

CITY OF COCOA  
POLICE OFFICERS' RETIREMENT PLAN

ACTUARIAL IMPACT STATEMENT

October 25, 2024

Attached hereto is a comparison of the impact on the Minimum Required Contribution (per Chapter 112, Florida Statutes) and the Required City Contribution, resulting from the implementation of the following changes:

- Section 2-198, Disability, is being amended to provide for a service-connected disability benefit when the disability occurred during an active shooter event or mass killing event. The benefit shall equal the member's accrued retirement benefit provided such amount is not less than 60% of the member's average monthly earnings at the time of the disability. To value for this change, we assume 0.2% of service-connected disabilities occur during an active shooter event.
- Section 2-218, Deferred Retirement Option Plan, is being amended for an extension of the participation period from 60 months to 96 months for current and future participants.
- Section 2-196, Benefits amounts and eligibility, is being amended for a 0% minimum for the cost-of-living adjustment. Currently, the monthly benefit could be reduced (but not below the initial benefit amount) in the event the applicable Consumer Price Index is negative.

The cost impact, determined as of October 1, 2023, applicable to the fiscal year ending September 30, 2025, is as follows:

	<u>Proposed</u>	<u>Current</u>
Minimum Required Contribution		
% of Projected Annual Payroll	39.08%	39.08%
Member Contributions (Est.)		
% of Projected Annual Payroll	6.50%	6.50%
City And State Required Contribution		
% of Projected Annual Payroll	32.58%	32.58%
State Contribution (Est.) <sup>1</sup>	\$277,059	\$277,059
% of Projected Annual Payroll	8.98%	8.98%
City Required Contribution <sup>2</sup>		
% of Projected Annual Payroll	23.60%	23.60%

<sup>1</sup> Represents the amount received in calendar 2024. As per a Mutual Consent Agreement between the Membership and the City, all State Monies received each year will be available to offset the City's required contribution.

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Unless otherwise noted, all data, assumptions, methods and plan provisions are the same as in the October 1, 2023 actuarial valuation report. It should be noted that changes to retirement benefits could potentially affect participants' retirement or termination behavior. We will monitor and advise of any recommended changes with future experience studies.

Future actuarial measurements may differ significantly from the current measurements presented in this report for a variety of reasons including: changes in applicable laws, changes in plan provisions, changes in assumptions, or plan experience differing from expectations. Due to the limited scope of the analysis, we did not perform an analysis of the potential range of such future measurements.

Please note that contents of this analysis and the October 1, 2023 actuarial valuation report are considered an integral part of the actuarial opinions. In reviewing the results presented in this study, it should be noted that there are risks that may not be inherently apparent to the reader that should be carefully considered. For key risks, please see the Discussion of Risk section of the October 1, 2023 actuarial valuation report.

In performing the analysis, we used third-party software to model (calculate) the underlying liabilities and costs. These results are reviewed in the aggregate and for individual sample lives. The output from the software is either used directly or input into internally developed models to generate the costs. All internally developed models are reviewed as part of the process. As a result of this review, we believe that the models have produced reasonable results. We do not believe there are any material inconsistencies among assumptions or unreasonable output produced due to the aggregation of assumptions.

The changes presented herein are in compliance with Part VII, Chapter 112, Florida Statutes and Section 14, Article X of the State Constitution. The undersigned is familiar with the immediate and long-term aspects of pension valuations and meets the Qualification Standards of the American Academy of Actuaries necessary to render the opinions contained herein.

  
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Douglas H. Lozen, EA, MAAA  
Enrolled Actuary #23-7778

STATEMENT OF PLAN ADMINISTRATOR

The prepared information presented herein reflects the estimated impact of the proposed Ordinance.

