# City of Coral Gables Retirement System

Actuarial Valuation Report as of October 1, 2023

Annual Employer Contribution for the Fiscal Year Ending September 30, 2025







May 1, 2024

Board of Trustees City of Coral Gables Retirement System Coral Gables, Florida

Dear Members of the Board:

The results of the October 1, 2023 Annual Actuarial Valuation of the City of Coral Gables Retirement System ("Retirement System" or "Plan") are presented in this report.

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

The purposes of the valuation are to measure the Plan's funding progress, to determine the employer contribution rate for the fiscal year ending September 30, 2025, to determine the actuarial information for Financial Accounting Standards Board (FASB) Accounting Standards Codification Topic 960 (ASC 960) for the plan year ending September 30, 2023, and to present the actuarial information for Governmental Accounting Standards Board (GASB) Statement No. 67 for the fiscal year ending September 30, 2023. This report should not be relied on for any purpose other than the purposes described herein. Determinations of financial results associated with the benefits described in this report for purposes other than those identified above may be significantly different.

The contribution rate in this report is determined using the actuarial assumptions and methods disclosed in Section B of this report. This report includes risk metrics on page 9 but does not include a more robust assessment of the risks of future experience not meeting the actuarial assumptions. Additional assessment of risks was outside the scope of this assignment.

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

The findings in this report are based on data and other information through October 1, 2023. The valuation was based upon information furnished by the City concerning plan benefits, financial transactions, plan provisions and active members, terminated members, retirees and beneficiaries. We checked for internal reasonability and year-to-year consistency, but did not audit the data. We are not responsible for the accuracy or completeness of the information provided by the City.

This report was prepared using certain assumptions adopted by the Board as authorized by and prescribed under Florida Statutes. The investment return assumption was prescribed by the Board, and the assumed mortality rates were prescribed by Florida Statutes Chapter 112.63. All actuarial assumptions used in this report are reasonable for the purposes of this valuation.

The combined effect of the assumptions, excluding prescribed assumptions or methods set by law, is expected to have no significant bias (i.e. not significantly optimistic or pessimistic). All actuarial assumptions and methods used in the valuation follow the guidance in the applicable Actuarial Standards of Practice. Additional information about the actuarial assumptions is included in the section of this report entitled Actuarial Assumptions and Methods.

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

This report was prepared using ProVal's valuation model, a software product of Winklevoss Technologies. We are relying on the ProVal model. We performed tests of the ProVal model with this assignment and made a reasonable attempt to understand the developer's intended purpose of, general operation of, major sensitivities and dependencies within, and key strengths and limitations of the ProVal model. In our professional judgment, the ProVal valuation model has the capability to provide results that are consistent with the purposes of the valuation and has no material limitations or known weaknesses.

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

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

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

Respectfully submitted,

GABRIEL, ROEDER, SMITH & COMPANY

By \_\_\_\_\_

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Melissa R. Zrelack, MAAA, FCA Enrolled Actuary No. 23-6467 Consultant & Actuary



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**DISCUSSION OF VALUATION RESULTS** 

### **Discussion of Valuation Results**

### **Comparison of Required Employer Contributions**

The required Employer contribution this year compared with the preceding year is as follows:

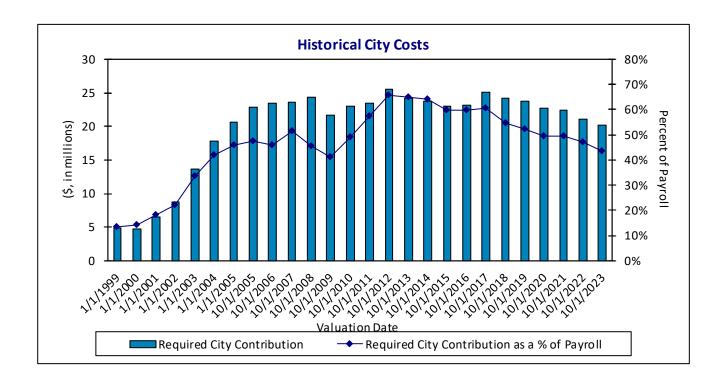
	FYE 9/30/2025 ed on 10/1/2023 Valuation	r FYE 9/30/2024 sed on 10/1/2022 Valuation	Increase/ (Decrease)
Required Employer Contribution As % of Contribution Year Payroll	\$ 20,308,217 43.93 %	\$ 21,229,356 47.20 %	\$ (921,139) (3.27) %
Estimated State Contribution (Discounted to Beginning of Year) As % of Contribution Year Payroll	145,830 137,279 0.30 %	145,830 137,223 0.30 %	\$ 0 56 0.00 %
Net Required Employer Contribution As % of Contribution Year Payroll	20,170,938 43.63 %	21,092,133 46.90 %	(921,195) (3.27) %

