial experience gain of \$4,446,752 for the year, which means that overall actual experience was more favorable than expected. The actuarial gain is primarily due to higher than expected investment returns on the actuarial value of assets. The net investment return on the actuarial value of assets was 11.48% versus an assumed return of 7.35%. The net investment return on the market value of assets was 18.60%. These gains were offset somewhat by net experience losses from higher than expected average salary increases (9.2% actual versus 6.9% expected), more retirements than expected (6 actual versus 5 expected), and better longevity among retirees than anticipated by the mortality assumption (1 actual retiree death versus 2 expected).

The net actuarial gain for the year caused a decrease in the annual required employer contribution of 2.50% of covered payroll, or about \$300,000.

Funded Ratio

The funded ratio was 74.4% this year compared to 71.5% last year. The funded ratio would have been 76.1% this year prior to recognizing the assumption changes. The funded ratio is equal to the actuarial value of assets divided by the actuarial accrued liability.

Analysis of Change in Employer Contribution

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

Contribution Rate Last Year	46.59 %
Revision in Benefits	0.00
Experience (Gains) or Losses	(2.50)
Revision in Assumptions/Methods	3.25
Amortization Payment on UAAL	0.57
Normal Cost Rate	(0.47)
Administrative Expense	(0.01)
State Contribution	0.09
Contribution Rate This Year	47.52 %



Covered payroll as of October 1, 2021 was \$11,710,333 versus \$11,598,511 last year, an increase of 0.96%. Amortization payments on the unfunded liability are scheduled to increase by 2.50% per year. When covered payroll increases less than 2.50%, the amortization payment as a percentage of covered payroll will increase. The 0.96% increase in covered payroll caused the Amortization Payment on the UAAL (expressed as a percentage of pay) to increase by approximately 0.57% of covered payroll.

Required Contributions in Later Years

The current calculated City contribution requirement is 47.52% of payroll starting October 1, 2022. Under the asset smoothing method, market value gains and losses are recognized over five years. As of October 1, 2021, the market value of assets exceeded the actuarial value by \$16,626,393. Once all the gains and losses through September 30, 2021 have been fully recognized in the actuarial value of assets, the employer contribution rate will decrease by roughly 9.19% of payroll unless there are offsetting losses.

Relationship to Market Value

If Market Value had been the basis for the valuation, the City contribution rate would have been 38.33% (a dollar amount of \$4,600,762) and the funded ratio would have been 84.3%. The funded ratio on a market value basis was 75.3% last year.

13th Check Provision

The Plan provides for a 13th check if there is a net actuarial gain for the previous year. Although the Plan experienced a gain during the prior plan year, the cumulative balance of actuarial gains and losses is negative (a net loss), so no funds are available to provide 13th checks in 2021.

Conclusion

The funded ratio is 74.4% this year, whereas it was over 100% in the year 2000. Steps have been taken in recent years to address this issue, such as strengthening the actuarial assumptions, including lowering the investment return assumption from 8.5% to 7.15% over time, applying an additional \$1,150,000 towards the unfunded liability, and reducing the amortization period in the amortization of the unfunded liability to a maximum of 25 years.

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



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

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

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

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

- 1. Investment risk actual investment returns may differ from the expected returns;
- Contribution risk actual contributions may differ from expected future contributions. For example, actual contributions may not be made in accordance with the plan's funding policy or material changes may occur in the anticipated number of covered employees, covered payroll, or other relevant contribution base;
- 3. Salary and Payroll risk actual salaries and total payroll may differ from expected, resulting in actual future accrued liability and contributions differing from expected;
- 4. Longevity risk members may live longer or shorter than expected and receive pensions for a period of time other than assumed; and
- 5. Other demographic risks members may terminate, retire or become disabled at times or with benefits other than assumed resulting in actual future accrued liability and contributions differing from expected.

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

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

PLAN MATURITY MEASURES

Risks facing a pension plan evolve over time. A young plan with virtually no investments and paying few benefits may experience little investment risk. An older plan with a large number of members in pay status



and a significant trust may be much more exposed to investment risk. Generally accepted plan maturity measures include the following:

	2021	2020
Ratio of the market value of assets to payroll	12.03	10.03
Ratio of actuarial accrued liability to payroll	14.26	13.31
Ratio of actives to retirees and beneficiaries	0.83	0.94
Ratio of net cash flow to market value of assets	0.5%	(0.3%)

RATIO OF MARKET VALUE OF ASSETS TO PAYROLL

The relationship between assets and payroll is a useful indicator of the potential volatility of contributions. For example, if the market value of assets is 2.0 times the payroll, a return on assets 5% different than assumed would equal 10% of payroll. A higher (lower) or increasing (decreasing) level of this maturity measure generally indicates a higher (lower) or increasing (decreasing) volatility in plan sponsor contributions as a percentage of payroll.

RATIO OF ACTUARIAL ACCRUED LIABILITY TO PAYROLL

The relationship between actuarial accrued liability and payroll is a useful indicator of the potential volatility of contributions for a fully funded plan. A funding policy that targets a funded ratio of 100% is expected to result in the ratio of assets to payroll and the ratio of liability to payroll converging over time.

The ratio of liability to payroll may also be used as a measure of sensitivity of the liability itself. For example, if the actuarial accrued liability is 2.5 times the payroll, a change in liability 2% other than assumed would equal 5% of payroll. A higher (lower) or increasing (decreasing) level of this maturity measure generally indicates a higher (lower) or increasing (decreasing) volatility in liability (and also plan sponsor contributions) as a percentage of payroll.

RATIO OF ACTIVES TO RETIREES AND BENEFICIARIES

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

RATIO OF NET CASH FLOW TO MARKET VALUE OF ASSETS

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



ADDITIONAL RISK ASSESSMENT

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



CHAPTER REVENUE

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

As of the valuation date, all minimum Chapter requirements have been met.

	Actuarial Confirmation of the Use of State Chapter Money						
1.	Fire Regular Fire Supplemental Total Base Amount Previous Plan Year	\$	1,062,385 0 1,062,385				
2.	Fire Regular Fire Supplemental Total Amount Received for Previous Plan Year	-	995,143 0 995,143				
3.	Adjustment to Base Amount Due to Reevaluation of COLA cost		0				
4.	Excess Funds for Previous Plan Year		(67,242)				
5.	Accumulated Excess at Beginning of Previous Year		1,735,276				
6.	Prior Excess Used in Previous Plan Year		0				
7.	Accumulated Excess as of September 30, 2021 (Available for Benefit Improvements)		1,668,034				

Note: The above exhibit confirms the use of State Chapter 175 Money for the fiscal year ending September 30, 2021. In the fiscal year ending September 30, 2022, the Base Amount for Fire Regular State Chapter 175 Money will increase to \$1,068,298 due to the reevaluation of the actuarial cost of the COLA.



SECTION B

VALUATION RESULTS

PARTICIPANT DATA						
	Oc	October 1, 2021		tober 1, 2020		
ACTIVE MEMBERS						
Number Covered Annual Payroll Average Annual Payroll Average Age Average Past Service Average Age at Hire	\$ \$	111 11,710,333 105,498 38.9 11.2 27.7	\$ \$	119 11,598,751 97,468 38.3 10.5 27.8		
RETIREES & BENEFICIARIES & DROP	•					
Number Annual Benefits Average Annual Benefit Average Age	\$ \$	129 8,080,500 62,640 62.5	\$ \$	123 7,542,113 61,318 62.3		
DISABILITY RETIREES						
Number Annual Benefits Average Annual Benefit Average Age	\$ \$	4 193,448 48,362 49.3	\$ \$	4 191,640 47,910 48.3		
TERMINATED VESTED MEMBERS						
Number Annual Benefits Average Annual Benefit Average Age	\$ \$	2 77,127 38,564 41.6	\$ \$	2 77,127 38,564 40.6		



ACTUARIALLY DETERMINED EMPLOYER CONTRIBUTION (ADEC)

A. Valuation Date	October 1, 2021 After Assumption Changes	October 1, 2021 Before Assumption Changes	October 1, 2020
B. ADEC to Be Paid During Fiscal Year Ending	9/30/2023	9/30/2023	9/30/2022
C. Assumed Date of Employer Contrib.	10/1/2022	10/1/2022	10/1/2021
D. Annual Payment to Amortize Unfunded Actuarial Liability	\$ 3,686,801	\$ 3,481,591	\$ 3,672,306
E. Employer Normal Cost	2,920,288	2,745,032	2,774,279
F. ADEC if Paid on the Valuation Date: D+E	6,607,089	6,226,623	6,446,585
G. ADEC Adjusted for Frequency of Payments	6,607,089	6,226,623	6,446,585
H. ADEC as % of Covered Payroll	56.42 %	53.17 %	55.58 %
I. Covered Payroll per Valuation	11,710,333	11,710,333	11,598,751
J. Assumed Rate of Increase in Covered Payroll to Contribution Year	2.50 %	2.50 %	2.50 %
K. Covered Payroll for Contribution Year	12,003,091	12,003,091	11,888,720
L. ADEC for Contribution Year: H x K	6,772,144	6,382,043	6,607,751
M. Estimate of State Allocated Revenue in Contribution Year (including amounts from Accumulated Excess Reserve)	1,068,298	1,068,298	1,068,298
N. Actuarially Determined Employer Contribution (ADEC) in Contribution Year	5,703,846	5,313,745	5,539,453
O. ADEC as % of Covered Payroll in Contribution Year: N ÷ K	47.52 %	44.27 %	46.59 %
 P. Estimated Amount of Accumulated Excess Premium Tax Revenue Used to Offset ADEC (If Actual State Revenue = \$995,143) 	73,155	73,155	73,155



ACTUARIAL VALUE OF BENEFITS AND ASSETS							
A. Valuation Date	October 1, 2021 After Assumption Changes	October 1, 2021 Before Assumption Changes	October 1, 2020				
 B. Actuarial Present Value of All Projected Benefits for 1. Active Members a. Service Retirement Benefits b. Vesting Benefits c. Disability Benefits d. Preretirement Death Benefits e. Return of Member Contributions f. Total 	\$ 83,032,516 3,748,287 2,075,764 670,667 195,851 89,723,085	\$ 80,056,223 3,592,971 2,009,977 645,582 194,967 86,499,720	\$ 80,270,330 3,694,260 2,066,099 660,697 206,462 86,897,848				
 Inactive Members a. Service Retirees & Beneficiaries b. Disability Retirees c. Terminated Vested Members d. Total 	104,348,122 2,968,202 <u>830,675</u> 108,146,999	102,256,961 2,898,596 <u>803,185</u> 105,958,742	94,628,526 2,874,936 747,635 98,251,097				
3. Total for All Members	197,870,084	192,458,462	185,148,945				
 C. Actuarial Accrued (Past Service) Liability D. Actuarial Value of Accumulated Plan Benefits per FASB No. 35 	166,996,539	163,197,960 151,579,806	154,416,171 142,806,095				
E. Plan Assets1. Market Value2. Actuarial Value	140,845,497 124,219,104	140,845,497 124,219,104	116,309,935 110,401,014				
F. Unfunded Actuarial Accrued Liability: C-E2	42,777,435	38,978,856	44,015,157				
G. Actuarial Present Value of Projected Covered Payroll	92,064,552	91,116,943	94,253,381				
 H. Actuarial Present Value of Projected Member Contributions 	11,047,747	10,934,033	11,310,406				
I. Accumulated Value of Member Contributions	11,176,646	11,176,646	10,973,238				
J. Funded Ratio: E2/C	74.4%	76.1%	71.5%				



	ENTRY AGE NORMAL METHOD CALCULATION OF EMPLOYER NORMAL COST						
A.	Valuation Date	October 1, 2021 After Assumption Changes			tober 1, 2021 The Assumption Changes	Octo	ober 1, 2020
В.	Normal Cost for		, ye		, y y -		
	 Service Retirement Benefits Vesting Benefits Disability Benefits Preretirement Death Benefits Return of Member Contributions Total for Future Benefits Assumed Amount for Administrative Expenses Total Normal Cost 	\$	3,572,328 262,005 187,350 40,806 55,343 4,117,832 207,696 4,325,528	\$	3,414,895 250,432 182,311 39,212 55,726 3,942,576 207,696 4,150,272	\$	3,433,256 250,731 180,796 39,612 54,777 3,959,172 206,957 4,166,129
C.	Expected Member Contribution		1,405,240		1,405,240		1,391,850
D.	Employer Normal Cost: B8-C		2,920,288		2,745,032		2,774,279
E.	Employer Normal Cost as a % of Covered Payroll		24.94%		23.44%		23.92%



