

# **Actuarial Valuation Report**

City of Panama City Beach

Police Officers' Pension Plan

Funding Results for the Year Ending September 30, 2024





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 Police Officers' 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 May 16, 2024 and are included in this report for comparison purposes.

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 Police Officer's 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.

#### 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.

Mitz. M. Silvasten

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

Respectfully submitted,

Stephen Lambert-Oswald, F.S.A., E.A., M.A.A.A.

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Enrollment No. 23-07225

August 2024

#### **Discussion of Results**

October 1, 2023

The results of the actuarial valuation of the Panama City Beach Police Officers' 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.

	Pian Year Ended		
	0	9/30/23	09/30/24
State Minimum Required Contribution	\$	933,797	\$ 1,103,383
Percent of Participants' Compensation		19.08%	22.03%

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 3.60% for the plan year ended September 30, 2023. Investment experience compounded over the last 5 years has been approximately 6.7% 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 7.60%, greater than the assumed salary increase of 5.0%. Salary experience compounded over the last 5 years has been approximately 6.9% 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.

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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*	\$ 27,628,968	\$ 28,159,625
Discount Rate	7.00%	7.00%
ACTUARIAL PRESENT VALUE OF ACCUMULATED PLAN BENEFITS		
TOTAL VESTED BENEFITS	\$ 25,375,332	\$ 27,152,550
Percent Funded	109%	104%
TOTAL ACTUARIAL PRESENT VALUE OF ACCUMULATED PLAN BENEFITS	\$ 26,545,582	\$ 28,510,604
Percent Funded	104%	99%

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	\$ 24,258,456	\$ 26,657,387
ENTRY AGE NORMAL ACCRUED LIABILITY	\$ 31,070,496	\$ 33,184,831
Funded Ratio	78.08%	80.33%

<sup>\*</sup> Actuarial Value of Assets

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## **Development of Normal Cost for State Minimum Required Contribution**

	10/1/2022	10/1/2023
1. Number of Participants		
Active Terminated with Vested Benefits Retirees and Beneficiaries Total	70 3 <u>35</u> 108	69 3 38 110
2. Participant's Compensation		
<ul><li>a. Below Normal Retirement Age</li><li>b. Beyond Normal Retirement Age</li><li>c. Total</li></ul>	\$ 4,660,842 <u>264,008</u> \$ 4,924,850	\$ 4,770,344
3. Present Value of Benefits		
Active Terminated with Vested Benefits Retirees Excess State Monies Reserve Total	\$ 18,531,724 499,169 19,461,143 214,866 \$ 38,706,902	\$ 18,164,103 534,948 22,270,261 321,256 \$ 41,290,568
4. Entry Age Accrued Liability	\$ 30,979,932	\$ 33,139,314
5. Actuarial Value of Assets	\$ 27,628,968	\$ 28,159,625
6. Unfunded Actuarial Accrued Liability	\$ 3,350,964	\$ 4,979,689
7. Past Excess Contributions	\$ 14,043	\$ 25,568
8. Normal Cost		
Retirement Death Disability Withdrawal	\$ 674,426 9,902 17,599 263,169	\$ 691,714 10,143 17,922 255,470
Total	\$ 965,096	\$ 975,249

## **State Minimum Required Contribution**

October 1, 2023

#### Plan Year Ended

		9	/30/2023	9/30/2024
1.	Normal Cost	\$	965,096	\$ 975,249
2.	Employee Contributions	\$	(464,590)	\$ (558,537)
3.	Amortization of Actuarial Accrued Liability	\$	418,470	\$ 648,361
4.	Interest Adjustment on (1), (2), and (3) for Quarterly Payment	\$	31,620	\$ 36,647
5.	Expenses			
	Current Year Estimate Equal to Prior Year's Actual Make-up for Shortfall in Prior Year's Estimate	\$	108,337 24,944	\$ 136,001 27,664
	Total	\$	133,281	\$ 163,665
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)	\$	135,554	\$ 135,554
7.	Past Excess Contributions plus Interest Adjusted for Quarterly Payment	\$	14,526	\$ 26,447
8.	Minimum Required Contribution by City for Fiscal Year = $(1) + (2) + (3) + (4) + (5) - (6) - (7)$	\$	933,797	\$ 1,103,383
9.	Percent of Participants' Compensation Below Normal Retirement Age*		19.08%	22.03%

