Actuarial Valuation Report

City of Panama City Beach

Firefighters' Pension Plan

Funding Results for the Year Ending September 30, 2024

Empower Results®

Ms. Holly J. White
Assistant City Manager
City of Panama City Beach
17007 Panama City Beach Parkway
Panama City Beach, FL 32413

Re: *Panama City Beach Firefighters' Pension Plan*

Dear Ms. White:

In accordance with your request, we have performed an actuarial valuation for the captioned pension plan as of October 1, 2023. The purposes of this report are to provide the contribution requirements for the Plan Year beginning October 1, 2023, and ending September 30, 2024, including measurements of the funded status of the plan. Disclosures for financial accounting were previously provided in a separate report dated February 15, 2024 and are not included in this report.

This report is intended for the sole use of the City of Panama City Beach and the Pension Board, and is intended only to supply information for the City and Board to comply with the stated purposes of the report and may not be appropriate for other purposes. Reliance on information contained in this report by anyone for other than the intended purposes, puts the relying entity at risk of being misled because of confusion or failure to understand applicable assumptions, methodologies, or limitations of the report's conclusions. Accordingly, no person or entity, including the City of Panama City Beach and the Pension Board, should base any representations or warranties in any agreement on any statements or conclusions contained in this report, without the written consent of Aon.

This report includes a Summary of Major Plan Provisions and a description of the Actuarial Basis used in the valuation. We relied on employee and financial data provided by the City. The Actuarial Cost Method used is considered acceptable under the Rules of the Department of Administration, Division of Retirement, Chapter 60T-1, Local Retirement Systems' Actuarial Reports.

A valuation model was used to develop the liabilities for the October 1, 2023 valuation. The valuation model relies on ProVal software, which was developed by Winklevoss Technologies, LLC. Experts within Aon selected this software and determined it is appropriate for performing valuations. We coded and reviewed the software for the provisions, assumptions, methods, and data of the Panama City Beach Firefighters' Pension Plan. The undersigned relied on experts at Aon for the development of the capital market assumptions models underlying the discount rate and the expected rate of return.

City of Panama City Beach
Firefighters' Pension Plan

STATEMENT BY ENROLLED ACTUARY

This actuarial valuation and/or cost determination was prepared and completed by the undersigned or under our direct supervision, and I acknowledge responsibility for the results. To the best of our knowledge, the results are complete and accurate, and in our opinion, the techniques and assumptions used are reasonable and meet the requirements and intent of Part VII, Chapter 112, Florida Statutes. There is no benefit or expense to be provided by the plan and/or paid from the plan's assets for which liabilities or current costs have not been established or otherwise provided for 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.

Respectfully submitted,

Stephen Lambert-Oswald, F.S.A., E.A., M.A.A.A.
Enrollment No. 23-07225

Mitzi Silverstein, F.S.A., E.A., M.A.A.A.

August 2024

Discussion of Results

October 1, 2023

The results of the actuarial valuation of the Panama City Beach Firefighters' Pension Plan as of October 1, 2023, are contained in this report. The actuarial valuation is based upon census data and trust fund financial statements provided to us by the City.

The major results of the actuarial valuation are discussed below.

Minimum Required Contribution

The State minimum required contribution to be deposited by the City is developed on pages 3 and 4. The minimum required contribution includes recognition of excess contributions made in prior years.

	Plan Year Ended	
	09/30/23	**09/30/24**
State Minimum Required Contribution	$ 789,231	$ 916,495
Percent of Participants' Compensation	23.77%	24.83%

Under a new state interpretation, the actual required contribution is not the dollar amount shown, which is based on estimated Participants’ Compensation Below Normal Retirement Age. Rather it is to be based on the percentage shown here and actual Participants’ Compensation Below Normal Retirement Age for the Plan Year.

Actuarial Experience

The approximate time-weighted rate of return on the Actuarial Value of Assets was 3.51% for the plan year ended September 30, 2023. Investment experience compounded over the last 5 years has been approximately 6.66% per year. According to the Public Plans Data, the average expected rate of return in 2023 was 6.9% and the Florida Retirement System uses a rate of return of 6.7%. Salary increase experience was observed to be 11.1%, greater than the assumed salary increase of 6.0%. Salary experience compounded over the last 5 years has been approximately 7.9% per year.

Funded Status

One of the best measures of the Funded Status of a defined benefit plan is considered to be the level of funding of the Accumulated Plan Benefits and Vested Benefits. Accumulated Plan Benefits are those future benefit payments that are attributable to employees' service rendered prior to the valuation date based on employees' actual pay histories (or estimates thereof). This measurement of benefits does not take into account the effect of potential future salary increases. Vested Benefits are those benefits which become nonforfeitable after 10 years of Credited Service or which are attributable to employee contributions.

Based on this measurement of Funded Status, using the Actuarial Value of Assets and the discount rate of 7.00%, the plan appears adequately funded as of October 1, 2023. Funded status is highly dependent on the market value of assets and the discount rate used to measure the liabilities. The higher the discount rate, the lower the liabilities. Use of an above average discount rate or an above-market asset value will result in a higher funded status, but it is not an indication of the security of the pension benefits or the adequacy of funding.

	10/01/22	**10/01/23**
NET ASSETS AVAILABLE FOR BENEFITS*	$ 20,429,414	$ 21,307,579
Discount Rate	7.00%	7.00%
ACTUARIAL PRESENT VALUE OF ACCUMULATED PLAN BENEFITS		
TOTAL VESTED BENEFITS	$ 18,602,319	$ 19,645,146
Percent Funded	110%	108%
TOTAL ACTUARIAL PRESENT VALUE OF ACCUMULATED PLAN BENEFITS	$ 19,868,680	$ 20,715,242
Percent Funded	103%	103%

Another, more traditional measure of the Funded Status uses the Entry Age Normal Accrued Liability. This accrued liability equals the Present Value of Benefits less the Present Value of Future Entry Age Normal Costs. (See the description of the entry age normal method on the "Actuarial Cost Method" pages herein.) This accrued liability is independent of the actual plan assets and therefore may be a more reasonable "mile post" of how funded the Plan should be. It recognizes future compensation increases and is a measure of where the level of assets should be to date if all participants are proportionately funded over their individual careers as a level percentage of each participant's compensation. The figures below show the funded status disclosed under GASB 67 for the fiscal years ending September 30 of 2022 and 2023, respectively:

	10/01/22	**10/01/23**
MARKET VALUE OF ASSETS	$ 17,801,272	$ 19,857,011
ENTRY AGE NORMAL ACCRUED LIABILITY	$ 24,029,646	$ 25,570,601
Funded Ratio	74.08%	77.66%