LIQUIDATION OF THE UNFUNDED ACTUARIAL ACCRUED LIABILITY

A1. UAAL Amortization Period and Payments						
Original UAAL				Current UAAL		
_	Amortization					
Date Established	Period	Amount	Years	Amount	Dourmont	
Established	(Years)	Amount	Remaining	Amount	Payment	
10/1/1997	30	\$ 1,201,102	6	\$ 822,965	\$ 153,487	
10/1/1999	30	613,865	8 9	540,805	79,030	
10/1/2000 10/1/2001	30 30	(1,240,378) 857,564	9 10	(1,136,219) 839,551	(150,814) 102,465	
10/1/2001	30	4,337,161	10	4,708,847	499,628	
10/1/2004	30	4,373,725	13	4,889,070	488,961	
10/1/2005	30	(1,004,416)	14	(1,150,336)	(109,066)	
10/1/2005	30	3,040,117	14	3,481,787	330,116	
10/1/2006 10/1/2006	30 30	2,426,747 1,889,229	15 15	2,817,733 2,193,614	254,523 198,147	
10/1/2007	30	(12,675)	16	(14,771)	(1,277)	
10/1/2007	30	(1,424,046)	16	(1,662,217)	(143,660)	
10/1/2008	30	4,046,900	17	4,734,938	393,015	
10/1/2009	30	3,681,910	18	4,303,543	344,189	
10/1/2010	30	1,249,043	19	1,455,167	112,468	
10/1/2010	30	2,256,012	19	2,628,313	203,138	
10/1/2010	30	(43,572)	19	(50,762)	(3,923)	
10/1/2011	30	1,378,822	20	1,586,101	118,774	
10/1/2011	30	3,739,943	20	4,302,178	322,165	
10/1/2012	30	1,446,560	21	1,615,406	117,478	
10/1/2012	30	(161,237)	21	(180,057)	(13,094)	
10/1/2013	30	199,486	22	221,347	15,666	
10/1/2013	30	818,309	22	907,984	64,262	
10/1/2013	30	3,401,164	22	3,773,882	267,094	
10/1/2014	30	(408,227)	22	(443,463)	(31,386)	
10/1/2014	30	1,753,497	22	1,904,852	134,815	
10/1/2015	30	(209,489)	22	(222,778)	(15,767)	
10/1/2016	30	(1,022,696)	22	(1,065,475)	(75,408)	
10/1/2016	30	5,982,170	22	6,232,395	441,094	
10/1/2017	30	(691,612)	22	(701,522)	(49,650)	
10/1/2018	30	(2,764,199)	22	(2,771,009)	(196,116)	
10/1/2018	30	(1,216,631)	22	(1,219,628)	(86,318)	
10/1/2019	25	2,636,284	23	2,670,295	184,272	
10/1/2019	25	523,444	23	530,196	36,588	
10/1/2020	25	(3,706,058)	24	(3,723,950)	(251,002)	
10/1/2020	25	603,911	24	606,826	40,901	
10/1/2020	25 25	(4,446,752)	24 25	(4,446,752)	(293,204)	
10/ 1/ 2021	23	\$ 34,104,977	25			
		\$ 34,104,977		\$38,978,856	\$ 3,481,591	

BEFORE ASSUMPTION CHANGES



City of Boynton Beach Municipal Firefighters' Pension Trust Fund -12-Actuarial Valuation Report as of October 1, 2021

LIQUIDATION OF THE UNFUNDED ACTUARIAL ACCRUED LIABILITY

A2. UAAL Amortization Period and Payments					
	Original UAAL			Current UAAL	
Date Established	Amortization Period (Years)	Amount	Years Remaining	Amount	Payment
10/1/1997 10/1/1999 10/1/2000 10/1/2001 10/1/2003	30 30 30 30 30 30	\$ 1,201,102 613,865 (1,240,378) 857,564 4,337,161	6 8 9 10 12	\$ 822,965 540,805 (1,136,219) 839,551 4,708,847	\$ 152,811 78,550 (149,778) 101,680 495,025
10/1/2004 10/1/2005 10/1/2005 10/1/2006 10/1/2006	30 30 30 30 30	4,373,725 (1,004,416) 3,040,117 2,426,747 1,889,229	13 14 14 15 15	4,889,070 (1,150,336) 3,481,787 2,817,733 2,193,614	484,089 (107,899) 326,584 251,615 195,883
10/1/2007 10/1/2007 10/1/2008 10/1/2009 10/1/2010	30 30 30 30 30 30	(12,675) (1,424,046) 4,046,900 3,681,910 1,249,043	16 16 17 18 19	(14,771) (1,662,217) 4,734,938 4,303,543 1,455,167	(1,261) (141,917) 387,973 339,539 110,873
10/1/2010 10/1/2010 10/1/2011 10/1/2011 10/1/2012	30 30 30 30 30	2,256,012 (43,572) 1,378,822 3,739,943 1,446,560	19 19 20 20 21	2,628,313 (50,762) 1,586,101 4,302,178 1,615,406	200,258 (3,868) 117,012 317,386 115,660
10/1/2012 10/1/2013 10/1/2013 10/1/2013 10/1/2014	30 30 30 30 30 30	(161,237) 199,486 818,309 3,401,164 (408,227)	21 22 22 22 22 22	(180,057) 221,347 907,984 3,773,882 (443,463)	(12,892) 15,413 63,227 262,793 (30,880)
10/1/2014 10/1/2015 10/1/2016 10/1/2016 10/1/2017	30 30 30 30 30	1,753,497 (209,489) (1,022,696) 5,982,170 (691,612)	22 22 22 22 22 22	1,904,852 (222,778) (1,065,475) 6,232,395 (701,522)	132,644 (15,513) (74,194) 433,990 (48,850)
10/1/2018 10/1/2018 10/1/2019 10/1/2019 10/1/2020	30 30 25 25 25	(2,764,199) (1,216,631) 2,636,284 523,444 (3,706,058)	22 22 23 23 24	(2,771,009) (1,219,628) 2,670,295 530,196 (3,723,950)	(192,958) (84,928) 181,191 35,976 (246,653)
10/1/2020 10/1/2021 10/1/2021	25 25 25	603,911 (4,446,752) 3,798,579 \$ 37,903,556	24 25 25	606,826 (4,446,752) <u>3,798,579</u> \$42,777,435	40,193 (287,952) 245,979 \$ 3,686,801

AFTER ASSUMPTION CHANGES



B. Amortization Schedule

The UAAL is being amortized as a level percent of payroll over the number of years remaining in the amortization period. The expected amortization schedule is as follows:

Amortization Schedule					
Year	Expected UAAL				
2021	\$ 42,777,435				
2022	41,885,610				
2023	40,831,261				
2024	39,600,302				
2025	38,177,565				
2026	36,546,748				
2031	25,499,294				
2036	11,157,737				
2041	1,084,524				
2043	-				



ACTUARIAL GAINS AND LOSSES

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

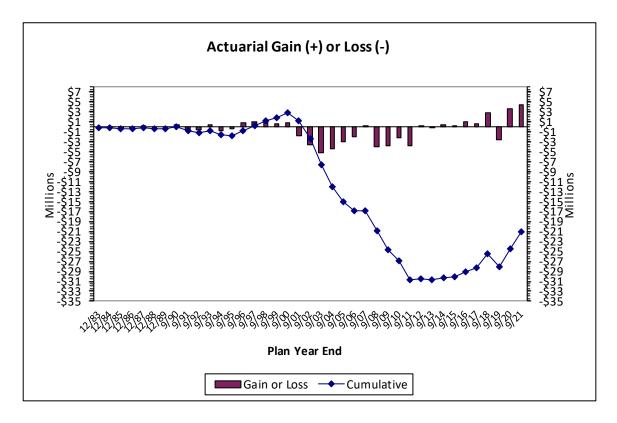
A. Derivation of the Current UAAL							
1. Last Year's UAAL	\$ 44,015,157						
2. Last Year's Employer Normal Cost	2,774,279						
3. Last Year's Contributions	6,400,723						
4. Interest at the Assumed Rate on:							
a. 1 and 2 for one year	3,439,024						
b. 3 from dates paid	402,129						
c. a-b	3,036,895						
5. This Year's Expected UAAL:							
1 + 2 - 3 + 4c	43,425,608						
6. This Year's Actual UAAL (Before any							
changes in benefits and/or assumptions)	38,978,856						
7. Net Actuarial Gain (Loss): (5) - (6)	4,446,752						
8. Gain (Loss) due to investments	5,572,264						
9. Gain (Loss) due to other sources	(1,125,512)						

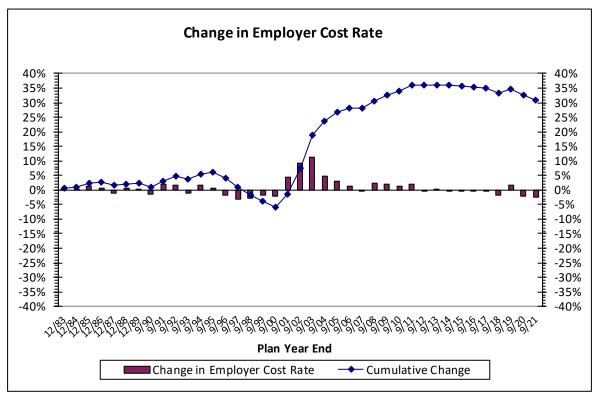


Net actuarial gains in previous years have been as follows:

	Change in Employer	
Year Ended	Cost Rate	Gain (Loss)
12/31/83	0.77 %	\$ (111,129)
12/31/84	0.13	(20,619)
12/31/85	1.27	(227,011)
12/31/86	0.50	(99,006)
12/31/87	(1.18)	279,837
12/31/88	0.52	(128,401)
12/31/89	0.41	(106,588)
9/30/90	(1.42)	371,790
9/30/91	2.09	(638,650)
9/30/92	1.61	(476,505)
9/30/93	(1.07)	483,965
9/30/94	1.76	(800,443)
9/30/95	0.56	(270,698)
9/30/96	(1.95)	895,789
9/30/97	(3.08)	1,049,747
9/30/98	(2.78)	1,020,121
9/30/99	(1.89)	722,161
9/30/00	(2.21)	891,463
9/30/01	4.44	(1,682,484)
9/30/02	9.11	(3,495,525)
9/30/03	11.31	(5,238,993)
9/30/04	4.88	(4,373,725)
9/30/05	3.04	(3,040,117)
9/30/06	1.44	(1,889,229)
9/30/07	(0.01)	12,675
9/30/08	2.33	(4,056,993)
9/30/09	2.16	(3,681,910)
9/30/10	1.25	(2,256,012)
9/30/11	2.12	(3,739,943)
9/30/12	(0.09)	161,237
9/30/13	0.12	(199,486)
9/30/14	(0.22)	408,227
9/30/15	(0.11)	209,489
9/30/16	(0.57)	1,022,696
9/30/17	(0.37)	691,612
9/30/18	(1.62)	2,764,199
9/30/19	1.53	(2,636,284)
9/30/20	(2.14)	3,706,058
9/30/21	(2.50)	4,446,752







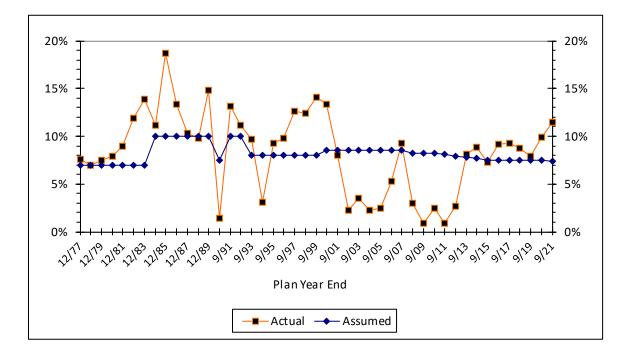


The fund earnings and salary increase assumptions have considerable impact on the cost of the Plan so it is important that they are in line with the actual experience. The following table shows the actual fund earnings and salary increase rates compared to the assumed rates for the last few years:

	Investme	nt Return	Salary I	ncreases
Year Ending	Actual	Assumed	Actual	Assumed
12/31/1977 12/31/1978	7.6 % 7.0	7.0 % 7.0	21.3 %	10.3 % (2 years)
12/31/1979 12/31/1980 12/31/1981	7.5 7.9 9.0	7.0 7.0 7.0	19.0 30.5	10.3 (2 years) 7.0
12/31/1982 12/31/1983 12/31/1984 12/31/1985	11.9 13.9 11.1 18.7	7.0 7.0 10.0 10.0	11.0 6.4 8.8 14.5	7.0 7.0 10.0 10.0
12/31/1986 12/31/1987 12/31/1988 12/31/1989 9/30/1990 (9 mos.) 9/30/1991	13.4 10.3 9.8 14.8 1.4 13.1	10.0 10.0 10.0 10.0 7.5 10.0	11.4 19.7 6.1 12.8 6.7 8.0	10.0 10.0 10.0 10.0 7.5 10.0
9/30/1992 9/30/1993 9/30/1994 9/30/1995 9/30/1996	11.2 9.7 3.1 9.3 9.8	10.0 8.0 8.0 8.0 8.0 8.0	4.9 4.0 2.0 10.3 (0.2)	10.0 6.5 6.5 6.5 6.5
9/30/1997 9/30/1998 9/30/1999 9/30/2000 9/30/2001	12.6 12.4 14.1 13.3 8.0	8.0 8.0 8.5 8.5	5.9 6.1 13.3 10.3 4.8	6.5 6.5 6.5 6.5 6.5
9/30/2002 9/30/2003 9/30/2004 9/30/2005 9/30/2006	2.3 3.5 2.2 2.5 5.3	8.5 8.5 8.5 8.5 8.5	12.1 10.0 11.0 11.7 13.3	6.5 6.5 6.5 9.2
9/30/2007 9/30/2008 9/30/2009 9/30/2010 9/30/2011	9.3 3.0 0.9 2.5 0.9	8.50 8.25 8.25 8.25 8.25 8.10	9.2 13.6 7.6 1.8 3.7	8.9 8.9 8.9 8.9 8.1
9/30/2012 9/30/2013 9/30/2014 9/30/2015 9/30/2016	2.7 8.1 8.8 7.3 9.2	7.95 7.80 7.65 7.50 7.50	(2.8) 1.9 7.2 4.9 6.3	7.1 8.7 6.0 6.2 5.9
9/30/2017 9/30/2018 9/30/2019 9/30/2020 9/30/2021	9.3 8.7 7.9 9.9 11.5	7.50 7.50 7.50 7.50 7.35	8.4 4.2 14.9 2.5 9.2	6.3 6.1 6.7 7.1 6.9
Averages	8.3 %		8.5 %	

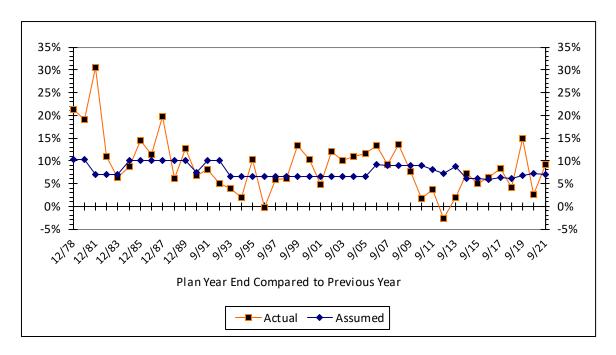
The actual investment return rates shown above are based on the actuarial value of assets. The actual salary increase rates shown above are the increases received by those active members who were included in the actuarial valuations both at the beginning and the end of each year.





History of Investment Return Based on Actuarial Value of Assets

History of Salary Increases





	Actual (A) Compared to Expected (E) Decrements Among Active Employees												
Year Ended	Ado Dui		Servi DR Retire A	ОР		bility ement E	De	ath E	Vested	Termina Other A		tals E	Active Members End of Year
9/30/2002	1	10	6	5	0	0	0	0	1	2	4	3	83
9/30/2002 9/30/2003	1 15	10	6 1	5 5	0	0	0	0	0	3 0	4	3	83 97
9/30/2003 9/30/2004	22	14	13	4	0	0	0	0	0	1	1	3	97 105
9/30/2005	1	4	2	1	0	0	0	0	0	2	2	4	105
9/30/2006	19	3	0	2	0	0	0	0	1	2	3	4	118
9/30/2007	5	4	1	3	0	0	0	0	0	-	3	4	119
9/30/2007 9/30/2008	э 5	4	0	5	1	0	0	0	0	3 0	3 0	4	119
9/30/2009	1	6	5	6	0	0	0	0	0	1	1	4	123
9/30/2010	11	4	3	3	0	0	0	0	0	1	1	4	110
9/30/2011	0	11	10	8	0	0	0	0	1	0	1	4	114
9/30/2012	3	2	1	2	0	0	0	0	1	0	1	4	115
9/30/2012	10	7	6	2	0	0	0	0	0	1	1	4	113
9/30/2014	3	2	0	1	0	0	0	0	0	2	2	2	119
9/30/2015	1	2	1	1	0	0	0	0	1	0	1	2	118
9/30/2016	11	7	4	1	1	0	0	0	1	1	2	2	122
9/30/2017	10	8	4	2	0	0	0	0	1	3	4	2	124
9/30/2018	1	12	10	4	0	0	0	0	0	2	2	2	113
9/30/2019	8	6	5	2	0	0	0	0	0	1	1	2	115
9/30/2020	14	10	2	1	2	0	1	0	1	4	5	2	119
9/30/2021	0	8	6	5	0	0	0	0	0	2	2	2	111
9/30/2022				3		0		0				2	
20 Yr Totals *	141	122	80	63	4	0	1	0	8	29	37	61	

* Totals are through current Plan Year only.



Cumulative Actuarial Gains (Losses)

The Plan provides for a 13th check if there is a net actuarial gain for the previous year. However, there is a limitation on 13th checks tied to actuarial gains provided in Chapter 112.61, Florida Statutes. The cumulative amount used to pay for 13th checks may not exceed the cumulative amount of actuarial gains. Although there was an actuarial gain during the prior plan year, the cumulative amount of gains is negative (a net loss), so no 13th check is payable.

	Cumulative Actuarial Gains (Losses)									
Year Ending 9/30	Balance at Beginning of Year	Gain (Loss) for Year	13th Check	Balance at End of Year						
2001	0	(1,682,484)	0	(1,682,484)						
2002	(1,682,484)	(3,495,525)	0	(5,178,009)						
2003 2004	(5,178,009) (10,417,002)	(5,238,993) (4,373,725)	0 0	(10,417,002) (14,790,727)						
2004	(14,790,727)	(3,040,117)	0	(17,830,844)						
2006	(17,830,844)	(1,889,229)	0	(19,720,073)						
2007	(19,720,073)	12,675	0	(19,707,398)						
2008	(19,707,398)	(4,056,993)	0	(23,764,391)						
2009	(23,764,391)	(3,681,910)	0	(27,446,301)						
2010	(27,446,301)	(2,256,012)	0	(29,702,313)						
2011	(29,702,313)	(3,739,943)	0	(33,442,256)						
2012	(33,442,256)	161,237	0	(33,281,019)						
2013	(33,281,019)	(199,486)	0	(33,480,505)						
2014	(33,480,505)	408,227	0	(33,072,278)						
2015	(33,072,278)	209,489	0	(32,862,789)						
2016	(32,862,789)	1,022,696	0	(31,840,093)						
2017	(31,840,093)	691,612	0	(31,148,481)						
2018	(31,148,481)	2,764,199	0	(28,384,282)						
2019	(28,384,282)	(2,636,284)	0	(31,020,566)						
2020	(31,020,566)	3,706,058	0	(27,314,508)						
2021	(27,314,508)	4,446,752	0	(22,867,756)						



				RECENT HISTOR	OF VALUATION RE	SULTS				
Number of								Employer Normal Cos		
Valuation	Active	Inactive	Covered Annual	Actuarial Value	Actuarial Accrued	Unfunded AAL	Funded			
Date	Members	Members	Payroll	of Assets	Liability (AAL)	(UFAAL)	Ratio	Amount	% of Payroll	
10/1/96	90	22	\$ 4,695,354	\$ 19,269,217	\$ 20,604,396	\$ 1,335,179	93.5 %	\$ 527,257	11.23 %	
10/1/97	88	39	4,238,988	22,220,848	23,723,850	1,503,002	93.7	361,957	8.54	
10/1/98	90	39	4,543,670	24,978,058	25,301,177	323,119	98.7	258,961	5.70	
10/1/99	92	40	5,083,063	28,290,983	28,286,754	(4,229)	100.0	217,814	4.29	
10/1/00	90	46	5,305,002	31,629,211	29,402,853	(2,226,358)	107.6	72,822	1.37	
10/1/01	92	53	5,201,958	33,397,848	34,916,820	1,518,972	95.6	475,187	9.13	
10/1/02	83	60	5,143,446	33,877,028	39,432,154	5,555,126	85.9	956,733	18.60	
10/1/03	97	60	6,079,095	34,694,072	42,431,717	7,737,645	81.8	979,363	16.11	
10/1/04	105	73	6,135,813	35,118,847	47,240,329	12,121,482	74.3	995,918	16.23	
10/1/05	102	75	6,763,318	35,386,328	49,620,257	14,233,929	71.3	1,186,288	17.54	
10/1/06	118	75	8,152,400	36,863,141	55,565,182	18,702,041	66.3	1,256,931	15.42	
10/1/07	119	76	8,806,744	43,503,237	61,054,498	17,551,261	71.3	1,490,649	16.93	
10/1/08	123	77	10,130,185	45,330,615	67,141,898	21,811,283	67.5	1,711,705	16.90	
10/1/09	118	82	10,350,054	46,448,767	72,211,379	25,762,612	64.3	1,724,525	16.66	
10/1/10	125	84	10,506,008	48,521,964	78,046,241	29,524,277	62.2	1,831,347	17.43	
10/1/11	114	93	9,781,772	49,140,415	84,384,761	35,244,346	58.2	1,793,275	18.33	
10/1/12	115	94	9,375,520	50,548,749	88,420,130	37,871,381	57.2	1,787,181	19.06	
10/1/13	118	100	9,128,801	55,474,480	98,003,969	42,529,489	56.6	1,772,505	19.42	
10/1/14	119	99	9,823,480	60,766,720	105,309,014	44,542,294	57.7	2,014,298	20.50	
10/1/15	118	101	10,221,317	66,257,757	110,826,525	44,568,768	59.8	2,105,539	20.60	
10/1/16	122	107	10,684,549	74,236,519	123,821,633	49,585,114	60.0	2,394,174	22.41	
10/1/17	124	112	11,282,228	82,643,710	132,091,634	49,447,924	62.6	2,519,728	22.33	
10/1/18	113	121	10,393,865	91,627,599	136,944,352	45,316,753	66.9	2,230,990	21.46	
10/1/19	115	124	11,504,436	99,976,001	147,354,005	47,378,004	67.8	2,426,234	21.09	
10/1/20	119	129	11,598,751	110,401,014	154,416,171	44,015,157	71.5	2,774,279	23.92	
10/1/21	111	135	11,710,333	124,219,104	166,996,539	42,777,435	74.4	2,920,288	24.94	



	RECENT HISTORY OF REQUIRED AND ACTUAL CONTRIBUTIONS										
	End of			Required Cont	tributions						
Valuation	Year To Which	Employer &	& State	Estimated S	itate	Net Emp	oloyer		Actual Contribut	ions	
	Valuation Applies	Amount	% of Payroll	Amount	% of Payroll	Amount	% of Payroll	Employer	State	Total	
10/1/96	9/30/97	\$ 776,723	16.54 %	\$ 285,443	6.08 %	\$ 491,280	10.46 %	\$ 422,898	\$ 353,826	\$ 776,724	
10/1/97	9/30/98	710,387	16.76	349,086	8.24	361,301	8.52	349,375	361,012	710,387	
10/1/98	9/30/99	597,198	13.14	351,241	7.73	245,957	5.41	245,957	361,012	606,969	
10/1/99	9/30/00	512,235	10.08	351,241	6.91	160,994	3.17	80,559	365,934	446,493	
10/1/00	9/30/01	292,146	5.51	365,934	6.90	0	0.00	0	365,715	365,715	
10/1/01	9/30/02	825,167	15.86	384,640	7.39	440,527	8.47	361,877	463,290	825,167	
10/1/02	9/30/03	1,359,690	26.44	463,290	9.01	896,400	17.43	922,724	499,520	1,422,244	
10/1/03	9/30/04	1,655,219	27.23	499,520	8.22	1,155,699	19.01	1,155,699	549,804	1,705,503	
10/1/04	9/30/05	1,988,852	32.41	549,804	8.96	1,439,048	23.45	1,439,048	589,543	2,028,591	
10/1/05	9/30/06	2,339,568	34.59	589,543	8.72	1,750,025	25.87	1,750,025	589,543	2,339,568	
10/1/06	9/30/07	2,664,373	32.68	589,543	7.23	2,074,830	25.45	2,074,830	589,543	2,664,373	
10/1/07	9/30/08	2,845,292	32.31	589,543	6.70	2,255,749	25.61	2,255,749	589,543	2,845,292	
10/1/08	9/30/09	3,380,771	33.37	579,772	5.73	2,800,384	27.64	2,800,384	579,772	3,380,156	
10/1/09	9/30/10	3,678,119	35.54	589,543	5.60	3,088,576	29.94	3,098,347	633,115	3,731,462	
10/1/09	9/30/11	3,606,278	34.04	633,115	5.98	2,973,163	28.06	3,026,506	623,344	3,649,850	
10/1/10	9/30/12	3,771,466	35.16	623,344	5.81	3,148,122	29.35	3,148,122	623,344	3,771,466	
10/1/11	9/30/13	4,272,215	40.87	704,322	6.74	3,567,893	34.13	3,648,871	704,322	4,353,193	
10/1/12	9/30/14	4,226,469	44.58	704,322	7.43	3,522,147	37.15	3,522,147	704,322	4,226,469	
10/1/13	9/30/15	4,635,318	48.78	704,322	7.41	3,930,996	41.37	3,930,996	704,322	4,635,318	
10/1/14	9/30/16	4,856,683	49.44	781,954	7.96	4,074,729	41.48	4,117,788	781,954	4,899,742	
10/1/15	9/30/17	5,075,517	49.10	781,954	7.56	4,293,563	41.54	4,293,563	781,954	5,075,517	
10/1/16	9/30/18	6,157,171	56.09	781,954	7.12	5,375,217	48.97	5,375,217	781,954	6,157,171	
10/1/17	9/30/19	6,409,551	55.42	1,062,385 *	9.19	5,347,166	46.23	5,347,166	1,062,385	6,409,551	
10/1/18	9/30/20	5,969,275	56.03	1,062,385 *	9.97	4,906,890	46.06	4,906,890	1,062,385	5,969,275	
10/1/19	9/30/21	6,400,723	54.28	1,062,385 *	9.01	5,338,338	45.27	5,338,338	1,062,385	6,400,723	
10/1/20	9/30/22	6,607,751	55.58	1,068,298 *	8.99	5,539,453	46.59	N/A	N/A	N/	
10/1/21	9/30/23	6,772,144	56.42	1,068,298 *	8.90	5,703,846	47.52	, N/A	N/A	N/	