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

## **Unfunded Frozen Initial and Supplemental Liabilities**

	Initial Amount to be Amortized	Beginning Amortization Period	Original Amortization Period (Years)	Years Remaining	(BOY) Annual Amortization Amount		Inamortized Balance as of 10/1/2023	
Fresh Start*	-	10/1/2020	20	17	-		-	
10/1/2021 Gain Loss	2,267,160	10/1/2021	10	8	283,804		\$1,994,571	
10/1/2022 Gain Loss	1,211,341	10/1/2022	10	9	147,220		\$1,143,198	
10/1/2023 Gain Loss	1,841,921	10/1/2023	10	10	217,337		1,841,921	
					\$ 648,361			
			1. Unamortized	Unamortized Balance as of 10/1/2023			4,979,689	
		:	2. Past Excess	. Past Excess Contributions				
			3. Remaining U	Remaining Unfunded Liabilities = (1) - (2)				

<sup>\*</sup>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. The Entry Age Accrued liability is over 100% funded at the fresh start date, so there is no amortization.

# Schedule Illustrating the Amortization of Unfunded Liabilities Existing This Date

October 1, 2023

October 1	Liability
2023	\$ 4,979,689
2024	\$ 4,634,521
2025	\$ 4,244,379
2026	\$ 3,805,490
2027	\$ 3,313,799
2028	\$ 2,764,948
2029	\$ 2,154,253
2030	\$ 1,476,681
2031	\$ 726,828
2032	\$ 283,575
2033	\$ 0

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 2033 less 2023, or 10 years.

## **Past Excess Contributions (State Requirements)**

October 1, 2023

#### Plan Year Ended

	9/30/2022		<u>9</u>	9/30/2023
Charges:				
Required City Contribution, per State* State (Estimated) Interest		529,435 135,554 22,881		883,671 135,554 35,070
Total Charges	\$	687,870	\$	1,054,295
Credits:				
City Contributions State Contributions (Excluding Excess Premium Tax Revenues That Have Not Been		543,011		908,389
Used to Provide Additional Benefits)		135,554		135,554
Interest		23,348		35,920
Total Credits	\$	701,913	\$	1,079,863
Balance:				
Excess Contribution Carried Forward	\$	14,043	\$	25,568
Deficiency Carried Forward	\$		\$	

### **Market Value of Assets**

	10/1/2022		10/1/2023		
Assets:					
Cash	\$	750,631.42	\$	292,706.00	
Certificates of Deposit					
Government and Corporate Bond		1,529,290.81		6,168,539.00	
Real Estate and Equity Funds		21,862,950.49		19,642,460.16	
Due from City Funds		308.27		-	
Due from State of Florida		210,099.51		-	
Accrued Interest		-		-	
Miscellaneous Receivable		3,828.59		600,686.31	
Total Assets	_\$	24,357,109.08	_\$_	26,704,391.47	
Liabilities and Fund Balance:					
Liabilities:					
Accounts Payable	\$	(38,836.85)	\$	(47,004.47)	
Refunds or Benefits Payable		(18,350.31)	\$	-	
Due Other Funds		(41,465.44)			
Total Liabilities	\$	(98,652.60)	\$	(47,004.47)	
Pension Fund Balance:	\$	24,258,456.48	\$	26,657,387.00	

## **Reconciliation of Assets (Market Value)**

October 1, 2023

#### Plan Year Ended

	9/30/2022	9/30/2023		
Revenues:				
City Contributions	543,011.38		908,389.12	
Employee Contributions	516,569.13		542,269.70	
State Contributions	210,099.51		241,944.07	
Repayment of Contributions	-		-	
Interest & Dividends	488,927.44		565,663.72	
Unrealized/Realized Gains (Losses)	(5,931,278.79)		1,890,250.99	
Commissions	<u>-</u>			
Total Revenues	\$ (4,172,671.33)	\$	4,148,517.60	
Expenses:				
Pension Payments	1,290,358.15		1,396,004.57	
Contribution Refunds	141,363.35		217,581.50	
DROP Payments	-		-	
Investment Expenses	70,678.96		98,567.36	
Other Expenses	 37,658.05		37,433.48	
Total Expenses	\$ 1,540,058.51	\$	1,749,586.91	
Net Income:	\$ (5,712,729.84)	\$	2,398,930.69	
Fund Balance, Beginning of Year:	\$ 29,971,186.31	\$	24,258,456.47	
Fund Balance, End of Year:	\$ 24,258,456.47	\$	26,657,387.16	