### **Payment of Required Contribution**

The contribution developed in this valuation has been calculated as though the full payment is paid on October 1, 2024. If deposited after October 1, 2024, additional interest at the 7.15% annual rate must be added. Further, the required Employer contribution has been computed with the assumption that the amount to be credited to the plan from the State in 2024 and 2025 will be equal to the amount received in 2023 of \$145,830. If the actual payment from the State falls below this amount, then the Employer must increase its contribution by the difference.

Actual contributions for the last year were \$31,709,266 from the City plus \$145,830 (\$137,167 when adjusted for timing) of annual State revenue, for a total of \$31,855,096 (\$31,846,433 when adjusted for timing). The total annual required Employer contribution (City plus State) was \$22,535,142. An additional contribution of 9,311,291 was made in October 2023 (in excess of the required City contribution for FY 2023) and was applied towards the unfunded actuarial accrued liability to reduce the Actuarial (Gain)/Loss amortization base established 1/1/2005 and the Actuarial (Gain)/Loss amortization base established 10/1/2006. Please see pages 26-38 for additional details.





### **Revisions in Plan Provisions / Benefits**

There were no revisions in plan provisions or benefits since the last valuation.

### **Revisions in Actuarial Assumptions**

As approved by the Board of Trustees, the assumed investment rate of return was lowered from 7.20% to 7.15% per year, compounded annually (net after investment expenses). This rate will be reevaluated annually, and future reductions of 5 to 10 basis points per year are anticipated.

This assumption change caused a \$275,335 increase in the City's required contribution and a \$2,821,137 increase in the unfunded actuarial accrued liability.

#### **Revisions in Methods**

There have been no revisions in methods since the last valuation.

#### **Actuarial Experience**

There was a net actuarial experience loss of \$8,235,523 since the last actuarial valuation, which means that actual experience was less favorable than expected. The loss resulted primarily from a lower investment return on the actuarial value of assets than expected. The investment return was 4.9% based on the actuarial value of assets versus the expected investment return of 7.20%. See below for a detailed breakdown of the net actuarial experience gain/(loss).



Gain/(Loss) by Source	Total	Elected	General Excludable	General Non- Excludable	Police Officers	Firefighters
<ol> <li>Retirement Decrements</li> <li>Termination Decrements</li> <li>Disability Decrements</li> <li>Mortality</li> <li>Transfers Between Divisions</li> <li>Service Adjustments from Past Buybacks</li> <li>Salary Experience</li> <li>New Entrants</li> </ol>	\$ 128,000 288,000 (211,000) 2,500,000 - (239,000) (179,000)	- - (10,000) - - -	(177,000) (29,000) 9,000 (229,000) - - (299,000)	139,000 253,000 17,000 734,000 - - (367,000)	127,000 46,000 (273,000) 1,825,000 - (67,000)	39,000 18,000 36,000 180,000 - (172,000) 377,000
9. 415 Limits/Data Adjustments 10. Investment Experience 11. Total	111,000 (10,634,000) (8,236,000)	(5,000) (15,000)	(49,000) (1,445,000) (2,219,000)	(2,813,000) (2,037,000)	160,000 (3,430,000) (1,502,000)	(2,941,000) (2,463,000)