* Actuarial Value of Assets

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Basis for Valuation

City of Panama City Beach
Firefighters' Pension Plan

Development of Normal Cost for State Minimum Required Contribution

October 1, 2023

		10/1/2022	10/1/2023
1.	Number of Participants		
	Active	55	58
	Terminated with Vested Benefits	2	4
	Retirees and Beneficiaries	19	19
	Total	76	81
2.	Participant’s Compensation		
	a. Below Normal Retirement Age	$ 3,320,668	$ 3,691,771
	b. Beyond Normal Retirement Age	-	134,800
	c. Total	$ 3,320,668	$ 3,826,571
3.	Present Value of Benefits		
	Active	$ 16,075,211	$ 17,935,371
	Terminated with Vested Benefits	231,489	391,490
	Retirees	14,593,192	14,545,569
	Total	$ 30,899,892	$ 32,872,430
4.	Entry Age Normal Accrued Liability	$ 23,894,702	$ 25,206,984
5.	Actuarial Value of Assets	$ 20,429,414	$ 21,307,579
6.	Unfunded Actuarial Accrued Liability	$ 3,465,288	$ 3,899,405
7.	Past Excess Contributions	$ 4,479	$ 1,879
8.	Normal Cost		
	Retirement	$ 597,692	$ 670,606
	Death	7,374	8,191
	Disability	12,883	14,317
	Withdrawal	183,911	206,005
	Total	$ 801,860	$ 899,119

City of Panama City Beach
Firefighters' Pension Plan

State Minimum Required Contribution

October 1, 2023

	Plan Year Ended	
	9/30/2023	**9/30/2024**
1. Normal Cost	$ 801,860	$ 899,119
2. Employee Contributions	$ (166,690)	$ (199,406)
3. Amortization of Actuarial Accrued Liability	$ 285,369	$ 352,561
4. Interest Adjustment on (1), (2), and (3) for Quarterly Payment	$ 31,674	$ 36,207
5. Expenses		
Current Year Estimate Equal to Prior Year's Actual	$ 100,369	$ 118,647
Make-up for Shortfall in Prior Year's Estimate	28,013	18,278
Total	$ 128,382	$ 136,925
6. Estimated State Premium Tax Refund (Equal to Prior Year's Actual Refund and Excluding Excess Premium Tax Revenues That Have Not Been Used to Provide Additional Benefits)	$ 286,731	$ 306,967
7. Past Excess Contributions plus Interest Adjusted for Quarterly Payment	$ 4,633	$ 1,944
8. Minimum Required Contribution by City for Fiscal Year = (1) + (2) + (3) + (4) + (5) – (6) – (7)	$ 789,231	$ 916,495
9. Percent of Participants' Compensation Below Normal Retirement Age*	23.77%	24.83%

* The actual required contribution is based on this percentage of actual, not estimated, Participants' Compensation Below Normal Retirement Age.

City of Panama City Beach
Firefighters' Pension Plan

Unfunded Frozen Initial and Supplemental Liabilities

October 1, 2023

	Initial Amount to be Amortized	Beginning Amortization Period	Original Amortization Period (Years)	Years Remaining	(BOY) Annual Amortization Amount	Unamortized Balance as of 10/1/2023
Redetermined Liability (Fresh Start)*	$ 2,905,181	10/1/2020	20	17	$ 222,545	$2,838,126
10/1/2021 Gain/Loss	$ (109,056)	10/1/2021	10	8	$ (13,652)	$ (95,944)
10/1/2022 Gain/Loss	$ 699,692	10/1/2022	10	9	$ 85,037	$ 660,331
10/1/2023 Gain/Loss	$ 496,892	10/1/2023	10	10	$ 58,631	$ 496,892
					$ 352,561	

1. Unamortized Balance as of 10/1/2023	$ 3,899,405
2. Past Excess Contributions	1,879
3. Remaining Unfunded Liabilities = (1) - (2)	$ 3,897,526

*Reducing discount rate from 7.75% to 7.00% and updating funding method. The amortization assumes a 7.00% discount rate and an increasing annuity with a 3.00% payroll growth assumption.

City of Panama City Beach
Firefighters' Pension Plan

Schedule Illustrating the Amortization of Unfunded Liabilities Existing This Date

October 1, 2023

October 1	Liability
2023	3,899,405
2024	3,795,123
2025	3,672,223
2026	3,529,063
2031	2,442,592
2036	1,235,750
2037	972,561
2038	680,458
2039	357,102
2040	-

The first figure is the Unfunded Liability as of the current valuation date. For each year thereafter, the preceding year's Unfunded Liability is reduced by the annual amortization amount shown on the prior page and increased with interest at 7.00% per annum.

Thus the remaining amortization period as of the October 1, 2023, valuation is 2039 less 2023, or 16 years.

City of Panama City Beach
Firefighters' Pension Plan

Past Excess Contributions (State Requirements)

October 1, 2023

	Plan Year Ended	
	9/30/2022	9/30/2023
Charges:		
Required City Contribution, per State*	618,676	851,975
State (Estimated)	282,739	286,731
Interest	31,016	39,181
Total Charges	$ 932,431	$ 1,177,887
Credits:		
City Contributions	644,790	856,137
State Contributions (Excluding Excess Premium Tax Revenues That Have Not Been Used to Provide Additional Benefits)	260,955	284,386
Interest	31,165	39,243
Total Credits	$ 936,910	$ 1,179,766
Balance:		
Excess Contribution Carried Forward	$ 4,479	$ 1,879
Deficiency Carried Forward	$ -	$ -

*Starting in the year ending September 30, 2021, the Excess Contribution is reflected in the "Required Contribution, per State" line, so no Excess is carried forward

City of Panama City Beach
Firefighters' Pension Plan

Market Value of Assets

October 1, 2023

	10/1/2022	10/1/2023
Assets:		
Cash	$ 529,253.71	$ 239,560.00
Certificates of Deposit	-	-
Government and Corporate Bond Funds	857,956.49	4,523,298.00
Real Estate and Equity Funds	16,197,398.23	14,518,859.48
Due from City Funds	-	-
Due from State of Florida	294,279.24	-
Accrued Interest	-	-
Miscellaneous Receivable	(32,516.11)	619,501.72
Total Assets	$ 17,846,371.56	$ 19,901,219.20
Liabilities and Fund Balance:		
Liabilities:		
Accounts Payable	$ (33,447.73)	$ (44,208.20)
Refunds or Benefits Payable	(11,651.69)	$ -
Due Other Funds	-	-
Total Liabilities	$ (45,099.42)	$ (44,208.20)
Pension Fund Balance:	$ 17,801,272.14	$ 19,857,011.00

City of Panama City Beach
Firefighters' Pension Plan

Reconciliation of Assets (Market Value)

October 1, 2023

	Plan Year Ended	
	09/30/2022	09/30/2023
Revenues:		
City Contributions	$ 644,790.03	$ 856,136.60
Employee Contributions	165,631.92	$ 193,598.14
State Contributions	294,279.24	$ 366,540.02
Repayment of Contributions	-	-
Interest & Dividends	365,156.21	416,382.81
Unrealized/Realized Gains (Losses)	(4,353,756.56)	1,351,445.67
Commissions	-	-
Total Revenues	$ (2,883,899.16)	$ 3,184,103.24
Expenses:		
Pension Payments	$ 1,319,896.62	$ 981,831.75
Contribution Refunds	77,818.97	27,886.52
DROP Payments	-	-
Investment Expenses	61,076.27	79,965.79
Other Expenses	39,292.39	38,680.80
Total Expenses	$ 1,498,084.25	$ 1,128,364.86
Net Income:	$ (4,381,983.41)	$ 2,055,738.38
Fund Balance, Beginning of Year:	$ 22,183,255.55	$ 17,801,272.14
Fund Balance, End of Year:	$ 17,801,272.14	$ 19,857,010.52