  
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Pat Dovale  
Chairman, Board of Trustees

## COMPARATIVE SUMMARY OF PRINCIPAL VALUATION RESULTS

	New Benefits <u>10/1/2023</u>	Old Benefits <u>10/1/2023</u>
A. Participant Data		
Actives	54	54
Service Retirees	45	45
DROP Retirees	3	3
Beneficiaries	3	3
Disability Retirees	8	8
Terminated Vested	<u>16</u>	<u>16</u>
Total	129	129
Projected Annual Payroll	3,083,666	3,083,666
Annual Rate of Payments to:		
Service Retirees	1,623,840	1,623,840
DROP Retirees	118,624	118,624
Beneficiaries	73,552	73,552
Disability Retirees	146,248	146,248
Terminated Vested	206,243	206,243
B. Assets		
Actuarial Value (AVA) <sup>1</sup>	37,888,462	37,888,462
Market Value (MVA) <sup>1</sup>	34,518,295	34,518,295
C. Liabilities		
Present Value of Benefits		
Actives		
Retirement Benefits	16,920,900	16,920,900
Disability Benefits	647,227	647,167
Death Benefits	46,903	46,903
Vested Benefits	1,027,350	1,027,350
Refund of Contributions	130,509	130,509
Service Retirees	21,680,218	21,680,218
DROP Retirees <sup>1</sup>	1,788,028	1,788,028
Beneficiaries	946,621	946,621
Disability Retirees	1,830,794	1,830,794
Terminated Vested	1,471,715	1,471,715
Share Plan Balances <sup>1</sup>	<u>0</u>	<u>0</u>
Total	46,490,265	46,490,205

C. Liabilities - (Continued)	New Benefits <u>10/1/2023</u>	Old Benefits <u>10/1/2023</u>
Present Value of Future Salaries	23,518,902	23,518,902
Present Value of Future Member Contributions	1,528,729	1,528,729
Normal Cost (Retirement)	465,519	465,519
Normal Cost (Disability)	55,699	55,691
Normal Cost (Death)	2,713	2,713
Normal Cost (Vesting)	66,975	66,975
Normal Cost (Refunds)	<u>21,541</u>	<u>21,541</u>
Total Normal Cost	612,447	612,439
Present Value of Future Normal Costs	4,546,501	4,546,448
Accrued Liability (Retirement)	13,415,767	13,415,767
Accrued Liability (Disability)	236,013	236,006
Accrued Liability (Death)	27,090	27,090
Accrued Liability (Vesting)	527,140	527,140
Accrued Liability (Refunds)	20,378	20,378
Accrued Liability (Inactives) <sup>1</sup>	27,717,376	27,717,376
Share Plan Balances <sup>1</sup>	<u>0</u>	<u>0</u>
Total Actuarial Accrued Liability (EAN AL)	41,943,764	41,943,757
Unfunded Actuarial Accrued Liability (UAAL)	4,055,302	4,055,295
Funded Ratio (AVA / EAN AL)	90.3%	90.3%

D. Actuarial Present Value of Accrued Benefits	New Benefits <u>10/1/2023</u>	Old Benefits <u>10/1/2023</u>
Vested Accrued Benefits		
Inactives + Share Plan Balances <sup>1</sup>	27,717,376	27,717,376
Actives	8,603,527	8,603,472
Member Contributions	<u>1,852,486</u>	<u>1,852,486</u>
Total	38,173,389	38,173,334
Non-vested Accrued Benefits	<u>1,094,818</u>	<u>1,094,818</u>
Total Present Value		
Accrued Benefits (PVAB)	39,268,207	39,268,152
Funded Ratio (MVA / PVAB)	87.9%	87.9%
Increase (Decrease) in Present Value of Accrued Benefits Attributable to:		
Plan Amendments	55	
Benefit Changes	0	
Plan Experience	0	
Benefits Paid	0	
Interest	0	
Other	<u>0</u>	
Total	55	

	New Benefits	Old Benefits
Valuation Date	10/1/2023	10/1/2023
Applicable to Fiscal Year Ending	<u>9/30/2025</u>	<u>9/30/2025</u>

E. Pension Cost

Normal Cost (with interest)		
% of Projected Annual Payroll <sup>2</sup>	19.86	19.86
Administrative Expenses (with interest)		
% of Projected Annual Payroll <sup>2</sup>	3.12	3.12
Payment Required to Amortize Unfunded Actuarial Accrued Liability over 15 years (as of 10/1/2023, with interest)		
% of Projected Annual Payroll <sup>2</sup>	16.10	16.10
Minimum Required Contribution		
% of Projected Annual Payroll <sup>2</sup>	39.08	39.08
Expected Member Contributions		
% of Projected Annual Payroll <sup>2</sup>	6.50	6.50
Expected City and State Contribution		
% of Projected Annual Payroll <sup>2</sup>	32.58	32.58

<sup>1</sup> The asset values and liabilities include accumulated DROP and Share Plan Balances.