## **Investment Gain/(Loss)**

1. Date of Actuarial Value of Assets:	10/1/2023	10/1/2022	10/1/2021	10/1/2020
Market Value as of Prior Year     (including receivable contributions)	\$ 24,258,456	\$ 29,971,186	\$ 25,163,071	\$ 22,998,492
3. Receivable Contribution included above	\$ -	\$ -	\$ -	\$ -
4. Market Value Excluding Receivable (2) - (3)	\$ 24,258,456	\$ 29,971,186	\$ 25,163,071	\$ 22,998,492
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)	\$ 1,692,603	\$ 1,269,680	\$ 1,101,206	\$ 1,121,332
6. Benefit Distributions	\$ 1,613,586	\$ 1,431,722	\$ 1,415,046	\$ 1,290,489
7. Administrative Expenses	\$ 136,001	\$ 108,337	\$ 83,393	\$ 86,952
8. Expected Return %	7.00%	7.00%	7.00%	7.00%
a. Item (4) for 1 year b. Item (3) for partial & (5) for 1/2 year c. Item (6) for 1/2 year d. Item (7) for 1/2 year (Assumed EOY)	\$ 1,698,092 59,241 (56,476) 0 1,700,857	\$ 2,097,983 44,439 (50,110) 0 2,092,312	\$ 1,761,415 32,827 (49,527) 0 1,743,715	\$ 1,782,383 36,280 (50,006) 0 1,768,657
9. Expected Market Value (2)+(5)-(6)-(7)+(8)	\$ 25,902,329	\$ 31,793,120	\$ 26,509,553	\$ 24,511,040
10. Actual Market Value this Year (including receivable contributions)	\$ 26,657,387	\$ 24,258,456	\$ 29,971,186	\$ 25,163,071
11. Investment Gain/(Loss) from Experience	\$ 755,058	\$ (7,534,663)	\$ 3,461,633	\$ 652,031

### **Actuarial Value of Assets**

5 -YEAR SMOO	OTHED MARK	KET VAL	UE WITHOUT PHASE	·IN	10/1/2023
1. Market \	/alue of Asset	S		\$	26,657,387
2. Investme	ent Gains/(Los	ses) for	Four Prior Years		
a. b. c. d.	Oct-22 Oct-21 Oct-20 Oct-19			\$	755,058 (7,534,663) 3,461,633 652,031
3. Unrecog	nized Investm	ent Gair	ns/(Losses)		
a. b. c. d.	Oct-22 Oct-21 Oct-20 Oct-19	80% 60% 40% 20%	of (2)(a) of (2)(b) of (2)(c) of (2)(d)	\$	604,046 (4,520,798) 1,384,653 130,406
e. To	otal: (a)+(b)+(	c)+(d)		\$	(2,401,693)
4. Prelimina	ary Actuarial V	/alue of	Assets = (1) - (3)(e)	\$	29,059,080
5. Adjustmo	ent to be withi	n 20% o	f market value	\$	-
6. Actuaria	Value of Ass	ets = (4)	+ (5)	\$	29,059,080

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

	Actuarial Value Allocated in Proportion to Market Value	Market Value		
Reserve for DROP	\$ 899,455	\$ 825,116		
Reserve for Other Retirement Benefits	28,159,625	25,832,271		
Total Fund Balances	\$ 29,059,080	\$ 26,657,387		