City of Panama City Beach
Firefighters' Pension Plan

Investment Gain/(Loss)

October 1, 2023

1. Date of Actuarial Value of Assets:		10/1/2023		10/1/2022		10/1/2021		10/1/2020
2. Market Value as of Prior Year (including receivable contributions)	$	17,801,272	$	22,183,256	$	18,308,303	$	17,152,870
3. Receivable Contribution included above	$	-	$	-	$	-	$	-
4. Market Value Excluding Receivable (2) - (3)	$	17,801,272	$	22,183,256	$	18,308,303	$	17,152,870
5. Employer, Employee & State Contributions (made for the year, i.e., excluding the receivable contribution, item (3), but including contributions made after the end of the year with no expected return thereon)	$	1,416,275	$	1,104,701	$	1,001,010	$	814,677
6. Benefit Distributions	$	1,009,718	$	1,397,716	$	855,938	$	1,341,145
7. Administrative Expenses	$	118,647	$	100,369	$	72,356	$	77,611
8. Expected Return %		7.00%		7.00%		7.00%		7.75%
a. Item (4) for 1 year	$	1,246,089	$	1,552,828	$	1,281,581	$	1,329,347
b. Item (3) for partial & (5) for 1/2 year		48,663		37,958		34,443		30,980
c. Item (6) for 1/2 year		(34,694)		(48,026)		(29,451)		(51,000)
d. Item (7) for 1/2 year		(4,077)		(3,449)		(2,490)		(2,951)
	$	1,255,981	$	1,539,311	$	1,284,083	$	1,306,376
9. Expected Market Value (2)+(5)-(6)-(7)+(8)	$	19,345,163	$	23,329,184	$	19,665,102	$	17,855,168
10. Actual Market Value this Year (including receivable contributions)	$	19,857,011	$	17,801,272	$	22,183,256	$	18,308,303
11. Investment Gain/(Loss) from Experience	$	511,847	$	(5,527,912)	$	2,518,153	$	453,134

City of Panama City Beach
Firefighters' Pension Plan

Actuarial Value of Assets

October 1, 2023

5 -YEAR SMOOTHED MARKET VALUE WITHOUT PHASE-IN				**10/1/2023**
1. Market Value of Assets				$ 19,857,011
2. Investment Gains/(Losses) for Four Prior Years				
a.	Oct-22			$ 511,847
b.	Oct-21			(5,527,912)
c.	Oct-20			2,518,153
d.	Oct-19			453,134
3. Unrecognized Investment Gains/(Losses)				
a.	Oct-22	80%	of (2)(a)	$ 409,478
b.	Oct-21	60%	of (2)(b)	(3,316,747)
c.	Oct-20	40%	of (2)(c)	1,007,261
d.	Oct-19	20%	of (2)(d)	90,627
e.	Total: (a)+(b)+(c)+(d)			$ (1,809,381)
4. Preliminary Actuarial Value of Assets = (1) - (3)(e)				$ 21,666,392
5. Adjustment to be within 20% of market value				$ -
6. Actuarial Value of Assets = (4) + (5)				$ 21,666,392

Allocation of Actuarial Value of Assets to the Reserve for Other Retirement Benefits (i.e., Excluding DROP)

October 1, 2023

	Actuarial Value Allocated in Proportion to Market Value	Market Value
Reserve for DROP	$ 358,813	$ 328,848
Reserve for Other Retirement Benefits	21,307,579	19,528,163
Total Fund Balances	$ 21,666,392	$ 19,857,011

City of Panama City Beach
Firefighters' Pension Plan

Funded Status – Accrued Benefits (ASC 960)

October 1, 2023

Generally the best measures of the Funded Status of a defined benefit plan are considered to be the levels of funding of the Actuarial Present Values of Accumulated Plan Benefits and Vested Benefits. Accumulated Plan Benefits are those future benefit payments that are attributable under the plan's provisions to employees' service rendered prior to the valuation date. Accumulated Plan Benefits are based on employees' actual pay histories, or estimates thereof; possible future salary increases or changes in Social Security levels are not recognized. Vested Benefits are those benefits which are nonforfeitable under the plan's vesting provisions.

The Actuarial Present Value of Accumulated Plan Benefits is the amount resulting from the application of actuarial assumptions to the Accumulated Plan Benefits to reflect the time value of money and the probabilities of death, disability, withdrawal and retirement. Underlying these assumptions (described on the Actuarial Basis page) is an assumption of an ongoing plan. Since most Accumulated Plan Benefits are generally synonymous with "Accrued Benefits" as defined in the plan, the Actuarial Present Value of Accumulated Plan Benefits has also been called the Present Value of Accrued Benefits.

	10/1/2022	10/1/2023
NET ASSETS AVAILABLE FOR BENEFITS*	$ 20,429,414	$ 21,307,579
ACTUARIAL PRESENT VALUE OF ACCUMULATED PLAN BENEFITS		
Discount Rate	7.00%	7.00%
Vested Benefits		
Participants Currently Receiving Payments	$ 14,593,192	$ 14,545,569
All Other Participants	4,009,127	5,099,577
TOTAL VESTED BENEFITS	$ 18,602,319	$ 19,645,146
Percent Funded	110%	108%
NONVESTED BENEFITS	1,113,633	1,080,620
EXCESS STATE MONIES RESERVE	152,728	234,882
TOTAL ACTUARIAL PRESENT VALUE OF ACCUMULATED PLAN BENEFITS	$ 19,868,680	$ 20,960,648
Percent Funded	103%	102%

* Actuarial Value of Assets

City of Panama City Beach
Firefighters' Pension Plan

Funded Status – Accrued Benefits (ASC 960) (Continued)

October 1, 2023

	10/1/2022	10/1/2023
ACTUARIAL PRESENT VALUE OF ACCUMULATED PLAN BENEFITS AS OF PRIOR VALUATION DATE	$ 18,758,799	$ 19,868,680
Increase (Decrease) During the Year Attributable to:		
Increase for Interest Due to the Decrease in the Discount Period	$ 1,264,196	$ 1,355,467
Benefits Paid	(1,397,716)	(1,009,718)
Benefits Accumulated, Turnover, Other Experience	1,243,401	746,219
Change in Actuarial Assumptions	-	-
Plan Amendment	-	-
Net Increase (Decrease)	$ 1,109,881	$ 1,091,968
ACTUARIAL PRESENT VALUE OF ACCUMULATED PLAN BENEFITS AS OF CURRENT VALUATION DATE	$ 19,868,680	$ 20,960,648