*Including amount allocated from Accumulated Excess State Contribution Reserve.



ACTUARIAL ASSUMPTIONS AND COST METHOD

Actuarial Cost Method - Normal cost and the allocation of benefit values between service rendered before and after the valuation date were determined using an **Individual Entry-Age Actuarial Cost Method** having the following characteristics:

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

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

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

Actuarial Value of Assets - The Actuarial Value of Assets phases in the difference between the actual and expected investment earnings over a period of 5 years. The Actuarial Value of Assets will be further adjusted to the extent necessary to fall within the corridor whose lower limit is 80% of the Market Value of plan assets and whose upper limit is 120% of the Market Value of plan assets. During periods when investment performance exceeds the assumed rate, Actuarial Value of Assets will tend to be less than Market Value. During periods when investment performance is less than assumed rate, Actuarial Value of Assets will tend to be greater than Market Value.

Valuation Assumptions

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

Economic Assumptions

The investment return rate assumed in the valuation is 7.15% per year, compounded annually (net after investment expenses). *This rate was 7.35% in the previous valuation.*

The **Wage Inflation Rate** assumed in this valuation is 3.25% per year. The Wage Inflation Rate is defined to be the portion of total pay increases for an individual that are due to macroeconomic forces including productivity, price inflation, and labor market conditions. The wage inflation rate does not include pay changes related to individual merit and seniority effects.

The **Price Inflation Rate** assumed in this valuation is 2.25% per year.

The assumed **real rate of return** over price inflation is defined to be the portion of total investment return that is more than the assumed inflation rate. Considering other economic assumptions, the 7.15% investment return rate translates to an assumed real rate of return over price inflation of 4.90%.



The active member population is assumed to remain constant. For purposes of financing the unfunded liabilities, total payroll is assumed to grow at 2.50% per year.

Pay increase assumptions for individual active members are shown below. Part of the assumption for each age is for merit and/or seniority increase, and the other 3.25% recognizes wage inflation, including price inflation, productivity increases, and other macroeconomic forces.

The rates of salary increase used for individual members are in accordance with the following table below and are based on the Experience Study dated October 29, 2020. This assumption is used to project a member's current salary to the salaries upon which benefits will be based.

-	% Increase in Salary					
Years of	Merit and	Wage	Total			
Service	Seniority	Inflation	Increase			
1-2	11.75%	3.25%	15.00%			
3 - 5	6.75%	3.25%	10.00%			
6 - 8	2.25%	3.25%	5.50%			
9 - 11	1.25%	3.25%	4.50%			
12 - 14	2.75%	3.25%	6.00%			
15 - 16	3.50%	3.25%	6.75%			
17 - 20	5.00%	3.25%	8.25%			
21+	0.00%	3.25%	3.25%			

Demographic Assumptions

The mortality table is the PUB-2010 Headcount Weighted Safety Healthy Employee Mortality Table (for preretirement mortality) and the PUB-2010 Headcount Weighted Safety Healthy Retiree Mortality Table (for postretirement mortality), with separate rates for males and females and ages set forward one year, with mortality improvements projected to all future years after 2010 using Scale MP-2018. For males, the base mortality rates for both pre-retirement and postretirement mortality are based on the Below Median Healthy tables. These are the same rates currently in use for Special Risk class members of the Florida Retirement System (FRS), as mandated by Chapter 112.63, Florida Statutes.

FRS Healthy Post-Retirement Mortality for Special Risk Class Members

Sample Attained	Probabil Dying Ne	-	Future Expectance	
Ages (in 2021)	Men	Women	Men	Women
50	0.42 %	0.20 %	32.50	36.33
55	0.56	0.36	27.73	31.30
60	0.92	0.61	23.14	26.51
65	1.32	0.92	18.87	22.00
70	2.08	1.45	14.86	17.74
75	3.54	2.42	11.27	13.82
80	6.30	4.16	8.19	10.35

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



	Sample Attained	Probabil Dying Ne	-	Future Expectanc	
_	Ages (in 2021)	Men	Women	Men	Women
	50	0.16 %	0.11 %	35.66	39.58
	55	0.26	0.16	30.58	34.44
	60	0.43	0.22	25.63	29.37
	65	0.69	0.30	20.86	24.35
	70	1.18	0.55	16.34	19.45
	75	2.08	1.07	12.10	14.75
	80	6.30	4.16	8.19	10.35

FRS Healthy Pre-Retirement Mortality for Special Risk Class Members

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

For disabled retirees, the mortality table is the 80% of the PUB-2010 Headcount Weighted General Disabled Retiree Mortality Table, and 20% of the PUB-2010 Headcount Weighted Safety Disabled Retiree Mortality Table, both with separate rates for males and females, with no provision being made for future mortality improvements. These are the same rates currently in use for Special Risk class members of the Florida Retirement System (FRS), as mandated by Chapter 112.63, Florida Statutes.

		-		
Sample	Probability of		Future	e Life
Attained	Dying Ne:	xt Year	Expectanc	xy (years)
Ages (in 2021)	Men	Women	Men	Women
50	1.45 %	1.25 %	24.04	26.84
55	1.91	1.50	20.88	23.54
60	2.37	1.81	17.92	20.32
65	3.00	2.22	15.07	17.17
70	3.91	2.90	12.39	14.10
75	5.30	4.13	9.87	11.22
80	7.66	6.21	7.60	8.67

FRS Disabled Mortality for Special Risk Class Members

The rates of retirement used to measure the probability of eligible members retiring during the next year were as follows and are based on the Experience Study dated October 29, 2020.

	Retirement Rates								
S	Age								
е		<50	56 - 59	60+					
r	10 - 19	N/A	5.0%	80.0%	80.0%	100.0%			
v	20 - 21	60.0%	90.0%	100.0%	100.0%	100.0%			
i	22 - 24	80.0%	90.0%	100.0%	100.0%	100.0%			
С	25+	100.0%	100.0%	100.0%	100.0%	100.0%			
е	-								



Rates of separation from active membership were as shown below (rates do not apply to members eligible to retire and do not include separation on account of death or disability) and are based on the Experience Study dated October 29, 2020. This assumption measures the probabilities of members remaining in employment.

Sample	% of Active Members
Ages	Separating Within Next Year
20	5.0 %
25	5.0
30	3.0
35	1.0
40	1.0
45	2.0
50	2.0
55	0.0

Rates of disability among active members (85% of disabilities are assumed to be service-connected).

Sample Ages	% Becoming Disabled within Next Year
20	0.09 %
25	0.10
30	0.12
35	0.15
40	0.20
45	0.34
50	0.67
55	1.03



Miscellaneous and Technical Assumptions

Administrative & Investment Expenses	The investment return assumption is intended to be the return net of investment expenses. Annual administrative expenses are assumed to be equal to the average of the prior two years' expenses. Assumed administrative expenses are added to the Normal Cost.
Benefit Service	Exact fractional service is used to determine the amount of benefit payable.
Cost of Living Increases	Benefits are increased by 2% per year beginning five years after benefit commencement.
Decrement Operation	Disability and mortality decrements operate during retirement eligibility.
Decrement Timing	Decrements of all types are assumed to occur at the beginning of the year.
Eligibility Testing	Eligibility for benefits is determined based upon the age nearest birthday and service nearest whole year on the date the decrement is assumed to occur.
Forfeitures	For vested separations from service, it is assumed that 0% of members separating will withdraw their contributions and forfeit an employer financed benefit. It was further assumed that the liability at termination is the greater of the vested deferred benefit (if any) or the member's accumulated contributions.
Incidence of Contributions	The employer contribution is assumed to be made in one full payment on October 1 st of each year (at the beginning of the fiscal year). Member contributions are assumed to be received continuously throughout the year based upon the computed percent of payroll shown in this report, and the actual payroll payable at the time contributions are made.
Liability Load	Projected retirement benefits are loaded by a unique amount for each member to allow for the inclusion of unused sick and vacation pay in final average earnings. These individual loads are based on the number of hours of unused sick and vacation reported for each member as of September 27, 2013.
Marriage Assumption	100% of males and 100% of females are assumed to be married for purposes of death-in-service benefits. Male spouses are assumed to be three years older than female spouses for active member valuation purposes.



Normal Form of Benefit	A ten year certain and life thereafter annuity is the Normal Form of Benefit.
Pay Increase Timing	Beginning of fiscal year. This is equivalent to assuming that reported pays represent amounts paid to members during the year ended on the valuation date.
Service Credit Accruals	It is assumed that members accrue one year of service credit per year.



GLOSSARY

Actuarial Accrued Liability (AAL)	The difference between the Actuarial Present Value of Future Benefits, and the Actuarial Present Value of Future Normal Costs.
Actuarial Assumptions	Assumptions about future plan experience that affect costs or liabilities, such as: mortality, withdrawal, disablement, and retirement; future increases in salary; future rates of investment earnings; future investment and administrative expenses; characteristics of members not specified in the data, such as marital status; characteristics of future members; future elections made by members; and other items.
Actuarial Cost Method	A procedure for allocating the Actuarial Present Value of Future Benefits between the Actuarial Present Value of Future Normal Costs and the Actuarial Accrued Liability.
Actuarial Equivalent	Of equal Actuarial Present Value, determined as of a given date and based on a given set of Actuarial Assumptions.
Actuarial Present Value (APV)	The amount of funds required to provide a payment or series of payments in the future. It is determined by discounting the future payments with an assumed interest rate and with the assumed probability each payment will be made.
Actuarial Present Value of Future Benefits (APVFB)	The Actuarial Present Value of amounts which are expected to be paid at various future times to active members, retired members, beneficiaries receiving benefits, and inactive, nonretired members entitled to either a refund or a future retirement benefit. Expressed another way, it is the value that would have to be invested on the valuation date so that the amount invested plus investment earnings would provide sufficient assets to pay all projected benefits and expenses when due.
Actuarial Valuation	The determination, as of a valuation date, of the Normal Cost, Actuarial Accrued Liability, Actuarial Value of Assets, and related Actuarial Present Values for a plan. An Actuarial Valuation for a governmental retirement system typically also includes calculations of items needed for compliance with GASB.
Actuarial Value of Assets	The value of the assets as of a given date, used by the actuary for valuation purposes. This may be the market or fair value of plan assets or a smoothed value in order to reduce the year-to-year volatility of calculated results, such as the funded ratio and the actuarially determined employer contribution (ADEC).