### 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*	\$ 27,628,968	\$	28,159,625
ACTUARIAL PRESENT VALUE OF ACCUMULATED PLAN BENEFITS			
Discount Rate	7.00%		7.00%
Vested Benefits Participants Currently Receiving Payments All Other Participants TOTAL VESTED BENEFITS	\$  19,461,143 5,914,189 25,375,332	\$	22,270,261 4,882,289 27,152,550
Percent Funded	109%		104%
NONVESTED BENEFITS	955,384		1,036,798
EXCESS STATE MONIES RESERVE	214,866		321,256
TOTAL ACTUARIAL PRESENT VALUE OF ACCUMULATED PLAN BENEFITS	\$ 26,545,582	\$	28,510,604
Percent Funded	104%		99%

<sup>\*</sup> Actuarial Value of Assets

### Funded Status - Accrued Benefits (ASC 960) (Continued)

	10/1/2022	<u>10/1/2023</u>
ACTUARIAL PRESENT VALUE OF ACCUMULATED PLAN BENEFITS AS OF PRIOR VALUATION DATE	\$ 25,138,784	\$ 26,545,582
Increase (Decrease) During the Year Attributable to:		
Increase for Interest Due to the Decrease in the Discount Period Benefits Paid Benefits Accumulated, Turnover, Other Experience Change in Actuarial Assumptions Plan Amendment Net Increase (Decrease)	\$ 1,709,605 (1,431,722) 1,128,915 - - - \$ 1,406,798	\$ 1,801,715 (1,613,586) 1,776,893 - - - 1,965,022
ACTUARIAL PRESENT VALUE OF ACCUMULATED PLAN BENEFITS AS OF CURRENT VALUATION DATE	\$ 26,545,582	\$ 28,510,604

## **State Required Exhibit**

		10/1/2022		10/1/2023
A. Member Data  1. Active Members and beneficiaries receiving		70		69
<ul><li>2. Retired Members and beneficiaries receiving benefits (including DROP)</li><li>3. Disabled Members receiving benefits</li></ul>		35 0		38 0
<ul><li>4. Terminated vested Members</li><li>5. Prior year active compensation</li><li>6. Annual benefits payable to retirees</li></ul>	\$	3 4,095,973	\$	3 4,086,215
and beneficiaries (including DROP)  7. Annual benefits payable to disabled retirees	\$ \$	1,637,378	\$ \$	1,873,287 -
Annual benefits payable to terminated vested Members	\$	69,454	\$	69,454
B. <u>Assets</u> 1. Actuarial value	\$	27,628,968	\$	28,159,625
2. Market value		23,846,602		25,832,271
<ul><li>C. <u>Liabilities</u></li><li>1. Actuarial present value of future expected benefit payments for active members</li></ul>				
a. Retirement benefits b. Termination benefits	\$	15,188,501 2,960,751	\$	14,539,116 3,235,818
<ul><li>c. Death benefits</li><li>d. Disability benefits</li></ul>		149,831 232,641		154,305 234,864
e. Total  2. Actuarial present value of future expected benefit	\$	18,531,724	\$	18,164,103
payments for terminated vested members  3. Actuarial present value of future expected benefit payments for members currently receiving benefits	\$	499,169	\$	534,948
a. Service retired, beneficiaries and DROP b. Disability retired	\$	19,461,143 -	\$	22,270,261
c. Total 4. Excess State Monies Reserve	\$ \$	19,461,143 214,866	\$ \$	22,270,261 321,256
<ol><li>Total actuarial present value of future expected benefit payments</li></ol>	\$	38,706,902	\$	41,290,568
<ol> <li>Entry age normal accrued liability</li> <li>Unfunded entry age normal accrued liability</li> </ol>	\$ \$	31,070,496 7,223,894	\$ \$	33,139,314 7,307,043
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### **State Required Exhibit (Continued)**