City of Panama City Beach
Firefighters' Pension Plan

State Required Exhibit

October 1, 2023

	10/1/2022	10/1/2023
A. Member Data		
1. Active Members	55	58
2. Retired Members and beneficiaries receiving benefits (including DROP)	18	18
3. Disabled Members receiving benefits	1	1
4. Terminated vested Members	2	4
5. Prior year active compensation	$ 3,223,950	$ 3,584,244
6. Annual benefits payable to retirees and beneficiaries (including DROP)	$ 1,054,771	$ 1,064,868
7. Annual benefits payable to disabled retirees	$ 52,636	$ 53,120
8. Annual benefits payable to terminated vested Members	$ 32,427	$ 60,114
B. Assets		
1. Actuarial value	$ 20,429,414	$ 21,307,579
2. Market value	17,613,049	19,528,163
C. Liabilities		
1. Actuarial present value of future expected benefit payments for active members		
a. Retirement benefits	$ 13,046,210	$ 14,678,017
b. Termination benefits	2,733,598	2,939,200
c. Death benefits	117,694	126,329
d. Disability benefits	177,709	191,825
e. Total	$ 16,075,211	$ 17,935,371
2. Actuarial present value of future expected benefit payments for terminated vested members	$ 231,489	$ 391,490
3. Actuarial present value of future expected benefit payments for members currently receiving benefits		
a. Service retired, beneficiaries and DROP	$ 14,089,106	$ 14,044,244
b. Disability retired	504,086	501,325
c. Total	$ 14,593,192	$ 14,545,569
4. Excess State Monies Reserve	$ 152,728	$ 234,882
5. Total actuarial present value of future expected benefit payments	$ 31,052,620	$ 33,107,312
6. Entry age normal accrued liability	$ 24,029,646	$ 25,206,984
7. Unfunded entry age normal accrued liability	$ 6,416,597	$ 5,678,821

City of Panama City Beach
Firefighters' Pension Plan

State Required Exhibit (Continued)

October 1, 2023

	10/1/2022	10/1/2023
D. Statement of Accumulated Plan Benefits		
1. Actuarial present value of accumulated vested benefits		
a. Members currently receiving benefits (including DROP)	$ 14,593,192	$ 14,545,569
b. Other Members	4,009,127	5,099,577
c. Total	$ 18,602,319	$ 19,645,146
2. Actuarial present value of accumulated non-vested plan benefits	1,113,633	1,080,620
3. Excess State Monies Reserve	152,728	234,882
4. Total actuarial present value of accumulated plan benefits	$ 19,868,680	$ 20,960,648

	10/1/2022	10/1/2023
E. Statement of Change in Accumulated Plan Benefits		
1. Actuarial present value of accumulated plan benefits as of Prior Valuation Date	$ 18,758,799	$ 19,868,680
2. Increase (decrease) during year attributable to:		
a. Plan amendment	0	0
b. Change in actuarial assumptions	0	0
c. Benefits paid	(1,397,716)	(1,009,718)
d. Other, including benefits accumulated and increase for interest due to decrease in the discount period	2,507,597	2,101,686
e. Net increase	$ 1,109,881	$ 1,091,968
3. Actuarial present value of accumulated plan benefits as of Current Valuation Date	$ 19,868,680	$ 20,960,648

City of Panama City Beach
Firefighters' Pension Plan

State Required Exhibit (Continued)

October 1, 2023

Actuarial Valuation Date		**10/1/2021**	**10/1/2022**
For Contribution Year		**2021-22**	**2022-23**
F. Past Contributions			
1. Total contribution required			
a. City			
i. Estimated Dollars, from Actuarial Valuation		$ 617,942	$ 789,231
ii. Percentage of Participants' Compensation		19.19%	23.77%
iii. Actual Compensation Under NRA		$ 3,223,950	$ 3,584,244
iv. Required, per new state interpretation = (ii.) x (iii.)		$ 618,676	$ 851,975
b. State (Estimated)		282,739	286,731
c. Member*		165,648	165,648
d. Total = (a.iv.) + (b.) + (c.)		$ 1,067,063	$ 1,304,354
2. Actual contributions made:			
a. City		$ 644,790	$ 856,137
b. State**		257,431	257,431
c. Member		165,632	193,598
d. Total		$ 1,067,853	$ 1,307,166
G. Net Actuarial Gain (Loss)		N/A	N/A
H. Disclosure of Following Items:		**10/1/2022**	**10/1/2023**
1. Actuarial present value of future salaries - attained age***		$ 29,701,269	$ 32,657,297
2. Actuarial present value of future employee contributions - attained age***		$ 1,323,842	$ 1,460,831
3. Actuarial present value of future contributions from other sources		N/A	N/A
4. Amount of active members' accumulated contributions		$ 920,254	$ 1,017,946
5. Actuarial present value of future salaries and future benefits at entry age		Not provided by system	
6. Actuarial present value of future employee contributions at entry age		Not provided by system	

* Determined by applying the required employee contribution rate (11.5% for members in the 25 & out tier, 8.1% for all others) to expected compensation for the year for participants under Normal Retirement Age (NRA)

** Excluding Excess Premium Tax Revenues that have not been used to provide Additional Benefits

*** Participants under Normal Retirement Age (NRA) only

City of Panama City Beach
Firefighters' Pension Plan

FS 112.664 Requirements

Sensitivity

The following table illustrates the impact of interest rate sensitivity on the Net Pension Liability for fiscal year end September 30, 2022:

	2% Decrease (5.00%)	Current Rate (7.00%)	2% Increase (9.00%)
(1) Total Pension Liability	$32,694,768	$24,029,646	$19,252,838
(2) Plan Fiduciary Net Position	$17,801,272	$17,801,272	$17,801,272
(3) Net Pension Liability	$14,893,496	$6,228,374	$1,451,566

The following table illustrates the impact of interest rate sensitivity on the Net Pension Liability for fiscal year end September 30, 2023:

	2% Decrease (5.00%)	Current Rate (7.00%)	2% Increase (9.00%)
(1) Total Pension Liability	$33,358,689	$25,206,984	$19,815,952
(2) Plan Fiduciary Net Position	$ 19,857,011	$ 19,857,011	$19,857,011
(3) Net Pension Liability	$13,501,678	$5,349,973	($41,059)

Adequacy of Assets

The following table illustrates the number of years and fractions for which the Market Value of Assets are adequate to sustain expected retirement benefits.

Assumptions	Years and Fractions
RP 2000 Mortality and 7.00% Interest	18.83
RP 2000 Mortality and 5.00% Interest	15.75

City of Panama City Beach
Firefighters' Pension Plan

Participant Data Summary

October 1, 2023

	Active	DROP	Terminated Vested	Disabled	Retired	Beneficiaries	Total
October 1, 2022	**55**	**2**	**2**	**1**	**16**	**-**	**76**
New Entrants	8						8
Retirements	-	-	-		-		-
Disabilities							-
Terminations							
a) with refund	(3)	-			-		(3)
b) without refund	(2)		- 2				-
DROP enrollments	-	-			-		-
Deaths							
a) with beneficiaries							-
b) without beneficiaries					-		-
Benefits Expired							-
Other		-					-
October 1, 2023	**58**	**2**	**4**	**1**	**16**	**-**	**81**
Average Age	**32.6**	**52.5**	**43**	**57.3**	**61.6**		

Active Participants as of 10/01/2022

	Males	Females	Total
Number of Participants	54	1	55
Average Age Nearest Birthday	32.5	42.8	32.7
Average Completed Years of Service	6.1	3.0	6.0
Average Compensation for Prior Year	N/A*	N/A*	$58,617

Active Participants as of 10/01/2023

	Males	Females	Total
Number of Participants	57	1	58
Average Age Nearest Birthday	32.4	43.8	32.6
Average Completed Years of Service	6.1	4.0	6.1
Average Compensation for Prior Year	N/A*	N/A*	$61,676

* Not displayed due to privacy issue.