Actuarially Determined Employer Contribution (ADEC)	The employer's periodic required contributions, expressed as a dollar amount or a percentage of covered plan compensation, determined under GASB. The ADEC consists of the Employer Normal Cost and Amortization Payment.
Amortization Method	A method for determining the Amortization Payment. The most common methods used are level dollar and level percentage of payroll. Under the Level Dollar method, the Amortization Payment is one of a stream of payments, all equal, whose Actuarial Present Value is equal to the UAAL. Under the Level Percentage of Pay method, the Amortization Payment is one of a stream of increasing payments, whose Actuarial Present Value is equal to the UAAL. Under the Level Percentage of Pay method, the stream of payments increases at the rate at which total covered payroll of all active members is assumed to increase.
Amortization Payment	That portion of the plan contribution or ADEC which is designed to pay interest on and to amortize the Unfunded Actuarial Accrued Liability.
Amortization Period	The period used in calculating the Amortization Payment.
Closed Amortization Period	A specific number of years that is reduced by one each year, and declines to zero with the passage of time. For example if the amortization period is initially set at 30 years, it is 29 years at the end of one year, 28 years at the end of two years, etc.
Employer Normal Cost	The portion of the Normal Cost to be paid by the employer. This is equal to the Normal Cost less expected member contributions.
Equivalent Single Amortization Period	For plans that do not establish separate amortization bases (separate components of the UAAL), this is the same as the Amortization Period. For plans that do establish separate amortization bases, this is the period over which the UAAL would be amortized if all amortization bases were combined upon the current UAAL payment.
Experience Gain/Loss	A measure of the difference between actual experience and that expected based upon a set of Actuarial Assumptions, during the period between two actuarial valuations. To the extent that actual experience differs from that assumed, Unfunded Actuarial Accrued Liabilities emerge which may be larger or smaller than projected. Gains are due to favorable experience, e.g., the assets earn more than projected, salaries do not increase as fast as assumed, members retire later than assumed, etc. Favorable experience means actual results produce actuarial liabilities not as large as projected by the actuarial assumptions. On the other hand, losses are the result of unfavorable experience, i.e., actual results that produce Unfunded Actuarial Accrued Liabilities which are larger than projected.



Funded Ratio	The ratio of the Actuarial Value of Assets to the Actuarial Accrued Liability.
GASB	Governmental Accounting Standards Board.
GASB No. 68 and GASB No. 67	These are the governmental accounting standards that set the accounting rules for public retirement systems and the employers that sponsor or contribute to them. Statement No. 68 sets the accounting rules for the employers that sponsor or contribute to public retirement systems, while Statement No. 67 sets the rules for the systems themselves.
Normal Cost	The annual cost assigned, under the Actuarial Cost Method, to the current plan year.
Open Amortization Period	An open amortization period is one which is used to determine the Amortization Payment but which does not change over time. In other words, if the initial period is set as 30 years, the same 30-year period is used in determining the Amortization Period each year. In theory, if an Open Amortization Period is used to amortize the Unfunded Actuarial Accrued Liability, the UAAL will never completely disappear, but will become smaller each year, either as a dollar amount or in relation to covered payroll.
Unfunded Actuarial Accrued Liability	The difference between the Actuarial Accrued Liability and Actuarial Value of Assets.
Valuation Date	The date as of which the Actuarial Present Value of Future Benefits are determined. The benefits expected to be paid in the future are discounted to this date.



SECTION C

PENSION FUND INFORMATION

SUMMARY OF ASSETS

			Septe	mber 30	
	lte	em	2021		2020
A.	Cash a	nd Cash Equivalents (Operating Cash)	\$ -	\$	-
В.	Receiva	ables:			
	1.	Member Contributions	\$ -	\$	-
	2.	Employer Contributions	-		-
	3.	State Contributions	-		-
	4.	Investment Income and Other Receivables	234,509		301,063
	5.	Prepaid Expenses	15,130		12,903
	6.	Total Receivables	\$ 249,639	\$	313,966
C.	Investr	nents			
	1.	Short Term Investments	\$ 6,466,977	\$	2,274,896
	2.	Domestic Equities	72,531,186		64,644,738
	3.	International Equities	28,692,647		22,618,202
	4.	Domestic Fixed Income	48,836,257		40,846,612
	5.	International Fixed Income	-		-
	6.	Real Estate	8,585,982		7,570,684
	7.	Private Equity	-		-
	8.	Total Investments	\$ 165,113,049	\$	137,955,132
D.	Liabili	ties			
	1.	Benefits Payable	\$ -	\$	-
	2.	Accrued Expenses and Other Payables	(479,543)		(226,156)
	3.	Prepaid City Contribution	-		(122,975)
	4.	Total Liabilities	\$ (479,543)	\$	(349,131)
E.	Total N	Narket Value of Assets Available for Benefits	\$ 164,883,145	\$	137,919,967
F.	Reserv	es			
	1.	State Contribution Reserve	\$ (1,668,034)	\$	(1,735,276)
	2.	DROP Accounts	(22,369,614)	<u> </u>	(19,874,756)
	3.	Total Reserves	\$ (24,037,648)	\$	(21,610,032)
G.	Marke	t Value Net of Reserves	\$ 140,845,497	\$	116,309,935
F.	Allocat	tion of Investments			
	1.	Short Term Investments	3.92%		1.65%
	2.	Domestic Equities	43.93%		46.86%
	3.	International Equities	17.37%		16.39%
	4.	Domestic Fixed Income	29.58%		29.61%
	5.	International Fixed Income	0.00%		0.00%
	6.	Real Estate	5.20%		5.49%
	7.	Private Equity	 0.00%		0.00%
	8.	Total Investments	100.00%		100.00%



PENSION FUND INCOME & DISBURSEMENTS

		September 30						
	ltem		2021		2020			
A.	Market Value of Assets at Beginning of Year	\$	137,919,967	\$	122,497,336			
В.	Revenues and Expenditures							
	1. Contributions							
	a. Employee Contributions	\$	1,457,370	\$	1,399,951			
	b. Employer Contributions*		5,338,338		4,906,890			
	d. State Contributions		995,143		881,763			
	e. Service Purchase		32,565		48,832			
	f. Rollover to DROP		168,513		327,937			
	g. Total	\$	7,991,929	\$	7,565,373			
	2. Investment Income							
	a. Interest, Dividends, and Other Income	\$	3,208,768	\$	2,420,048			
	b. Net Realized Gains/(Losses)		10,204,986		5,994,365			
	c. Net Unrealized Gains/(Losses)		13,252,581		7,841,717			
	d. Investment Expenses		(450,151)		(421,470)			
	e. Net Investment Income	\$	26,216,184	\$	15,834,660			
	3. Benefits and Refunds							
	a. Refunds	\$	(8,017)	\$	(84 <i>,</i> 833)			
	b. Regular Monthly Benefits		(6,501,805)		(6,141,616)			
	c. DROP Distributions		(548 <i>,</i> 886)		(1,521,789)			
	d. Ad Hoc Payments from State Reserve		-		-			
	e. Total	\$	(7,058,708)	\$	(7,748,238)			
	4. Administrative and Miscellaneous Expenses	\$	(186,227)	\$	(229,164)			
	5. Transfers	\$	-	\$	-			
C.	Market Value of Assets at End of Year	\$	164,883,145	\$	137,919,967			
D.	Reserves							
	1. State Contribution Reserve	\$	(1,668,034)	\$	(1,735,276)			
	2. DROP Accounts		(22,369,614)		(19,874,756)			
	3. Total Reserves	\$	(24,037,648)	\$	(21,610,032)			
E.	Market Value Net of Reserves	\$	140,845,497	\$	116,309,935			

* For 2019, actual City Contribution was \$5,627,597, but \$5,347,166 was recognized. The difference of \$280,431 was added to the prepaid contribution balance (of \$14,589), increasing it to \$295,020. For 2020, actual City contribution was \$4,734,845, but \$4,906,890 was recognized to include \$172,045 of the previous year's prepaid contribution. For 2021, actual City contribution was \$5,215,363, but \$5,338,338 was recognized to include the remaining \$122,975 of the previous year's prepaid contribution.



ACTUARIAL VALUE OF ASSETS

	Valuation Date - September 30	2020	2021		2022	2023	2024	 2025
A.	Actuarial Value of Assets Beginning of Year	\$ 120,335,579	\$ 132,011,046	\$	-	\$ -	\$ -	\$
В.	Market Value End of Year	137,919,967	164,883,145		-	-	-	
C.	Market Value Beginning of Year	122,497,336	137,919,967		-	-	-	
D.	Non-Investment/Administrative Net Cash Flow	(412,029)	746,994		-	-	-	
E.	Investment Income							
	E1. Actual Market Total: B-C-D	15,834,660	26,216,184		-	-	-	
	E2. Assumed Rate of Return	7.50%	7.35%		-	-	-	
	E3. Assumed Amount of Return	9,193,726	9,926,448		-	-	-	
	E4. Amount Subject to Phase-In: E1–E3	6,640,934	16,289,736		-	-	-	
F.	Phase-In Recognition of Investment Income							
	F1. Current Year: 0.2 x E4	1,328,187	3,257,947		-	-	-	
	F2. First Prior Year	(339,497)	1,328,187	3	8,257,947	-	-	
	F3. Second Prior Year	289,039	(339,497)	1	,328,187	3,257,947	-	
	F4. Third Prior Year	1,036,587	289,039		(339,497)	1,328,187	3,257,947	
	F5. Fourth Prior Year	579,454	1,036,588		289,040	(339 <i>,</i> 499)	1,328,186	3,257,948
	F6. Total Phase-Ins	2,893,770	5,572,264	4	,535,677	4,246,635	4,586,133	3,257,948
G.	Actuarial Value of Assets End of Year							
	G1. Preliminary Actuarial Value of Assets End of Year:	\$ 132,011,046	\$ 148,256,752	\$	-	\$ -	\$ -	\$
	G2. Upper Corridor Limit: 120%*B	165,503,960	197,859,774		-	-	-	
	G3. Lower Corridor Limit: 80%*B	110,335,974	131,906,516		-	-	-	
	G4. Funding Value End of Year	132,011,046	148,256,752		-	-	-	
	G5. Less: State Contribution Reserve	(1,735,276)	(1,668,034)		-	-	-	
	G6. Less: DROP Account Balance	(19,874,756)	(22,369,614)		-	-	-	
	G7. Final Funding Value End of Year	110,401,014	124,219,104		-	-	-	
	G8. Final Market Value End of Year	116,309,935	140,845,497		-	-	-	
Н.	Difference between Market & Actuarial Value of Assets	5,908,921	16,626,393		-	-	-	
I.	Actuarial Rate of Return	9.86%	11.48%		0.00%	0.00%	0.00%	0.00
J.	Market Value Rate of Return	12.69%	18.60%		0.00%	0.00%	0.00%	0.00
к.	Ratio of Actuarial Value of Assets to Market Value	95.72%	89.92%		0.00%	0.00%	0.00%	0.00



RECONCILIATION OF DROP ACCOUNTS					
Value at beginning of year	\$ 19,874,756				
Adjustment to beginning of year balance	+ 87,868				
Payments credited to accounts	+ 1,318,600				
Rollovers into DROP	+ 168,513				
Net Loan Activity	+ 38,713				
Investment Earnings credited	+ 1,430,050				
Withdrawals from accounts	- 548,886				
Value at end of year	22,369,614				



INVESTMENT RATE OF RETURN

	Investment R	ate of Return
Year Ended	Market Value	Actuarial Value
12/31/1982	NA %	11.9 %
12/31/1983	15.2	13.9
12/31/1984	11.7	11.1
12/31/1985	23.1	18.7
12/31/1986	11.8	13.4
12/31/1987	5.3	10.3
12/31/1988	10.9	9.8
12/31/1989	15.9	14.8
9/30/1990 (9 mos.)	(1.6)	1.4
9/30/1991	19.6	13.1
9/30/1992	12.7	11.2
9/30/1993	13.1	9.7
9/30/1994	0.2	3.1
9/30/1995	18.8	9.3
9/30/1996	13.1	9.8
9/30/1997	24.5	12.6
9/30/1998	11.4	12.4
9/30/1999	11.8	14.1
9/30/2000	9.4	13.3
9/30/2001	(7.7)	8.0
9/30/2002	(5.6)	2.3
9/30/2003	15.3	3.5
9/30/2004	6.4	2.2
9/30/2005	7.9	2.5
9/30/2006	5.2	5.3
9/30/2007	12.3	9.3
9/30/2008	(17.1)	3.0
9/30/2009	(0.2)	0.9
9/30/2010	8.5	2.5
9/30/2011	(0.9)	0.9
9/30/2012	17.1	2.7
9/30/2013	13.6	8.1
9/30/2014	10.2	8.8
9/30/2015	0.4	7.3
9/30/2016	11.1	9.2
9/30/2017	13.0	9.3
9/30/2018	8.6	8.7
9/30/2019	5.8	7.9
9/30/2020	12.7	9.9
9/30/2021	18.6	11.5
Average Returns:		
Last Five Years	11.7 %	9.5 %
Last Ten Years	11.0 %	8.3 %
All Years	9.0 %	8.4 %