			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)	\$	19,461,143	\$ 22,270,261
	b. Other Members		5,914,189	4,882,289
	c. Total	\$	25,375,332	\$ 27,152,550
	2. Actuarial present value of accumulated non-			
	vested plan benefits		955,384	1,036,798
	3. Excess State Monies Reserve		214,866	321,256
	4. Total actuarial present value of accumulated plan			
	benefits	\$	26,545,582	\$ 28,510,604
E.	Statement of Change in Accumulated Plan Benefits  1. Actuarial present value of accumulated plan benefits as of Prior Valuation Date  2. Increase (decrease) during year attributable to:	\$	25,138,784	\$ 26,545,582
	a. Plan amendment		0	0
	b. Change in actuarial assumptions		0	0
	c. Benefits paid		(1,431,722)	(1,613,586)
	d. Other, including benefits accumulated and increase	9	,	, , , ,
	for interest due to decrease in the discount period		2,838,520	3,578,608
	e. Net increase	\$	1,406,798	\$ 1,965,022
	3. Actuarial present value of accumulated plan			
	benefits as of Current Valuation Date	\$	26,545,582	\$ 28,510,604

### **State Required Exhibit (Continued)**

	Actuarial Valuation Date		<u>10/1/2021</u>		<u>10/1/2022</u>
	For Contribution Year		2021-22		2022-23
F.	Past Contributions				
	1. Total contribution required				
	a. City				
	i. Estimated Dollars, from Actuarial Valuation	\$	509,277	\$	933,797
	ii. Percentage of Participants' Compensation		11.70%		19.08%
	iii. Actual Compensation Under NRA	\$	4,525,089	\$	4,631,402
	iv. Required, per new state interpretation = (ii.) x (iii.)	\$	529,435	\$	883,671
	b. State (Estimated)		135,554		135,554
	c. Member*	_	450,903		450,903
	d. Total = (a.iv.) + (b.) + (c.)	\$	1,115,892	\$	1,470,128
	2. Actual contributions made:	Φ	E40.044	Φ	000 000
	a. City	\$	543,011	\$	908,389
	b. State** c. Member		135,554		135,554
	d. Total	\$	516,569 1,195,134	\$	542,270 1,586,213
	d. Total	Ψ	1,195,154	Ψ	1,500,215
G.	Net Actuarial Gain (Loss)		N/A		N/A
Н.	<u>Disclosure of Following Items:</u>		10/1/2022		10/1/2023
	1. Actuarial present value of future salaries - attained				
	age***	\$	35,213,848	\$	37,248,449
	2. Actuarial present value of future employee				
	contributions - attained age***	\$	3,549,165	\$	3,759,236
	Actuarial present value of future contributions				
	from other sources		N/A		N/A
	Amount of active members' accumulated			_	
	contributions	\$	2,555,481	\$	1,467,353
	5. Actuarial present value of future salaries and future		Niet was dele	ما احد	
	benefits at entry age		Not provided	ı by	system
	<ol><li>Actuarial present value of future employee contributions at entry age</li></ol>		Not provided	l hv	evetem
	Continuations at entry age		Not provided	лоу	ayat <del>c</del> iii

<sup>\*</sup> Determined by applying the required employee contribution rate (11.0%) to expected compensation for the year for participants under Normal Retirement Age (NRA)

<sup>\*\*</sup> Excluding Excess Premium Tax Revenues that have not been used to provide Additional Benefits

<sup>\*\*\*</sup> Participants under Normal Retirement Age (NRA) only

### FS112.664 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	Current Rate	2% Increase
	(5.00%)	(7.00%)	(9.00%)
(1) Total Pension Liability	\$40,424,013	\$31,070,496	\$25,258,831
(2) Plan Fiduciary Net Position	\$24,258,456	\$24,258,456	\$24,258,456
(3) Net Pension Liability	\$16,165,557	\$6,812,040	\$1,000,375

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

	2% Decrease	Current Rate	2% Increase
	(5.00%)	(7.00%)	(9.00%)
(1) Total Pension Liability	\$42,886,934	\$33,139,314	\$26,521,994
(2) Plan Fiduciary Net Position	\$26,657,387	\$26,657,387	\$26,657,387
(3) Net Pension Liability	\$16,229,547	\$6,481,927	(\$135,393)

#### 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	18.33		
RP 2000 Mortality and 5.0% Interest	15.33		

## **Reconciliation of DROP Participants and Assets**

Participants as of 10/1/2022	3
New DROP Members	3
New DROP's, Withdrew during PY	0
All Other Withdrawals	0
Corrections	0
Participants as of 10/1/2023	6