City of Panama City Beach
Firefighters' Pension Plan

Age and Service Distribution

October 1, 2023

	Years of Service							
Age	**0-4**	**5-9**	**10-14**	**15-19**	**20-24**	**25-29**	**30+**	**Total**
Under 25	8	0	0	0	0	0	0	8
25-29	19	3	0	0	0	0	0	22
30-34	5	3	0	0	0	0	0	8
35-39	2	3	1	2	0	0	0	8
40-44	1	1	1	3	1	0	0	7
45-49	1	1	0	0	1	0	0	3
50-54	0	0	0	1	1	0	0	2
55-59	0	0	0	0	0	0	0	0
60-64	0	0	0	0	0	0	0	0
65 and over	0	0	0	0	0	0	0	0
Total	36	11	2	6	3	0	0	58

City of Panama City Beach
Firefighters' Pension Plan

Comparison of Actual vs. Assumed Salary Increases and Investment Returns

October 1, 2023

Salary Increases

Year Ended September 30,	Actual	Assumed
1990	11.3%	6.0%
1991	8.1%	6.0%
1992	19.9%	6.0%
1993	8.0%	6.0%
1994	5.5%	6.0%
1995	6.5%	6.0%
1996	5.9%	6.0%
1997	5.7%	6.0%
1998	15.5%	6.0%
1999	10.1%	6.0%
2000	1.3%	6.0%
2001	9.5%	6.0%
2002	9.3%	6.0%
2003	3.7%	6.0%
2004	5.8%	6.0%
2005	3.9%	6.0%
2006	8.6%	6.0%
2007	4.2%	6.0%
2008	9.7%	6.0%
2009	13.2%	6.0%
2010	0.6%	6.0%
2011	8.8%	6.0%
2012	4.1%	6.0%
2013	6.5%	6.0%
2014	2.1%	6.0%
2015	7.1%	6.0%
2016	5.2%	6.0%
2017	5.4%	6.0%
2018	6.5%	6.0%
2019	10.6%	6.0%
2020	0.3%	6.0%
2021	11.4%	6.0%
2022	6.5%	6.0%
2023	11.1%	6.0%
Last 5 Years, Compounded	7.9%	6.0%

Each figure is the rate of increase in weighted average compensation from the prior year, as reported for the actuarial valuations. The average includes only continuing active employees who have a full year of compensation in both the current and prior years, based on their reported dates of employment. Prior to September 30, 2001, employees with less than a full year of compensation in the prior year were also included by annualizing their compensation on a pro rata basis.

Comparison of Actual vs. Assumed Salary Increases and Investment Returns (Continued)

October 1, 2023

Investment Return

Year Ended September 30,	Actual	Assumed
1990	2.42%	8.0%
1991	2.98%	8.0%
1992	26.77%	8.0%
1993	11.52%	8.0%
1994	0.18%	8.0%
1995	16.21%	8.0%
1996	13.29%	8.0%
1997	24.15%	8.0%
1998	7.01%	8.0%
1999	12.22%	8.0%
2000	10.58%	8.0%
2001	(5.13%)	8.0%
2002	(4.07%)	8.0%
2003	3.63%	8.0%
2004	3.88%	8.0%
2005	4.84%	8.0%
2006	7.85%	8.0%
2007	10.19%	8.0%
2008	6.24%	8.0%
2009	4.24%	8.0%
2010	4.80%	8.0%
2011	3.74%	8.0%
2012	5.13%	8.0%
2013	9.84%	8.0%
2014	11.11%	8.0%
2015	8.46%	8.0%
2016	8.73%	8.0%
2017	8.40%	8.0%
2018	6.88%	7.75%
2019	6.50%	7.75%
2020	8.42%	7.75%
2021	10.44%	7.00%
2022	4.58%	7.00%
2023	3.51%	7.00%
Last 5 Years, Compounded	6.66%	7.30%
Last 20 Years, Compounded	6.86%	7.81%
Last 30 Years, Compounded	7.06%	7.87%

The actual experience figures are the approximate time-weighted rates of return for the particular year. Through September 30, 2002, the return shown is from market value to market value; thereafter the return is from smoothed value to smoothed value. Income includes dividends, interest, and realized and unrealized gains (losses), based upon statements of Fund Balances provided by the City. The time-weighted rates reflect estimated transaction dates for income, employer, employee and state contributions, expenses, and disbursements.

City of Panama City Beach
Firefighters' Pension Plan

Reconciliation of DROP Participants and Assets

October 1, 2023

Participants as of 10/1/2022	2
New DROP Members	0
New DROP's, Withdrew during PY	0
All Other Withdrawals	0
Corrections	0
Participants as of 10/1/2023	2

	Total
Assets as of 10/1/2022	$188,233.05
Payments into DROP	135,205.00
Earnings	5,409.95
Distributions	0.00
Expenses	0.00
Adjustments	0.00
Assets as of 10/1/2023	$328,848.00