SECTION D

FINANCIAL ACCOUNTING INFORMATION

	FASB NO. 35 INFORM	ATION	
	Valuation Date	October 1, 2021	October 1, 2020
В.	Actuarial Present Value of Accumulated Plan Benefits		
	1. Vested Benefits		
	a. Members Currently Receiving Payments	\$ 107,316,324	\$ 97,503,462
	b. Terminated Vested Members	830,675	747,635
	c. Other Members	44,557,509	42,536,843
	d. Total	152,704,508	140,787,940
	2. Non-Vested Benefits	2,477,371	2,018,155
	 Total Actuarial Present Value of Accumulated Plan Benefits: 1d + 2 	155,181,879	142,806,095
	4. Accumulated Contributions of Active Members	11,176,646	10,973,238
C.	Changes in the Actuarial Present Value of Accumulated Plan Benefits		
	1. Total Value at Beginning of Year	142,806,095	134,298,238
	2. Increase (Decrease) During the Period Attributable to:		
	a. Plan Amendment	0	0
	b. Change in Actuarial Assumptions	3,602,073	275,286
	c. Latest Member Data, Benefits Accumulated	10,000,100	45 024 770
	and Decrease in the Discount Period d. Benefits Paid net of DROP activity	16,602,133 (7,828,422)	15,821,770 (7,589,199)
	e. Net Increase	12,375,784	8,507,857
	3. Total Value at End of Period	155,181,879	142,806,095
D.	Market Value of Assets	140,845,497	116,309,935
E.	Actuarial Assumptions - See page entitled Actuarial Assumptions and Methods		



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

Fiscal year ending September 30,	2022*	2021	2020	2019	2018	2017	2016	2015	2014
Total pension liability									
Service Cost	\$ 3,942,576	\$ 3,656,658	\$ 3,593,983	\$ 3,403,511	\$ 3,717,529	\$ 3,330,443	\$ 3,204,682	\$ 2,988,536	\$ 2,772,724
Interest	13,645,609	13,234,970	12,281,407	11,904,771	11,208,637	10,066,945	9,542,671	8,955,215	8,188,369
Benefit Changes	-	-	616,047	(1,384,791)	-	-	-	-	-
Difference between actual & expected experience	1,322,203	(890,682)	3,514,248	(1,516,079)	1,224,054	668,799	(498,197)	708,071	(28,363)
Assumption Changes	3,884,192	709,591	-	-	-	6,644,861	-	1,809,581	-
Benefit Payments	(8,469,554)	(7,050,691)	(7,663,405)	(7,597,186)	(5,970,713)	(5,456,760)	(5,176,836)	(4,304,149)	(4,292,070)
Refunds	(41,233)	(8,017)	(84,833)	(26,917)	(105,981)	(53,290)	-	(4,622)	(50,673)
Other (Increase in Excess State Reserve)	(73,155)	(142,242)	(255,622)	(8,104)	(326,167)	(231,973)	(192,041)	259,251	312,239
Other (Rollovers into DROP)		168,513	327,937	379,375	323,472	70,279	271,411	139,860	343,843
Net Change in Total Pension Liability	14,210,638	9,678,100	12,329,762	5,154,580	10,070,831	15,039,304	7,151,690	10,551,743	7,246,069
Total Pension Liability - Beginning	186,003,933	176,325,833	163,996,071	158,841,491	148,770,660	133,731,356	126,579,666	116,027,923	108,781,854
Total Pension Liability - Ending (a)	\$200,214,571	\$ 186,003,933	\$ 176,325,833	\$ 163,996,071	\$ 158,841,491	\$ 148,770,660	\$133,731,356	\$126,579,666	\$116,027,923
Plan Fiduciary Net Position									
Contributions - Employer (from City)	\$ 5,539,453	\$ 5,215,363	\$ 4,734,845	\$ 5,627,597	\$ 5,444,061	\$ 4,293,563	\$ 4,195,420	\$ 3,930,996	\$ 3,522,147
Contributions - Employer (from State)	995,143	995,143	881,763	830,904	789,121	883,314	923,246	963,573	1,016,561
Contributions - Non-Employer Contributing Entity	-	-	-	-	-	-	-	-	-
Contributions - Members	1,405,240	1,489,935	1,448,783	1,524,397	1,473,516	1,477,115	1,485,128	1,251,530	1,291,773
Net Investment Income	11,932,661	26,216,184	15,834,660	6,835,550	9,221,736	12,165,106	9,197,486	282,853	7,187,580
Benefit Payments	(8,469,554)	(7,050,691)	(7,663,405)	(7,597,186)	(5,970,713)	(5,456,760)	(5,176,836)	(4,304,149)	(4,292,070)
Refunds	(41,233)	(8,017)	(84,833)	(26,917)	(105,981)	(53,290)	-	(4,622)	(50,673)
Administrative Expense	(207 <i>,</i> 696)	(186,227)	(229,164)	(184,750)	(141,569)	(151,010)	(161,122)	(132,439)	(122,390)
Other (Rollovers into DROP)	-	168,513	327,937	379,375	323,472	70,279	271,411	139,860	343,843
Net Change in Plan Fiduciary Net Position	11,154,014	26,840,203	15,250,586	7,388,970	11,033,643	13,228,317	10,734,733	2,127,602	8,896,771
Plan Fiduciary Net Position - Beginning	164,883,145	138,042,942	122,792,356	115,403,386	104,369,743	91,141,426	80,406,693	78,279,091	69,382,320
Plan Fiduciary Net Position - Ending (b)	\$176,037,159	\$ 164,883,145	\$ 138,042,942	\$ 122,792,356	\$ 115,403,386	\$ 104,369,743	\$ 91,141,426	\$ 80,406,693	\$ 78,279,091
Net Pension Liability - Ending (a) - (b)	24,177,412	21,120,788	38,282,891	41,203,715	43,438,105	44,400,917	42,589,930	46,172,973	37,748,832
Plan Fiduciary Net Position as a Percentage									
of Total Pension Liability	87.92 %	88.64 %	78.29 %	74.88 %	72.65 %	70.15 %	68.15 %	63.52 %	67.47 %
Covered Employee Payroll	\$ 11,710,333	\$ 12,144,750	\$ 11,666,258	\$ 12,156,508	\$ 11,133,758	\$ 11,219,225	\$ 10,906,700	\$ 9,962,067	\$ 9,925,925
Net Pension Liability as a Percentage									
of Covered Employee Payroll	206.46 %	173.91 %	328.15 %	338.94 %	390.15 %	395.76 %	390.49 %	463.49 %	380.31 %

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



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

FY Ending September 30,	Total Pension Liability	Plan Net Position	Net Pension Liability	Plan Net Position as a % of Total Pension Liability	Covered Payroll	Net Pension Liability as a % of Coverd Payroll
2014	\$116,027,923	\$ 78,279,091	\$ 37,748,832	67.47%	\$ 9,925,925	380.31%
2015	126,579,666	80,406,693	46,172,973	63.52%	9,962,067	463.49%
2016	133,731,356	91,141,426	42,589,930	68.15%	10,906,700	390.49%
2017	148,770,660	104,369,743	44,400,917	70.15%	11,219,225	395.76%
2018	158,841,491	115,403,386	43,438,105	72.65%	11,133,758	390.15%
2019	163,996,071	122,792,356	41,203,715	74.88%	12,156,508	338.94%
2020	176,325,833	138,042,942	38,282,891	78.29%	11,666,258	328.15%
2021	186,003,933	164,883,145	21,120,788	88.64%	12,144,750	173.91%
2022*	200,214,571	176,037,159	24,177,412	87.92%	11,710,333	206.46%

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



NOTES TO NET PENSION LIABILITY GASB Statement No. 67

Valuation Date:	October 1, 2021
Measurement Date:	September 30, 2022
Methods and Assumptions Us	sed to Determine Net Pension Liability:
Actuarial Cost Method	Entry Age Normal
Inflation	2.25%
Salary Increases	Varies by years of service from 3.25% to 15.0% (see Table in Actuarial Assumptions Section)
Investment Rate of Return	7.15%
Retirement Age	Rates vary by age and years of service (see Table in Actuarial Assumptions Section)
Mortality	PUB-2010 Headcount Weighted Safety Healthy Employee Mortality Table (for pre-retirement mortality) and the PUB-2010 Headcount Weighted Safety Healthy Retiree Mortality Table (for postretirement mortality), with separate rates for males and females and ages set forward one year, with mortality improvements projected to all future years after 2010 using Scale MP-2018. For males, the base mortality rates for both pre-retirement and post-retirement mortality are based on the Below Median Healthy tables. These are the same rates currently in use for Special Risk Class members of the Florida Retirement System (FRS), as mandated by Chapter 112.63, Florida Statutes.
Other Information:	
Notes	See Discussion of Valuation Results on Page 1.
	Assumption changes reflect the change in the investment return assumption from 7.35% to 7.15%.



SCHEDULE OF CONTRIBUTIONS GASB Statement No. 67

FY Ending September 30,	Actuarially Determined Contribution	Actual Contribution	Contribution Deficiency (Excess)	Covered Payroll	Actual Contribution as a % of Covered Payroll
2014	\$ 4,226,469	\$ 4,226,469	\$-	\$ 9,925,925	42.58%
2015	4,635,318	4,635,318	-	9,962,067	46.53%
2016	4,899,742	4,977,374	(77,632) **	* 10,906,700	45.64%
2017	5,075,517	5,075,517	-	11,219,225	45.24%
2018	6,157,171	6,226,015	(68,844) *	* 11,133,758	55.92%
2019	6,409,551	6,458,501	(48,950) *'	* 12,156,508	53.13%
2020	5,969,275	5,616,608	352,667 **	** 11,666,258	48.14%
2021	6,400,723	6,210,506	190,217 **	*** 12,144,750	51.14%
2022*	6,607,751	6,534,596	73,155 **	**** 11,710,333	55.80%

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

- **Prepaid contributions (resulting from the previous years' excess contributions) were applied toward the Actuarially Determined Contributions for Fiscal Year Ending September 30, 2020 and 2021.
- ***The Deficiency in actual contribution is funded through the use of Prepaid contributions (\$172,045) plus Accumulated Excess Chapter 175 Premium Tax Revenue Reserves (\$180,622).
- ****The Deficiency in actual contribution is funded through the use of Prepaid contributions (\$122,975) plus Accumulated Excess Chapter 175 Premium Tax Revenue Reserves (\$67,242).
- *****The Deficiency in actual contribution is funded through the use of Accumulated Excess Chapter 175 Premium Tax Revenue Reserves.



NOTES TO SCHEDULE OF CONTRIBUTIONS GASB Statement No. 67

Valuation Date: Notes	October 1, 2020 Actuarially determined contribution rates are calculated as of the October 1st which is two years prior to the end of the fiscal year in which contributions are reported.
Methods and Assumptions Used	to Determine Contribution Rates:
Actuarial Cost Method	Entry Age Normal
Amortization Method	Level Percentage of Payroll, Closed
Remaining Amortization Period	17 years (Single equivalent amortization period)
Asset Valuation Method	5-year smoothed market
Inflation	2.25%
Salary Increases	Varies by years of service from 3.25% to 15.0% (see Table in
	Actuarial Assumptions Section)
Investment Rate of Return	7.35%
Retirement Age	Rates vary by age and years of service (see Table in Actuarial
	Assumptions Section)
Mortality	PUB-2010 Headcount Weighted Safety Healthy Employee Mortality Table (for pre-retirement mortality) and the PUB-2010 Headcount Weighted Safety Healthy Retiree Mortality Table (for postretirement mortality), with separate rates for males and females and ages set forward one year, with mortality improvements projected to all future years after 2010 using Scale MP-2018. For males, the base mortality rates for both pre- retirement and post-retirement mortality are based on the Below Median Healthy tables. These are the same rates currently in use for Special Risk Class members of the Florida Retirement System (FRS), as mandated by Chapter 112.63, Florida Statutes.
Other Information:	
Notes	See Discussion of Valuation Results on Page 1 of the October 1,

2020 Actuarial Valuation Report.



SINGLE DISCOUNT RATE GASB Statement No. 67

A single discount rate of 7.15% was used to measure the total pension liability. This single discount rate was based on the expected rate of return on pension plan investments of 7.15%. The projection of cash flows used to determine this single discount rate assumed that plan member contributions will be made at the current contribution rate and that employer contributions will be made at rates equal to the difference between the total actuarially determined contribution rates and the member rate. Based on these assumptions, the pension plan's fiduciary net position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the long-term expected rate of return on pension plan investments (7.15%) was applied to all periods of projected benefit payments to determine the total pension liability.