	Total
Assets as of 10/1/2022	\$411,854.09
Payments into DROP	386,819.16
Earnings	26,442.75
Distributions	0.00
Expenses	0.00
Adjustments	0.00
Assets as of 10/1/2023	\$825,116.00

## **Participant Data Summary**

### October 1, 2023

	Active	DROP	Terminated Vested	Disabled	Retired	Beneficiaries	Total
October 1, 2022	70	3	3	-	31	1	108
New Entrants	17						17
Retirements	-	-	-		-		-
Disabilities							-
Terminations a) with refund b) without refund	(15) -	-	-		-		(15) -
DROP enrollments	(3)	3					-
Deaths a) with beneficiaries b) without beneficiaries					- -	-	- -
Benefits Expired							-
Other	-	-	-		-		-
October 1, 2023	69	6	3	-	31	1	110
Average Age	35.0	51.8	48.5		65.2	59.5	

### Active Participants as of 10/01/2022

	Males	Females	Total
Number of Participants	58	12	70
Average Age Nearest Birthday	36.1	32.6	35.5
Average Completed Years of Service	6.8	3.9	6.3
Average Compensation for Prior Year	\$60,147	\$50,622	\$58,514

### Active Participants as of 10/01/2023

	Males	Females	Total
Number of Participants	58	11	69
Average Age Nearest Birthday	35.6	32.0	35.0
Average Completed Years of Service	6.4	3.6	5.9
Average Compensation for Prior Year	\$61,128	\$49,164	\$59,221

## **Age and Service Distribution**

Years of Service								
	0-4	5-9	10-14	15-19	20-24	25-29	30+	Total
Age								
Under 25	9	0	0	0	0	0	0	9
25-29	12	1	0	0	0	0	0	13
30-34	10	4	1	0	0	0	0	15
35-39	7	4	4	1	0	0	0	16
40-44	1	1	0	3	0	0	0	5
45-49	2	3	0	2	0	0	0	7
50-54	0	1	0	1	0	0	0	2
55-59	0	1	1	0	0	0	0	2
60-64	0	0	0	0	0	0	0	0
65 and over	0	0	0	0	0	0	0	0
Total	41	15	6	7	0	0	0	69

## **Comparison of Actual vs. Assumed Salary Increases and Investment Returns**

October 1, 2023

#### **Salary Increases**

Year Ended September 30,	Actual	Assumed
1990	4.70%	6.0%
1991	1.50%	6.0%
1992	7.60%	6.0%
1993	7.10%	6.0%
1994	4.50%	6.0%
1995	7.00%	6.0%
1996	15.70%	6.0%
1997	(0.30%)	6.0%
1998	11.50%	6.0%
1999	13.80%	6.0%
2000	1.70%	6.0%
2001	13.50%	6.0%
2002	3.90%	6.0%
2003	6.70%	6.0%
2004	4.00%	6.0%
2005	4.70%	6.0%
2006	7.10%	6.0%
2007	9.90%	6.0%
2008	11.20%	6.0%
2009	3.10%	6.0%
2010	2.00%	6.0%
2011	8.80%	6.0%
2012	4.45%	6.0%
2013	2.45%	6.0%
2014	5.01%	6.0%
2015	8.50%	6.0%
2016	3.30%	6.0%
2017	1.87%	6.0%
2018	9.20%	5.0%
2019	11.80%	5.0%
2020	(2.25%)	5.0%
2021	11.20%	5.0%
2022	6.96%	5.0%
2023	7.60%	5.0%
ars, Compounded	6.90%	5.0%

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.