City of Panama City Beach
Firefighters' Pension Plan

History of Excess Premium Tax Revenues

October 1, 2023

	Regular			Supplemental Compensation Fund			Total			
	Cash Received	Applicable "Frozen" Amount	Excess Over Frozen Amount	Cash Received	Applicable "Frozen" Amount	Excess Over Frozen Amount	Total Excess = Additional Premium Tax Revenue	Current Year Benefit Improve-ments	Set Aside for Future Improve-ments	Cumulative Set Aside for Future Improve-ments
9/30/1998	$ 48,873.25	$ 48,873.25	$ 0.00	$ 21,907.17	$ 21,907.17	$ 0.00	$ 0.00	$ 0.00	$ 0.00	$ 0.00
9/30/1999	44,211.49	48,873.25	0.00	24,139.40	21,907.17	2,232.23	2,232.23	0.00	2,232.23	2,232.23
9/30/2000	70,881.88	48,873.25	22,008.63	40,444.30	21,907.17	18,537.13	40,545.76	0.00	40,545.76	42,777.99
9/30/2001	48,577.26	48,873.25	0.00	25,381.58	21,907.17	3,474.41	3,474.41	46,252.40 (1)	0.00	0.00
9/30/2002	54,888.30	48,873.25	6,015.05	28,691.11	21,907.17	6,783.94	12,798.99	41,181.00 (2)	0.00	0.00
9/30/2003	61,580.73	48,873.25	12,707.48	34,312.47	21,907.17	12,405.30	25,112.78	41,181.00	0.00	0.00
9/30/2004	66,676.24	48,873.25	17,802.99	40,043.17	21,907.17	18,136.00	35,938.99	41,181.00	0.00	0.00
9/30/2005	73,517.87	48,873.25	24,644.62	42,460.12	21,907.17	20,552.95	45,197.57	41,181.00	4,016.57	4,016.57
9/30/2006	87,444.59	48,873.25	38,571.34	52,473.25	21,907.17	30,566.08	69,137.42	41,181.00	27,956.42	31,972.99
9/30/2007	127,251.63	48,873.25	78,378.38	108,377.15	21,907.17	86,469.98	164,848.36	41,181.00	123,667.36	155,640.35
9/30/2008	182,873.74	48,873.25	134,000.49	143,540.37	21,907.17	121,633.20	255,633.69	370,093.00 (3)	0.00	0.00
9/30/2009	116,306.62	48,873.25	67,433.37	42,616.18	21,907.17	20,709.01	88,142.38	83,124.00 (4)	5,018.38	5,018.38
9/30/2010	136,553.57	48,873.25	87,680.32	48,163.22	21,907.17	26,256.05	113,936.37	83,124.00	30,812.37	35,830.75
9/30/2011	137,445.52	48,873.25	88,572.27	41,843.68	21,907.17	19,936.51	108,508.78	83,124.00	25,384.78	61,215.53
9/30/2012	150,652.54	48,873.25	101,779.29	53,112.15	21,907.17	31,204.98	132,984.27	83,124.00	49,860.27	111,075.80
9/30/2013	150,729.03	48,873.25	101,855.78	48,217.29	21,907.17	26,310.12	128,165.90	83,124.00	45,041.90	156,117.70
9/30/2014	148,749.67	48,873.25	99,876.42	57,900.59	21,907.17	35,993.42	135,869.84	83,124.00	52,745.84	208,863.54
9/30/2015	160,239.82	48,873.25	111,366.57	27,493.57	21,907.17	5,586.40	116,952.97	145,422.88 (5)	0.00	180,393.63
9/30/2016	180,727.63	48,873.25	131,854.38	12,509.09	21,907.17	0.00	131,854.38	142,915.84 (6)	0.00	169,332.17
9/30/2017	174,180.73	48,873.25	125,307.48	2,452.81	21,907.17	0.00	125,307.48	146,523.18 (6)	0.00	148,116.47
9/30/2018	172,297.52	48,873.25	123,424.27	2,535.66	21,907.17	0.00	123,424.27	137,380.44 (6)	0.00	134,160.30
9/30/2019	210,226.97	48,873.25	161,353.72	0.00	21,907.17	0.00	161,353.72	171,977.00 (6)	0.00	123,537.02
9/30/2020	226,138.48	48,873.25	177,265.23	41.13	21,907.17	0.00	177,265.23	186,989.52 (6)	0.00	113,812.73
9/30/2021	263,022.42	48,873.25	214,149.17	0.00	21,907.17	0.00	214,149.17	208,557.52 (6)	5,591.65	119,404.38
9/30/2022	294,279.24	48,873.25	245,405.99	0.00	21,907.17	0.00	245,405.99	212,081.96 (6)	33,324.03	152,728.41
9/30/2023	357,520.78	48,873.25	308,647.53	16,583.69	21,907.17	0.00	308,647.53	226,493.75 (6)	82,153.78	234,882.18

Notes:

(1) Additional Benefits adopted ($350 per month Supplemental Benefit) with a lump sum cost in excess of the available $46,252.40.

(2) Additional Benefits adopted ($350 per month Supplemental Benefit) with an annual cost initially valued as $41,181.

(3) Additional Benefits adopted (3.00% Multiplier changed to 3.35%) with a lump sum cost in excess of the available $370,093.

(4) Additional Benefits adopted (3.00% Multiplier changed to 3.35%) with an annual cost initially valued as $83,124.

(5) Additional Benefits adopted (Employee Contribution reduced to 7.5% for 25 and out tier and 4.1% for all others) annual cost estimated at $62,298.88 for fiscal year end 9/30/2015.

(6) Annual cost of Employee Contribution Reduction estimated at $59,791.84 for fiscal year end 9/30/2016, $63,399.18 for fiscal year end 9/30/2017, $54,256.44 for fiscal year end 9/30/2018, $88,853 for fiscal year end 9/30/2019, $103,865 for fiscal year end 9/30/2020, $125,446 for fiscal year end 09/30/2021, and $128,957.96 for fiscal year end 9/30/2022.

Low-Default-Risk Obligation Measure ("LDROM")

A key purpose of this report is to communicate an Actuarially Determined Contribution and Funded Percentage for the Public Employees' Pension Plan. For both of these calculations, we use an Actuarial Accrued Liability that represents the present value of the portion of expected future benefit payments accrued under the plan's actuarial cost method, discounted back to the valuation date using an asset return expectation of 7.00%. The asset return expectation is based on the plan's diversified asset portfolio and long-term capital market return assumptions for the various asset classes represented in the portfolio. The objective of the portfolio is to maximize investment returns with a reasonable amount of risk.

For all funding valuations with measurement dates on or after February 15, 2023, and for which an actuarial report is issued on or after February 15, 2023, Actuarial Standard of Practice No. 4 (ASOP 4) now requires the calculation and disclosure of an additional measure of the plan's liability using a discount rate or discount rates derived from low-default-risk fixed income securities whose cash flows are reasonably consistent with the pattern of benefits expected to be paid in the future.

This additional liability measure is referred to as the Low-Default-Risk Obligation Measure (LDROM). The LDROM shown in this report is based upon the Bond Buyer GO-20 index as of the measurement date, 4.09%, although other discount rates may also be appropriate for this purpose.

The LDROM can be thought of as a measure of what the plan's funding liability would be if the plan were to use an ultra-low-risk investment policy. Since plan assets are not invested in an all-bond portfolio, the LDROM may not be appropriate for assessing funding status progress on an Actuarial Accrued Liability basis, necessary plan contributions, or the security of participant benefits.

All assumptions and methods other than the asset return assumption are the same for the calculation of Actuarial Accrued Liability and LDROM.

	Fiscal Year Ending September 30, 2023
LDROM	$ 38,493,740
Interest Rate	4.09%
Actuarial Cost Method	Entry Age Normal

Reasonable Actuarially Determined Contribution

The actuarially determined contribution (minimum annual required contribution) in this report is considered reasonable because it meets the criteria of Section 3.21 of Actuarial Standard of Practice No. 4, *Measuring Pension Obligations and Determining Pension Plan Costs or Contributions* (ASOP 4):

- All significant assumptions are reasonable
- Combined impact of assumptions are projected to have no significant bias
- The actuarial cost method allocates cost in a reasonable way over employees' careers
- Amortizations are projected to either fully amortize the unfunded liability or reduce the unfunded accrued liability by a reasonable amount within a reasonable period.
- The asset method and output smoothing method (if any) are consistent with actuarial standards.
- Contributions are projected to accumulate assets adequate to make benefit payments when due

Based on the plan sponsor's funding policy, the plan's unfunded liability would be expected to decrease over time, and the plan assets would be expected to be sufficient to pay plan benefits for all future years. The plan's unfunded liability is estimated to be fully amortized in 16 years.

Liability (Gain)/Loss

The following table illustrates the liability gain/loss.

	Fiscal Year Ending 9/30/2023	Fiscal Year Ending 9/30/2023
Pension Liability at Beginning of Measurement Period	$22,550,442	$ 23,894,702
Normal Cost	785,279	801,860
Interest on the Total Pension Liability	1,585,408	1,694,017
Changes of Benefit Terms	0	0
Changes of Assumptions	0	0
Benefit Payments	(1,397,716)	(1,009,718)
Expected Pension Liability at End of Measurement Period	23,523,413	25,380,861
Actual Pension Liability at End of Measurement Period	23,894,702	25,206,984
Pension Liability (Gain)/Loss	$ 371,289	$ (173,877)

Unfunded Liability Reconciliation

	Fiscal Year Ending 9/30/2022	Fiscal Year Ending 9/30/2023
Unfunded Liability at Beginning of Measurement Period	$ 2,781,571	$3,465,288
Contribution Towards Unfunded	(196,902)	(285,369)
Interest	180,927	222,594
Asset (Gain)/Loss	328,403	670,769
Liability (Gain)/Loss	371,289	(173,877)
Unfunded Liability at End of Measurement Period	$ 3,465,288	$3,899,405

Summary of Major Plan Provisions

October 1, 2023

Effective Date: August 25, 1971.