<sup>2</sup> Contributions developed as of 10/1/2023 are expressed as a percentage of Projected Annual Payroll at 10/1/2023 of \$3,083,666.

## ACTUARIAL ASSUMPTIONS AND METHODS

### Mortality Rate

#### *Healthy Active Lives:*

**Female:** PubS.H-2010 (Below Median) for Employees, set forward one year.

**Male:** PubS.H-2010 (Below Median) for Employees, set forward one year.

#### *Healthy Retiree Lives:*

**Female:** PubS.H-2010 for Healthy Retirees, set forward one year.

**Male:** PubS.H-2010 for Healthy Retirees, set forward one year.

#### *Beneficiary Lives:*

**Female:** PubG.H-2010 for Healthy Retirees.

**Male:** PubG.H-2010 for Healthy Retirees, set back one year.

#### *Disabled Lives:*

80% PubG.H-2010 for Disabled Retirees / 20% PubS.H-2010 for Disabled Retirees.

All rates for healthy lives are projected generationally with Mortality Improvement Scale MP-2018. We feel this assumption sufficiently accommodates future mortality improvements.

The previously described mortality assumption rates were mandated by Chapter 2015-157, Laws of Florida. This law mandates the use of the assumptions used in either of the two most recent valuations of the Florida Retirement System (FRS). The above rates are those outlined in Milliman's July 1, 2021 FRS valuation report for special risk employees, with appropriate adjustments made based on plan demographics.

### Interest Rate

7.25% per year compounded annually, net of investment related expenses. This is supported by the target asset allocation of the trust and the expected long-term return by asset class.

### Salary Increases

Salary Scale	
Service	Rate
0	6.5%
1 - 5	4.5%
6+	4.0%

These rates were developed in an August 17, 2018 Experience Study.

### Retirement

% Retiring During the Year (< 25 Years of Service)	
Age	Rate
50	50%
51 - 52	10%
53	50%
54+	100%

These rates were developed in an August 17, 2018 Experience Study.

### Termination

% Terminating During the Year	
Service	Rate
0 - 1	17%
2	10%
3 - 19	4%
20+	0%

These rates were developed in an August 17, 2018 Experience Study.

### Disability Rate

Sample rates below:

% Becoming Disabled During the Year	
Age	Rate
20	0.14%
30	0.18%
40	0.30%
50	1.00%
60+	2.09%

75% of Disability Retirements are assumed to be Line-of-Duty related. These rates were confirmed in an August 17, 2018 Experience Study.

Cost-of-Living Adjustment

3.0% per year beginning at age 65.

Payroll Growth

None.

Administrative Expenses

\$96,295 annually, based on the average of actual expenses incurred in the prior two fiscal years.

Amortization Method

New UAAL amortization bases are amortized over 15 years.

The amortization payment is subject to a minimum based on a 30-year amortization of the UAAL in order to comply with Actuarial Standard of Practice No. 4.

Bases established prior to the valuation date are adjusted proportionally to match the Expected Unfunded Actuarial Accrued Liability as of the valuation date, in order to align prior year bases with the portion of the current year UAAL associated with prior year sources.

Funding Method

Entry Age Normal Actuarial Cost Method.

Asset Smoothing Methodology

The Actuarial Value of Assets is brought forward using the historical four-year geometric average of Market Value Returns (net-of-fees). Over time, this may result in a de minimis bias that is above or below the Market Value of Assets.

Low-Default-Risk Obligation Measure

Based on the Entry Age Normal Actuarial Cost Method and an interest rate of 4.87% per year compounded annually, net of investment related expenses. This rate is consistent with the Yield to Maturity of the S&P Municipal Bond 20-Year High Grade Rate Index as of September 30, 2023. All other assumptions for the Low-Default-Risk Obligation Measure are consistent with the assumptions shown in this section unless otherwise noted.