Regarding the sensitivity of the net pension liability to changes in the single discount rate, the following presents the plan's net pension liability, calculated using a single discount rate of 7.15%, as well as what the plan's net pension liability would be if it were calculated using a single discount rate that is 1-percentage-point lower or 1-percentage-point higher:

	Current Single Discount	
1% Decrease	Rate Assumption	1% Increase
6.15%	7.15%	8.15%
\$46,128,975	\$24,177,412	\$6,177,610

Sensitivity of the Net Pension Liability to the Single Discount Rate Assumption*

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



SECTION E

MISCELLANEOUS INFORMATION

	RECONCILIATION OF MEMBERS	SHIP DATA	
		From 10/1/20 To 10/1/21	From 10/1/19 To 10/1/20
Α.	Active Members		
1.	Number Included in Last Valuation	119	115
2.	New Members Included in Current Valuation	0	14
3.	Non-Vested Employment Terminations	(2)	(4)
4.	Vested Employment Terminations	0	(1)
5.	DROP Participation	(6)	(2)
6.	Service Retirements	0	0
7.	Disability Retirements	0	(2)
8.	Deaths	0	(1)
9.	Transfer from General Employees	0	0
10.	Number Included in This Valuation	111	119
В.	Terminated Vested Members		
1.	Number Included in Last Valuation	2	2
2.	Additions from Active Members	0	1
3.	Lump Sum Payments/Refund of Contributions	0	0
4.	Payments Commenced	0	(1)
5.	Deaths	0	0
6.	Other	0	0
7.	Number Included in This Valuation	2	2
C.	DROP Plan Members		
1.	Number Included in Last Valuation	16	20
2.	Additions from Active Members	6	2
3.	Retirements	(4)	(6)
4.	Deaths Resulting in No Further Payments	0	0
5.	Other (Death Resulting in Survivor Benefits)	0	0
6.	Number Included in This Valuation	18	16
D.	Service Retirees, Disability Retirees and Beneficia	aries	
1.	Number Included in Last Valuation	111	102
2.	Additions from Active Members	0	3
3.	Additions from Terminated Vested Members	0	1
4.	Additions from DROP Plan	4	6
5.	Deaths Resulting in No Further Payments	0	(1)
6.	Deaths Resulting in New Survivor Benefits	0	0
7.	End of Certain Period - No Further Payments	0	0
8.	Other Lump Sum Distributions	0	0
9.	Number Included in This Valuation	115	111



ACTIVE PARTICIPANT DISTRIBUTION

AVG PAY 0 0 59,649 0 </th <th></th> <th></th> <th></th> <th></th> <th>Years</th> <th>of Service</th> <th>to Valuatio</th> <th>on Date</th> <th></th> <th></th> <th></th> <th></th>					Years	of Service	to Valuatio	on Date				
TOT PAY AVG PAY 0	Age Group	0-1	1-2	2-3	3-4	4-5	5-9	10-14	15-19	20-24	25+	Totals
TOT PAY AVG PAY 0	15-19 NO.	0	0	0	0	0	0	0	0	0	0	0
AVG PAY 0 </td <td></td> <td></td> <td>-</td> <td></td> <td>-</td> <td></td> <td></td> <td>-</td> <td>-</td> <td>-</td> <td></td> <td>0</td>			-		-			-	-	-		0
Z0-24 NO. 0 0 1 0			-	-	-	-	-	-	-	-	•	0
TOT PAY AVG PAY 0 0 59,649 0 0 0 0 0 0 0 0 0 0 59,64 25-29 NO. 0 6 2 0 2 4 0 <	AVG PAT	0	0	0	0	0	0	0	0	0	0	0
AVG PAY 0 0 59,649 0 </td <td>20-24 NO.</td> <td>0</td> <td>0</td> <td></td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>1</td>	20-24 NO.	0	0		0	0	0	0	0	0	0	1
25-29 NO. 0 6 2 0 2 4 0 0 0 0 TOT PAY AVG PAY 0 61,801 68,874 0 80,245 102,078 0 0 0 0 0 1,077,33 30-34 NO. 0 5 0 1 4 6 1 0 0 0 0 0 1,375,98 30-34 NO. 0 50,260 0 80,021 331,402 551,249 112,010 0 0 0 1,375,98 AVG PAY 0 62,764 62,773 0 136,149 781,312 553,487 1,157,392 0 0 2,753,83 AVG PAY 0 62,764 62,773 0 168,075 91,791,795 1,563,718 0 0 2,745,03 AVG PAY 0 0 0 0 79,535 103,329 113,114 11,1694 0 120,41 AVG PAY 0 0	ΤΟΤ ΡΑΥ	0	0		0	0	0	0	0	0	0	59,649
TOT PAY AVG PAY 0 370,808 137,747 0 160,490 408,312 0 0 0 0 1,077,33 30-34 NO. 0 5 0 1 4 6 1 0 0 0 0 0 0 76,93 30-34 NO. 0 55 0 1 4 6 1 0 0 0 0 1,375,98 AVG PAY 0 60,260 0 80,021 82,851 91,875 112,010 0 0 0 1,375,98 3CG PAY 0 62,764 62,773 0 136,149 781,312 553,471 1,157,392 0 101,99 40-44 NO. 0 0 0 0 1 3 7 14 0 0 2,745,373 AVG PAY 0 0 0 0 1 3 7 14 0 0 2,745,373 AVG PAY 0 0<	AVG PAY	0	0	59,649	0	0	0	0	0	0	0	59,649
AVG PAY 0 61,801 68,874 0 80,245 102,078 0 0 0 76,93 30-34 NO. 0 5 0 1 4 6 1 0 0 0 1,375,94 AVG PAY 0 60,260 0 80,021 831,402 551,249 112,010 0 0 0 1,375,94 AVG PAY 0 62,764 62,773 0 136,149 781,312 553,487 1,157,392 0 0 2,753,87 AVG PAY 0 62,764 62,773 0 68,075 97,664 110,697 115,739 0 2,754,00 101,997 40-44 NO. 0 0 0 0 791,795 1,563,718 0 0 2,745,00 AVG PAY 0 0 0 0 0 313,114 111,694 0 129,84 AVG PAY 0 0 0 0 0 327,646 1,33,	25-29 NO.	0	6	2	0	2	4	0	0	0	0	14
30-34 NO. 0 5 0 1 4 6 1 0 0 1,375,39 AVG PAY 0 60,260 0 80,021 331,402 551,249 112,010 0 0 60,260 80,921 331,402 551,249 112,010 0 0 60,260 80,921 331,402 551,249 112,010 0 0 60,260 80,921 325,39 0 136,149 781,312 553,487 1,157,392 0 0 2,753,83 101,957 14 0 0 2,753,83 101,957 111,0697 115,739 0 62,764 62,773 0 68,075 97,664 110,697 115,739 0 0 2,745,03 101,957 12,114 111,694 0 0 2,745,03 103,959 135,728 0 109,80 42,448,00 0 0 0 109,80 42,449,00 12,80,84 12,80,84 12,80,84 12,80,84 12,80,84 12,80,84 12,80,84	ΤΟΤ ΡΑΥ	0	370,808	137,747	0	160,490	408,312	0	0	0	0	1,077,357
TOT PAY AVG PAY 0 301,298 0 80,021 331,402 551,249 112,010 0 0 0 1,375,92 3S-39 NO. 0 1 1 0 2 8 5 10 0 0 2,753,83 AVG PAY 0 62,764 62,773 0 136,149 781,312 553,487 1,157,392 0 0 2,753,83 AVG PAY 0 62,764 62,773 0 68,075 97,664 110,697 115,739 0 0 2,745,03 40-44 NO. 0 0 0 0 1 3 7 14 0 0 2,745,03 AVG PAY 0 0 0 0 79,535 103,329 113,114 11,694 0 0 109,84 45-49 NO. 0 0 0 0 0 3 1 1 0 2 2,745,03 AVG PAY 0 0 0 0 0 3 1 1 0,63 1 1,806,84	AVG PAY	0	61,801	68,874	0	80,245	102,078	0	0	0	0	76,954
AVG PAY 0 60,260 0 80,021 82,851 91,875 112,010 0 0 0 80,94 35-39 NO. 0 1 1 0 2 8 5 10 0 0 2,753,83 AVG PAY 0 62,764 62,773 0 68,075 97,664 110,697 115,739 0 2,753,83 40-44 NO. 0 0 0 0 1 3 7 14 0 0 2,745,03 AVG PAY 0 0 0 0 79,535 103,329 113,114 11,694 0 0 109,86 45-49 NO. 0 0 0 0 0 3 11 1 0 2,745,03 AVG PAY 0 0 0 0 0 327,646 1,343,469 135,728 0 1,806,84 AVG PAY 0 0 0 0 0 0 1,258,34	30-34 NO.	0	5	0	1	4	6	1	0	0	0	17
AVG PAY 0 60,260 0 80,021 82,851 91,875 112,010 0 0 0 80,94 35-39 NO. 0 1 1 0 2 8 5 10 0 0 2,753,83 AVG PAY 0 62,764 62,773 0 68,075 97,664 110,697 115,739 0 2,753,83 40-44 NO. 0 0 0 0 1 3 7 14 0 0 2,745,03 AVG PAY 0 0 0 0 79,535 103,329 113,114 11,694 0 0 109,86 45-49 NO. 0 0 0 0 0 3 11 1 0 2,745,03 AVG PAY 0 0 0 0 0 327,646 1,343,469 135,728 0 1,806,84 AVG PAY 0 0 0 0 0 0 1,258,34	ΤΟΤ ΡΑΥ	0	301,298	0	80,021	331,402	551,249	112,010	0	0	0	1,375,980
TOT PAY AVG PAY 0 62,764 62,773 0 136,149 781,312 553,487 1,157,392 0 2,753,83 40-44 NO. 0 62,764 62,773 0 68,075 97,664 110,697 115,739 0 0 101,993 40-44 NO. 0 0 0 0 0 1 3 7 14 0 0 2,753,83 101,993 40-44 NO. 0 0 0 0 0 79,535 309,987 791,795 1,563,718 0 2,745,03 AVG PAY 0 0 0 0 0 79,535 103,329 113,114 111,694 0 0 2,745,03 AVG PAY 0 0 0 0 0 0 3 11 1 0 2,745,03 45-49 NO. 0 0 0 0 0 0 327,646 1,34,469 135,728 0 1,806,84 405 PAY 0 0 0 0 0 0 0 1,110,219 148,		0	60,260	0						0	0	
AVG PAY 0 62,764 62,773 0 68,075 97,664 110,697 115,739 0 101,993 40-44 NO. 0 0 0 0 0 1 3 7 14 0 0 2,745,033 AVG PAY 0 0 0 0 79,535 103,329 113,114 111,694 0 0 109,813 AVG PAY 0 0 0 0 0 0 3 1 1 0 2,745,033 AVG PAY 0 0 0 0 0 3 11 1 0 109,813 45-49 NO. 0 0 0 0 0 3 327,646 1,343,469 135,728 0 1,806,84 AVG PAY 0 0 0 0 0 0 109,215 122,134 135,728 0 120,453 50-54 NO. 0 0 0 0 0 0 117,834 0 0 123,358 148,129 0 125,834	35-39 NO.	0	1	1	0	2	8	5	10	0	0	27
AVG PAY 0 62,764 62,773 0 68,075 97,664 110,697 115,739 0 101,993 40-44 NO. 0 0 0 0 0 1 3 7 14 0 0 2,745,033 AVG PAY 0 0 0 0 79,535 103,329 113,114 111,694 0 0 109,813 AVG PAY 0 0 0 0 0 0 3 1 1 0 2,745,033 AVG PAY 0 0 0 0 0 3 11 1 0 109,813 45-49 NO. 0 0 0 0 0 3 327,646 1,343,469 135,728 0 1,806,84 AVG PAY 0 0 0 0 0 0 109,215 122,134 135,728 0 120,453 50-54 NO. 0 0 0 0 0 0 117,834 0 0 123,358 148,129 0 125,834	ΤΟΤ ΡΑΥ	0	62,764	62,773	0	136,149	781,312	553,487	1,157,392	0	0	2,753,877
TOT PAY AVG PAY 0 0 0 79,535 309,987 791,795 1,563,718 0 0 2,745,03 AVG PAY 0 0 0 0 0 79,535 103,329 113,114 111,694 0 0 109,80 45-49 NO. 0 0 0 0 0 0 0 3 11 1 0 1,806,84 45-49 NO. 0 0 0 0 0 0 3 11 1 0 1,806,84 AVG PAY 0 0 0 0 0 0 327,646 1,343,469 135,728 0 1,806,84 AVG PAY 0 0 0 0 0 0 0 109,215 122,134 135,728 0 128,68 50-54 NO. 0 0 0 0 0 0 1,110,219 148,129 0 1,258,32 55-59 NO. 0 117,834 0 0 0 0 0 0 0 0 0 0 <th< td=""><td></td><td>0</td><td>62,764</td><td>62,773</td><td>0</td><td>68,075</td><td>97,664</td><td>110,697</td><td>115,739</td><td>0</td><td>0</td><td></td></th<>		0	62,764	62,773	0	68,075	97,664	110,697	115,739	0	0	
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INACTIVE PARTICIPANT DISTRIBUTION