Plan Year: October 1 to September 30.

Last Amendment: Restatement (Ordinance 670) effective June 8, 2000. First Amendment (Ordinance 723) effective June 14, 2001 (adding Early Retirement and $350 per month supplement). Second Amendment (Ordinance 792) effective April 10, 2003 (for various law and other changes). Third Amendment (Ordinance 889) effective July 22, 2004 (changing investment policy). Fourth Amendment (Ordinance 984) effective November 1, 2005 (adding 25 & Out Tier). Fifth Amendment (Ordinance 1030) effective May 11, 2006 (changing various provisions as required by new IRS rules). Sixth Amendment (Ordinance 1085) effective July 26, 2007 (adding 5% fixed investment return option for DROP). Seventh Amendment (Ordinance 1127) effective October 1, 2008 (increasing multiplier from 3.00% to 3.35%). Restatement (Ordinance 1157) adopted August 17. 2009. First Amendment (Ordinance 1220) effective February 9, 2012 (adding 300 hours of overtime cap). First Amendment (Ordinance 1573) effective November 10, 2021 (changing vesting from 10 year cliff, to graded vesting schedule starting at 5 years of service).

Eligibility: All permanent Firefighters who have passed the medical examination.

Employee Contributions: 7.5% of Compensation for Firefighters who elect the 25 & Out Tier, else 4.1% of Compensation (5.0% prior to June 8, 2000). Employee Contributions are excluded from taxable income under IRC Section 414(h). The election of the 25 & Out Tier is irrevocable. Starting October 1, 2014, contributions will be reduced by 4.0% annually, to the extent that an additional offset is available from premium tax revenues.

Compensation: Total compensation paid by the City for services rendered as reported on Form W-2, plus all tax deferred, tax sheltered or tax exempt amounts derived from elective employee contributions or salary reductions. Compensation includes regular pay, overtime (up to 300 hours) and other cash incentives. Payments of leave amounts (vacation, sick, etc.) upon termination of employment shall not be included. Auto allowance and mileage reimbursements shall not be included. Compensation in excess of the IRC Section 401(a)(17) limit is disregarded.

Average Final Compensation: The Compensation received during the 5 years out of the last 10 years of Credited Service divided by 60, which produces the highest average, or the career average as a full-time Firefighter, if greater.

Credited Service: Years and fractional parts of years of service as a Firefighter with the City and while making Employee Contributions.

Accrued Benefit: The benefit using the formula for the Normal Retirement Benefit, based upon the Average Final Compensation and Credited Service as of the date of the calculation. The Accrued Benefit is payable at the Normal Retirement Date in the Normal Form of Benefit.

Accumulated Contributions: A participant's contributions with interest compounded annually at 5.25% through June 3, 2000; after that date interest is no longer accrued.

Normal Retirement Date: The first day of the month coincident with or next following the earlier of (1) the date a participant attains age 50 and has completed at least 20 years of Credited Service or (2) the date he attains age 55 and has completed at least 10 years of Credited Service, or (3) if he has elected the 25 & Out

Tier, the date he has completed at least 25 years of Credited Service regardless of age.

Early Retirement Date: The first day of the month coincident with or next following the date a participant attains age 50 and has completed at least 10 years of Credited Service.

Normal Form of Benefit: A monthly annuity for life with 10 years certain.

Optional Forms of Benefit: Benefits Actuarially Equivalent to the benefit provided under the Normal Form of Benefit; optional forms:

a. Life annuity (with no modified cash refund feature),
b. Joint and survivor annuity (100%, 75%, 66 2/3% or 50%; reducing upon death of participant only),
c. Level income option,
d. Any of the above forms, increasing 3% per year on each January 1 (the Actuarially Equivalent adjustment recognizes that the regular retirement benefit includes a 1% COLA and that the $350 Per Month Supplemental Benefit does not), or
e. Lump Sum if under $5,000, or less than $100 per month.

Normal Retirement Benefit: A monthly benefit commencing at the Normal Retirement Date equal to 3.35% of Average Final Compensation multiplied by years of Credited Service, but not more than 100% of Average Final Compensation (excluding COLA's).

Late Retirement Benefit: Additional benefits will accrue after the Normal Retirement Date.

Early Retirement Benefit: A participant who elects to retire on or after his Early Retirement Date may receive an Early Retirement Benefit commencing at his Normal Retirement Date equal to his Accrued Benefit. If he further elects to have such benefit commence prior to his Normal Retirement Date, it shall be reduced 3% per year (.25% per month) for each period by which the benefit commencement date precedes his Normal Retirement Date. For this purpose Normal Retirement Date is determined based on the participant's actual years of Credited Service as a Firefighter at his termination date.

Death Benefit: The beneficiary of a participant who dies (1) during employment or after termination with a vested benefit and (2) with respect to whom benefit payments have not commenced shall be entitled to a Death Benefit equal to 100 times his monthly Accrued Benefit based on his Credited Service and Average Final Compensation as of the time of death. This benefit is payable in a lump sum unless the Firefighter elected that it be paid in an Actuarially Equivalent annuity or installments. The Plan also provides minimum Death Benefits based upon the vested, 10-year-certain portion of the Normal Form of Benefit or the refund of Accumulated Contributions.

Termination of Employment Benefit: A participant who terminates his employment after completing ten years of Credited Service for reason other than death, disability or retirement shall be entitled to a vested deferred monthly benefit commencing at his Normal Retirement Date equal to his Accrued Benefit. Any participant may withdraw his Accumulated Contributions; a vested participant who withdraws his Accumulated Contributions forfeits his rights to his vested Accrued Benefit or Death Benefit.

If a participant terminates after completing 10 years but prior to being eligible for retirement:

- With less than 20 years of Credited Service, his annuity can begin unreduced at age 55 or reduced (3% per year) between ages 50 and 55, or
- With 20 or more years of Credited Service, his annuity can begin unreduced at age 50.

Disability Benefit: A Participant who becomes totally and permanently disabled shall be eligible to receive a Disability Benefit in the form of an immediate monthly annuity for life with ten years certain as follows:

> **Job-Related Disability**: Without regard to years of Credited Service, a benefit equal to the greater of his Accrued Benefit or 42% of Average Final Compensation as of the date of disability.
>
> **Non-Job-Related Disability**: With ten or more years of Credited Service, a benefit equal to his Accrued Benefit as of the date of disability.

The Disability Benefit together with worker's compensation benefits may not exceed 100% of pay, as provided in the Plan. Optional Forms of Benefit may be elected.

Actuarial Equivalent: A benefit or amount of equal value, based upon the 1983 Group Annuity Mortality Table for Males and an interest rate of 8% per annum. In practice, in accordance with the prior document, the Table for Males is used for all Firefighters, regardless of sex, and the same table with ages set back 6 years is used for all beneficiaries and survivor annuitants, regardless of sex.