Last 5 Years, Compounded

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

October 1, 2023

#### **Investment Return**

Year Ended		
September 30,	Actual	Assumed
1990	2.72%	8.0%
1991	2.95%	8.0%
1992	27.46%	8.0%
1993	10.29%	8.0%
1994	(0.67%)	8.0%
1995	15.73%	8.0%
1996	12.57%	8.0%
1997	23.52%	8.0%
1998	5.93%	8.0%
1999	11.27%	8.0%
2000	10.72%	8.0%
2001	(5.35%)	8.0%
2002	(3.70%)	8.0%
2003	3.71%	8.0%
2004	4.11%	8.0%
2005	5.67%	8.0%
2006	7.80%	8.0%
2007	10.53%	8.0%
2008	6.10%	8.0%
2009	3.86%	8.0%
2010	4.24%	8.0%
2011	3.10%	8.0%
2012	4.27%	8.0%
2013	9.64%	8.0%
2014	11.01%	8.0%
2015	8.31%	8.0%
2016	8.74%	8.0%
2017	11.72%	8.0%
2018	7.63%	7.75%
2019	6.61%	7.75%
2020	8.43%	7.75%
2021	10.50%	7.00%
2022	4.70%	7.00%
2023	3.60%	7.00%
Last 5 Years, Compounded	6.70%	7.30%
Last 20 Years, Compounded	6.99%	7.81%
Last 30 Years, Compounded	7.00%	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.

## **History of Excess Premium Tax Revenues**

October 1, 2023

		Regular				
	Cash <u>Received</u>	Applicable "Frozen" <u>Amount</u>	Excess = Additional Premium Tax Revenue	Current Year Benefit Improve- <u>ments</u>	Set Aside for Future Improve- ments	Cumulative Set Aside for Future Improve- ments
9/30/1998	\$ 47,792.65	\$ 47,792.65	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00
9/30/1999	46,261.19	47,792.65	0.00	0.00	0.00	0.00
9/30/2000	44,579.19	47,792.65	0.00	0.00	0.00	0.00
9/30/2001	48,325.16	47,792.65	532.51	0.00	532.51	532.51
9/30/2002	61,887.18	47,792.65	14,094.53	0.00	14,094.53	14,627.04
9/30/2003	62,368.77	47,792.65	14,576.12	0.00	14,576.12	29,203.16
9/30/2004	81,949.69	47,792.65	34,157.04	0.00	34,157.04	63,360.20
9/30/2005	89,105.73	47,792.65	41,313.08	0.00	41,313.08	104,673.28
9/30/2006	93,883.30	47,792.65	46,090.65	0.00	46,090.65	150,763.93
9/30/2007	89,105.73	47,792.65	41,313.08	192,077.01 (1)	0.00	0.00
9/30/2008	96,755.15	47,792.65	48,962.50	45,846.00 (2)	3,116.50	3,116.50
9/30/2009	92,821.89	47,792.65	45,029.24	45,846.00	0.00	3,116.50
9/30/2010	95,223.83	47,792.65	47,431.18	45,846.00	1,585.18	4,701.68
9/30/2011	94,730.77	47,792.65	46,938.12	45,846.00	1,092.12	5,793.80
9/30/2012	98,598.30	47,792.65	50,805.65	45,846.00	4,959.65	10,753.45
			_, _,_			
9/30/2013	99,510.28	47,792.65	51,717.63	45,846.00	5,871.63	16,625.08
9/30/2014	111,256.94	47,792.65	63,464.29	45,846.00	17,618.29	34,243.37
9/30/2015	117,869.72	47,792.65	70,077.07	45,846.00	24,231.07	58,474.44
9/30/2016	137,096.72	47,792.65	89,304.07	45,846.00	43,458.07	101,932.51
9/30/2017	142,662.63	47,792.65	94,869.98	45,846.00	49,023.98	150,956.49
9/30/2018	155,114.25	47,792.65	107,321.60	212,432.09 (3)	0.00	0.00
9/30/2019	170,054.80	47,792.65	122,262.15	87,761.00 (4)	34,501.15	34,501.15
9/30/2020	185,074.44	47,792.65	137,281.79	87,761.00	49,520.79	84,021.94
9/30/2021	191,851.88	47,792.65	144,059.23	87,761.00	56,298.23	140,320.17
9/30/2022	210,099.51	47,792.65	162,306.86	87,761.00	74,545.86	214,866.03
9/30/2023	241,944.07	47,792.65	194,151.42	87,761.00	106,390.42	321,256.45