								sed with
	Termina	ted Vested	Disabled		R	etired	Beneficiary	
		Total		Total		Total		Total
Age	Number	Benefits	Number	Benefits	Number	Benefits	Number	Benefits
Under 20	-	-	-	-	-	-	-	-
20-24	-	-	-	-	-	-	-	-
25-29	-	-	-	-	-	-	-	-
30-34	-	-	-	-	-	-	-	-
35-39	-	-	-	-	-	-	-	-
40-44	2	77,127	1	53,975	2	195,657	-	-
45-49	-	-	- 1	45,138	14	1,162,310	1	78,035
50-54	-	-	1	47,281	16	1,197,260	-	-
55-59	-	-	1	47,054	21	1,755,040	1	29,935
60-64	-	-	-	-	18	1,071,634	1	57,724
65-69	-	-	-	-	23	1,087,398	1	34,603
70-74	-	-	-	-	17	974,585	1	44,495
75-79	-	-	-	-	5	219,328	2	45,246
00.04					4	27.067	2	67.000
80-84	-	-	-	-	1	37,067	3	67,090
85-89	-	-	-	-	-	-	1	6,951
90-94	-	-	-	-	-	-	1	16,142
95-99	-	-	-	-	-	-	-	-
100 & Over	-	-	-	-	-	-	-	-
Total	2	77,127	4	193,448	117	7,700,279	12	380,221
Average Age		42		49		61		74
Liability		830,675		2,968,202		100,476,121		3,872,001



SECTION F

SUMMARY OF PLAN PROVISIONS

SUMMARY OF PLAN PROVISIONS

A. Ordinances

Plan established under the Code of Ordinances for the City of Boynton Beach, Florida, Chapter 18, Article IV, and was most recently amended under Ordinance No. 20-003 passed and adopted on its second reading on February 18, 2020. The Plan is also governed by certain provisions of Chapter 175, <u>Florida Statutes</u>, Part VII, Chapter 112, <u>Florida Statutes</u> and the Internal Revenue Code.

B. Effective Date

Date was not provided.

C. Plan Year

October 1 through September 30

D. Type of Plan

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

E. Eligibility Requirements

All full-time firefighters are eligible to participate. Members hired before February 5, 2019 are classified as "Tier 1 members" and members hired on or after February 5, 2019 are classified as "Tier 2 members."

F. Credited Service

Service is measured as the total length of employment for which the firefighter received Compensation from the City and made Member Contributions to the plan. No service is credited for any periods of employment for which the member received a refund of their contributions.

G. Compensation

Cash compensation exclusive of bonuses and incentive pay, but including overtime earnings not to exceed 300 hours and lump sum payment of accumulated unused sick and vacation hours, but not to exceed the number of accumulated sick and vacation hours as of September 27, 2013.

H. Final Average Compensation (FAC)

The average of Compensation over the highest 3 years during the last 10 years of Credited Service.



I. Normal Retirement

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

	<u>Tier 1:</u> (1) age 55 and 10 years of Credited Service, or (2) 20 years of Credited Service regardless of age.
	<u>Tier 2:</u> (1) age 55 and 10 years of Credited Service, or (2) 25 years of Credited Service regardless of age.
Benefit:	3.00% of FAC multiplied by years of Credited Service.
	Effective October 1, 2018, for all Firefighters who are not eligible for Normal Retirement as of October 1, 2018 the normal retirement benefit shall be limited to a maximum benefit cap, initially set at \$95,000 per year. This maximum benefit cap will be increased annually beginning on October 1, 2020 (and on each October 1 st thereafter) by 1.5%. As of October 1, 2021, the maximum benefit cap is \$97,871 per year. In accordance with Chapter 175 minimum benefit provisions, in no event will a Firefighter's retirement benefit be less than 2.75% of FAC multiplied by years of Credited Service.

Normal Form

- of Benefit: 10 Years Certain and Life thereafter; other options are also available.
- COLA: Each retiree, beneficiary and disability retiree who retires or enters the DROP on or after December 1, 2006 will receive a 2.0% increase in benefits on October 1st of each year beginning 5 years after retirement.

J. Early Retirement

Eligibility:	A member may elect to retire earlier than the Normal Retirement Eligibility upon attainment of age 50 and 10 years of Credited Service.
Benefit:	The Normal Retirement Benefit is reduced by 3.0% for each year by which the Early Retirement date precedes the Normal Retirement date.
	Effective October 1, 2018, for all Firefighters who are not eligible for Normal Retirement as of October 1, 2018 the early retirement benefit shall be limited to a maximum benefit cap, initially set at \$95,000 per year (\$97,871 per year as of October 1, 2021), applied to the normal retirement benefit before reflecting any reductions for early retirement.
Normal Form of Benefit:	10 Years Certain and Life thereafter; other options are also available.
COLA:	Each retiree, beneficiary and disability retiree who retires or enters the DROP on or after December 1, 2006 will receive a 2.0% increase in benefits on October 1 st of each year

beginning 5 years after retirement.



K. Delayed Retirement

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

L. Service Connected Disability

- Eligibility: Any member who becomes totally and permanently disabled as a result of an act occurring in the performance of service for the City is immediately eligible for a disability benefit.
- Benefit: 66 2/3% of Compensation in effect on the date of disability, reduced by amounts payable under Social Security PIA with a minimum benefit equal to 42% of FAC.

Effective October 1, 2018, for all Firefighters who are not eligible for Normal Retirement as of October 1, 2018 the disability benefit shall be limited to a maximum benefit cap, initially set at \$95,000 per year. As of October 1, 2021, the maximum benefit cap is \$97,871 per year.

Normal Form

- of Benefit: Payable until death or recovery from disability; other options are also available.
- COLA: Each disability retiree who retires on or after December 1, 2006 will receive a 2.0% increase in benefits on October 1st of each year beginning 5 years after retirement.

M. Non-Service Connected Disability

Eligibility:	Any member with 10 years of Credited Service who becomes totally and permanently disabled is immediately eligible for a disability benefit.
Benefit:	2.5% of FAC multiplied by years of Credited Service with a minimum benefit equal to 25% of FAC.
	Effective October 1, 2018, for all Firefighters who are not eligible for Normal Retirement as of October 1, 2018 the disability benefit shall be limited to a maximum benefit cap, initially set at \$95,000 per year. As of October 1, 2021, the maximum benefit cap is \$97,871 per year.
Normal Form of Benefit:	Payable until death or recovery from disability; other options are also available.
COLA:	Each disability retiree who retires on or after December 1, 2006 will receive a 2.0% increase in benefits on October 1 st of each year beginning 5 years after retirement.



N. Death in the Line of Duty

Eligibility:	Members are eligible for survivor benefits after the completion of 10 or more years of Credited Service.
Benefit:	Spouse will receive 3.0% of the member's FAC multiplied by years of Credited Service.
	Effective October 1, 2018, for all Firefighters who are not eligible for Normal Retirement as of October 1, 2018 the death benefit shall be limited to a maximum benefit cap, initially set at \$95,000 per year. As of October 1, 2021, the maximum benefit cap is \$97,871 per year.
Normal Form	
of Benefit:	Paid for the life of the spouse with 10 years certain.
COLA:	Each surviving spouse whose benefits began on or after December 1, 2006 will receive a 2.0% increase in benefits on October 1 st of each year beginning 5 years after benefits began.

The beneficiary of a plan member with less than 10 years of Credited Service at the time of death will receive a refund of the member's accumulated contributions.

O. Other Pre-Retirement Death

Eligibility:	Members are eligible for survivor benefits after the completion of 10 or more years of Credited Service.
Benefit:	Spouse will receive 3.0% of the member's FAC multiplied by years of Credited Service.
	Effective October 1, 2018, for all Firefighters who are not eligible for Normal Retirement as of October 1, 2018 the death benefit shall be limited to a maximum benefit cap, initially set at \$95,000 per year. As of October 1, 2021, the maximum benefit cap is \$97,871 per year.
Normal Form	
of Benefit:	Paid for the life of the spouse with 10 years certain.
COLA:	Each surviving spouse whose benefits began on or after December 1, 2006 will receive a 2.0% increase in benefits on October 1 st of each year beginning 5 years after benefits began.

The beneficiary of a plan member with less than 10 years of Credited Service at the time of death will receive a refund of the member's accumulated contributions.

P. Post Retirement Death

Benefit determined by the form of benefit elected upon retirement.



Q. Optional Forms

In lieu of electing the Normal Form of benefit, the optional forms of benefits available to all retirees are a Single Life Annuity or the 50%, 66 2/3%, 75% and 100% Joint and Survivor options. A Social Security option is also available for members retiring prior to the time they are eligible for Social Security retirement benefits.

R. Vested Termination

- Eligibility: A member has earned a non-forfeitable right to Plan benefits after the completion of 10 years of Credited Service.
- Benefit: The benefit is the member's accrued Normal Retirement Benefit as of the date of termination. For Tier 1 members, benefit begins on the date that would have been the member's Normal Retirement date had they continued employment. For Tier 2 members, benefit begins at age 55. Alternatively, members can elect a reduced Early Retirement benefit any time after age 50.

Effective October 1, 2018, for all Firefighters who are not eligible for Normal Retirement as of October 1, 2018 the deferred vested retirement benefit shall be limited to a maximum benefit cap, initially set at \$95,000 per year (\$97,871 per year as of October 1, 2021), applied to the normal retirement benefit before reflecting any reductions for early retirement.

Normal Form
of Benefit:10 Years Certain and Life thereafter; other options are also available.COLA:Each member who retires on or after December 1, 2006 will receive a 2.0% increase in

benefits on October 1st of each year beginning 5 years after retirement.

Members terminating employment with less than 10 years of Credited Service will receive a refund of their own accumulated contributions.

S. Refunds

- Eligibility: All members terminating employment with less than 10 years of Credited Service are eligible. Optionally, vested members (those with 10 or more years of Credited Service) may elect a refund in lieu of the vested benefits otherwise due.
- Benefit: Refund of the member's contributions.

T. Member Contributions

12% of Compensation.



U. Employer Contributions

Chapter 175 Premium Tax Refunds and any additional amount determined by the actuary needed to fund the plan properly according to State laws.

V. Cost of Living Increases

Each retiree, beneficiary and disability retiree who retires or enters the DROP on or after December 1, 2006 will receive a 2.0% increase in benefits on October 1st of each year beginning 5 years after retirement.

W. 13th Check

In years in which a cumulative net actuarial gain has been determined, there shall be payable an ad-hoc thirteenth check paid in December.

X. Deferred Retirement Option Plan

Eligibility:	Plan members who have less than 30 years of Credited Service but have met one of the following criteria are eligible for the DROP:					
	(1) age 55 with 10 years of Credited Service, or(2) 20 years of Credited Service (25 years for Tier 2 members) regardless of age.					
	Members who meet eligibility must submit a written election to participate in the DROP.					
Benefit:	The member's Credited Service and FAC 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 FAC.					
Maximum DROP Period:	The earlier of 5 years of participation in the DROP or 30 years of employment.					
Interest Credited:	For members hired before January 21, 2020, the member's DROP account is credited at an interest rate based upon the option chosen by the member. Members must elect from 1 of the 3 following options:					
	 Gain or loss at the same rate earned by the Plan, or Guaranteed rate of 7%, or The rate earned by a self-directed account utilizing mutual funds selected by the Board. 					
	For members hired on or after January 21, 2020, the member's DROP account is credited at the same rate earned by the Plan, no less than 0% and no more than 8%.					



Normal Form of Benefit:	For members hired before January 21, 2020: Options include a lump sum or equal periodic payments.
	For members hired on or after January 21, 2020: Full lump sum payment. Such members must also withdraw the DROP balance within 45 days of separating from employment and exiting the DROP.
COLA:	Each member who enters the DROP on or after December 1, 2006 will receive a 2.0% increase in benefits on October 1 st of each year beginning 5 years after retirement.

Y. Other Ancillary Benefits

There are no ancillary retirement type benefits not required by statutes but which might be deemed a City of Boynton Beach Municipal Firefighters' Pension Trust Fund liability if continued beyond the availability of funding by the current funding source.

Z. Changes from Previous Valuation

There have been no changes since the prior valuation.