Cost-of-Living Adjustment: All retirees, including disabled retirees, who retired on or after June 8, 2000, (including Firefighters who terminate with a deferred benefit after such date, once they retire) and their survivor annuitants shall receive on the first January 1 following one full year of retirement, and on each January 1 thereafter, a 1% cost-of-living adjustment on their regular retirement benefit; the $350 Per Month Supplemental Benefit does not receive a COLA.

Vesting: A participant is considered 50% vested, once they complete 5 years of service. Their vesting percentage increases by 10% each additional full year of service completed, until they reach 100% vested upon completion of 10 years of service.

Maximum Benefits: IRC Section 415 limits apply as modified for governmental plans and for police and fire plans.

Deferred Retirement Option Program (DROP):

a. **Eligibility**: Normal Retirement.

b. **Benefit Amount**: The participant's Accrued Benefit calculated as of the beginning of the DROP period, accumulated quarterly with interest at a rate equal to either the Pension Plan's net investment performance during the quarter or a fixed guaranteed rate of 5% annually, plus cost-of-living adjustments, if any, during the DROP period. The participant elects which interest basis he wants upon his entry into the DROP, and may change such election only once during the DROP period.

c. **Form of Benefit**: When the DROP period ends (maximum 5 years), the employee must terminate employment. At that time, the accumulated DROP benefits will be distributed in the form of a lump sum, a rollover, or a nonforfeitable fixed annuity to the participant, or if deceased, such participant's designated beneficiary. In addition, the monthly annuity, including any COLA adjustments, will continue to the participant as otherwise provided in the Plan.

d. **Other Provisions**: A participant in DROP is no longer eligible for Death or Disability Benefits. Employee Contributions are no longer collected, and Credited Service and Average Final Compensation are frozen as of the date of entry into DROP.

$350 Per Month Supplemental Benefit: Firefighters who retire from active service only receive a supplemental monthly benefit of $350 payable for life only, without any COLA. This benefit is not provided for firefighters who terminate prior to being eligible for early, normal or disability retirement, nor is it provided for beneficiaries of deceased firefighters, nor their joint annuitants. However, when he retires a firefighter may elect to have the $350 benefit paid in one of the reduced, Actuarially Equivalent Optional Forms of Benefit; this includes having it paid as a reduced, Actuarially Equivalent, increasing annuity under the 3% increasing annuity option.

Actuarial Basis

October 1, 2023

ACTUARIAL COST METHOD

Entry Age Normal with Amortization of the unfunded actuarial accrued liability plus normal cost and expenses. The initial unfunded accrued liability is amortized as a percentage of payroll over 20 years. Future gains and losses will be amortized over 10 years.

ACTUARIAL ASSUMPTIONS

Investment Yield: The investment rate of earnings is assumed to be 7.00% per annum.

Interest on Employee Contributions: No interest is credited beyond June 8, 2000.

Mortality: PUB 2010, adjusted for the safety classification, set forward one year, projected generationally using scale MP 2018 (Florida Retirement System Special Risk mortality).

Disability: Preretirement disability is assumed to occur in accordance with a standard scale of disability rates (1955 UAW, male and female). Sample rates are shown below:

	Probability of Disablement	
Age	**Male**	**Female**
20	0.03%	0.04%
30	0.04%	0.06%
40	0.07%	0.10%
50	0.18%	0.26%
60	0.90%	1.21%

Twenty-five percent of disabilities are assumed to be non-job-related.

Withdrawal: Preretirement withdrawals are assumed to occur in accordance with a standard scale of turnover rates (Frees 2003). Sample rates are shown below:

Age	**Years of Service**			
	< 2	2-4	5-9	>10
20	18.0%	14.2%	15.0%	18.8%
30	18.6%	13.6%	8.4%	4.8%
40	15.9%	10.4%	6.0%	4.2%
50	15.6%	8.9%	5.3%	3.5%

Salary Scale: Future salaries are assumed to increase at the rate of 6% per year.

Actuarial Value of Assets: Assets are valued using a 5-year smoothed market value without phase-in.

Retirement Rates: Active employees are expected to retire at a rate of 60% at first eligibility. They are then assumed to retire at a rate of 50% for each year thereafter. 100% of eligible participants are assumed to retire at age 60.

Timing of Contribution: The contribution is assumed to be made quarterly throughout the plan year.

Employees Covered: All participants as of the actuarial valuation date.

Expenses: Expenses for the current year are assumed to equal actual expenses for the prior year. If actual expenses for the current year differ from this estimate, a make-up contribution or credit is included.

Maximum Compensation: Compensation is limited to $330,000 projected to increase at the rate of 4% per annum.

Maximum Benefits: The $265,000 maximum for years ending in 2023 and other applicable Benefit Limitations under Section 415 are projected to increase at the rate of 4% per annum.

Completeness of Assumptions: All benefits and expenses to be provided by the Plan are recognized in the valuation. All known events are taken into account; no current trends are assumed to discontinue in the future.

All assumptions, with the exception of the investment return and mortality, were selected in conjunction with guidance provided by Aon. The demographic assumptions were selected as a result of an experience study, and are reviewed annually for reasonableness.

The investment return was selected by the Pension Board in conjunction with the investment consultant.

The mortality used is based on the mortality assumption used by the Florida Retirement System, as mandated by Florida Statute.

COMPARABILITY WITH PRIOR VALUATION

Significant Events During the Year: None.

Significant Changes in the Summary of Major Plan Provisions: None

Significant Changes in the Actuarial Cost Method or Actuarial Assumptions: None

Other Information Needed to Fully and Fairly Disclose the Actuarial Position of the Plan: None.

Actuarial Cost Method
"Entry Age Normal "

October 1, 2023

An actuarial valuation is a series of mathematical calculations which project future benefits under a pension plan and future contributions to fund those benefits. The true cost of a pension plan cannot be determined until the last benefit is paid, because the true cost is the actual benefits ultimately paid, plus the expense of maintaining the plan, less the actual income earned on invested funds. Since funding cannot wait until the last benefit is paid, however, actuarial assumptions are used to project ultimate benefit levels and the reserves needed to provide them. An actuarial cost method is then used to establish a reasonable pattern of contributions to accumulate those reserves. The assumptions and cost method themselves, therefore, only impact on the incidence of funding, not the true cost. Each new valuation automatically corrects for any differences between the assumptions and actual experience, and the correction is spread over the current and future years of funding.

The Entry Age Normal cost method spreads the funding of the annual accrual of pension benefits over the future service of all active participants and the balance is funded in a separate amortization schedule.

The initial unfunded accrued liability (UAL) is determined and fixed in the first year the cost method is adopted. The UAL, is amortized over a closed 20-year period over a level percentage of payroll. Future gains and losses will be amortized over 10 years.

The state minimum required contribution in a particular year is equal to the Normal Cost, plus an amount which will amortize the Unfunded Accrued Liability over the applicable number of years, plus expected and "make-up" expenses, less the Past Excess Contributions and expected employee contributions.

The calculation of the contribution has been made in a manner that assumes quarterly payment during the Plan Year. In order to meet the state minimum funding requirements, the state minimum required contribution must be made at least quarterly during the Plan Year.