SUMMARY OF CURRENT PLAN  
(THROUGH ORDINANCE 16-2022)

<u>Original Effective Date</u>	August 1, 1969
<u>Effective Date Latest Amendment</u>	January 10, 2023
<u>Eligibility</u>	Full time sworn Police Officers from date of employment, including probationary period. Mandatory as a condition of employment.
<u>Credited Service</u>	Total years and fractional parts of years with the City as a Police Officer, whether continuous or not, so long as Member contributions attributable to such periods of service remain in Fund in the event of termination of employment with the City and subsequent reemployment within 5 years.
<u>Salary</u>	<p>Salary means total compensation reportable on Form W-2 for services rendered as a Police Officer, plus tax deferred, tax exempt, and tax-sheltered items of income derived from elective employee payroll deductions or salary reductions.</p> <p>Effective October 27, 2015, Salary means base pay, including state funded incentives, holiday pay and overtime pay up to 150 hours per fiscal year, but excluding special detail pay, payments for unused sick and annual leave, and overtime pay in excess of 150 hours per fiscal year.</p> <p>Additionally, in order to comply with the regulations set forth in Senate Bill 1128, Salary will include the lesser of the amount of sick and annual leave time accrued as of June 7, 2013, or the actual amount of sick and annual leave time for which the retiree receives payment at the time of retirement.</p>
<u>Average Monthly Earnings</u>	Average Salary for the highest 5 years during the 10 years immediately preceding retirement or termination.
<u>Member Contributions</u>	6.5% of Compensation.
<u>Interest on Member Contributions</u>	4.5% per year.
<u>City Contributions</u>	Amount required after Member contributions and State premium tax refunds in order to pay current costs and amortize unfunded past service cost over 40 years.

### Normal Retirement

Date	Earlier of: 1) Age 50 and 10 years of Credited Service, or 2) 25 years of Credited Service, regardless of age.
Benefit	3% of Average Monthly Earnings times Years of Credited Service.
Form of Benefit	Ten Year Certain and Life Annuity (options available).

### Cost-of-Living Adjustment

Up to 3% per year beginning at 65.

### Vesting (Termination of Employment)

Less than 10 Years	Refund of Member Contributions with interest.
10 Years or More	Accrued pension payable at age 50, or Refund of contributions with interest.

### Disability

Eligibility	Total and permanent; not able to perform useful and efficient service as a police officer. Board can require periodic re-examination. 10 years of service required for non-service incurred benefits.
Exclusions	Disability resulting from use of drugs, illegal participation in riots, service in military, etc.
Benefit	
Service Connected	Greater of 1) Accrued benefit, 2) 42% of Average Monthly Earnings, or 3) 50% of regular base pay on date of disability.
Non-Service Connected	Accrued benefit.
Duration	Benefit payable for life with 120 payments guaranteed, or until recovery (options available).
Benefit Offsets	If the 50% or 25% of pay benefit plus all Primary and Family Social Security benefits and/or all regular or periodic payments under Worker's Compensation exceeds 100% of regular base pay on the date of disability, the Plan benefit will be reduced so that the sum of all such payments equal 100% of pay. (In no event will offset reduce benefits below 42% of AME for service connected, or 25% of AME for non-service connected disability).

## Board of Trustees

- a. Two City Council appointees,
- b. Two Members of the System elected by a majority of the other covered Police Officers, and
- c. A fifth Member elected by the other 4 and appointed by Council.

## Pre-Retirement Death

If Not Vested or Eligible  
for Early or Normal  
Retirement

Refund of contributions plus 4.5% interest

Vested or Eligible to Retire

Accrued benefits payable to beneficiary for 10 years, or  
in accordance with available options.

## Death After Retirement

Benefit payable in accordance with optional form of  
pension selected at time of retirement.

## Deferred Retirement Option Plan

Eligibility

Satisfaction of Normal Retirement requirements.

Participation

Not to exceed 60 months.

Rate of Return

Actual net investment rate or fixed interest, at member's  
election.

Distribution

Lump sum at termination of employment.

## Chapter 185 Share Account

Pursuant to Chapter 2015-39, Laws of Florida, a share  
plan exists but is currently not funded as the City and  
Membership mutually consented to allow the City to use  
all annual State Monies to offset its funding  
requirements.