#### Notes:

- (1) Additional Benefits adopted (increasing multiplier to 3.42%) with a lump sum cost in excess of the available \$192,077.01.
- (2) Additional Benefits adopted (increasing multiplier to 3.42%) with an annual cost initially valued as \$45,846.
- (3) Additional Benefits adopted (adding \$150/month supplement and 25 and out normal retirement) with a lump sum cost in excess of the available \$212,432.09
- (4) Additional Benefits adopted (adding \$150/month supplement and 25 and out normal retirement) with an annual cost initially valued as \$87,761

### 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	\$ 48,879,638
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 10 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	\$29,197,758	\$ 30,979,932
Normal Cost	946,881	965,096
Interest on the Total Pension Liability	2,060,862	2,180,632
Changes of Benefit Terms	0	0
Changes of Assumptions	0	0
Benefit Payments	(1,431,722)	(1,613,586)
Expected Pension Liability at End of Measurement Period	30,773,779	32,512,074
Actual Pension Liability at End of Measurement Period	30,979,932	33,139,314
Pension Liability (Gain)/Loss	\$ 206,154	\$ 627,240
Unfunded Liability Reconciliation		
•	Fiscal Year Ending 9/30/2022	Fiscal Year Ending 9/30/2023
Unfunded Liability at Beginning of Measurement Period	\$ 2,267,160	\$3,350,964
Contribution Towards Unfunded	(267,513)	(418,470)
Interest	139,975	205,275
Asset (Gain)/Loss	1,005,188	1,214,680
Liability (Gain)/Loss	206,153	627,240
Unfunded Liability at End of Measurement Period	\$ 3,350,964	\$4,979,689

### **Summary of Major Plan Provisions**

October 1, 2023

Effective Date: August 25, 1971.

Plan Year: October 1 to September 30.

Last Amendment: Restatement (Ordinance 669) effective June 8, 2000. First Amendment (Ordinance 715) effective March 8, 2001 (changing Employee Contributions from 7.0% to 9.7% and the multiplier from 3.00% to 3.25%). Second Amendment (Ordinance 794) effective April 10, 2003 (for various law and other changes). Third Amendment (Ordinance 811) effective July 10, 2003 (adding Early Retirement). Fourth Amendment (Ordinance 881) effective July 22, 2004 (adding 3% increasing annuities as an Optional Form of Payment and changing investment policy). Fifth Amendment (Ordinance 1029) effective May 11, 2006 (changing various provisions as required by new IRS rules). Sixth Amendment (Ordinance 1070) effective May 17, 2007 (changing Employee Contributions from 9.7% to 11.0% and the multiplier from 3.25% to 3.50%). Seventh Amendment (Ordinance 1083) effective July 26, 2007 (adding 5% fixed investment return option for DROP). Restatement (Ordinance 1159) adopted August 17, 2009. First Amendment (Ordinance 1222) effective February 9, 2012 (adding 300 hours of overtime cap). First Amendment (Ordinance 1419) Effective October 12, 2017 (adding supplemental benefit and 25 and out retirement provision). First Amendment (Ordinance 1574) effective November 10, 2021 (changing vesting from 10 year cliff, to graded vesting schedule starting at 5 years of service).

**Eligibility**: All permanent Police Officers who have passed the medical examination.

**Employee Contributions**: 11% of Compensation (9.7% prior to May 17, 2007) and excluded from taxable income under IRC Section 414(h).

**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 Police Officer, if greater.

**Credited Service**: Years and fractional parts of years of service as a Police Officer 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 8, 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) 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, 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 3.5% 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 Police Officer 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 Police Officer 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 Police Officers, regardless of sex, and the same table with ages set back 6 years is used for all beneficiaries and survivor annuitants, regardless of sex.

**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.

**\$150 Per Month Supplemental Benefit:** Police Officers who retire from active service only receive a supplemental monthly benefit of \$150 payable for life only, without any COLA. This benefit is not provided for Police Officers who terminate prior to being eligible for early, normal or disability retirement, nor is it provided for beneficiaries of deceased Police Officers, nor their joint annuitants. However, when he retires a Police Officer may elect to have the \$150 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			
Male	Female		
0.03%	0.04%		
0.04%	0.06%		
0.07%	0.10%		
0.18%	0.26%		
0.90%	1.21%		
	Male 0.03% 0.04% 0.07% 0.18%		

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 5% 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.