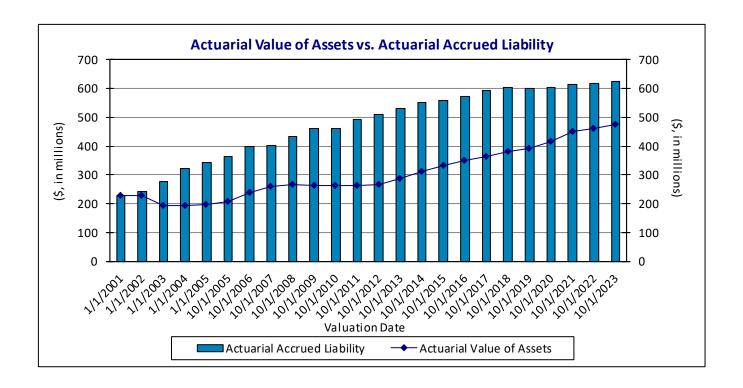
### Participation in the 401(a) Plan

New General Employees are given a choice between entering the 401(a) defined contribution plan or the defined benefit plan. During fiscal year 2023, approximately 35% of newly hired General Employees elected to participate in the 401(a) Plan, in lieu of participating in the defined benefit plan. Over time, future employees entering (or transferring to) the 401(a) defined contribution plan will result in lower liabilities in the defined benefit plan. However, this experience does not have much impact on the annual cost of the defined benefit plan since the employee contribution rate is very close to the total normal cost rate in the defined benefit plan.

#### **Funded Ratio**

The funded ratio as of October 1, 2023 is 76.1% compared to 74.7% as of October 1, 2022. Prior to the assumption change, the funded ratio this year would have been 76.5%. The ratio is equal to the actuarial value of assets divided by the actuarial accrued (past service) liability.





### **Analysis of City Contribution by Group**

The fiscal year 2025 required City contribution as a dollar amount and as a percent of Covered Payroll for each group is shown below:

Total	Elected	General Employees Excludable	General Employees Non-Excludable	Police Officers	Firefighters
\$20,170,938	\$25,730	\$3,379,062	\$4,777,889	\$6,491,184	\$5,497,073
43.63 %	N/A	36.69 %	40.92 %	47.93 %	46.58 %

### **Variability of Future Contribution Rates**

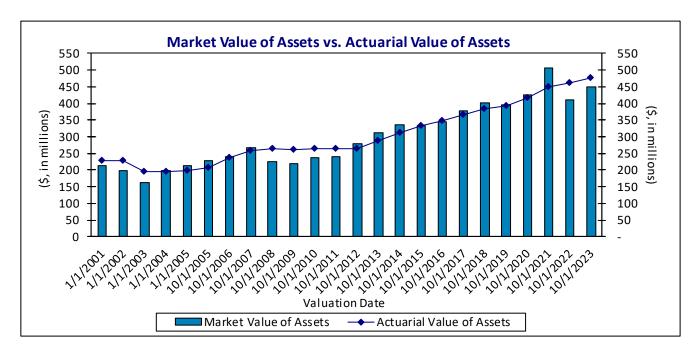
The Actuarial Cost Method used to determine the required contribution is intended to produce contribution rates which are generally level as a percent of payroll. Even so, when experience differs from the assumptions, as it often does, the Employer's contribution rate can vary significantly from year-to-year. Over time, if the year-to-year gains and losses offset each other, the contribution rate would be expected to return to the current level, but this does not always happen.

The Actuarial Value of Assets exceeds the Market Value of Assets by \$25,737,597 as of the valuation date (see Section C). This difference will gradually be recognized in the absence of offsetting experience gains. In turn, the computed employer contribution rate is expected to gradually increase by approximately 4.96% of covered payroll (or approximately \$2.3 million).



#### **Relationship to Market Value**

If Market Value had been the basis for the valuation assets, the City contribution rate would have been 48.59% (approximately \$22.5 million), and the funded ratio would have been 72.0%. The market value-based funded ratio was 66.4% last year.



#### **Conclusions and Recommendations**

The current investment return assumption is 7.15% net of investment expenses. The Plan's Funding Policy (adopted in January 2017) states that economically based actuarial assumptions, including the general inflation assumption and the net investment return assumption, shall be based on forward-looking expectations over a medium to long-term horizon (10-25 years). The Funding Policy also says that the Board should give consideration to the arithmetic and geometric mean of forecasted investment returns when selecting a net investment return assumption.

Based on current forward-looking expectations (taking an average of medium and long-term forecasts) and the Plan's target asset allocation, the expected average return over the next 10 to 25 years is in the range of approximately 6.5% to 7.0%. It is our opinion that the Plan's current net investment return assumption of 7.15% does not significantly conflict with what we consider to be reasonable for the purpose of the measurement. However, we recommend the Board continue to lower the net investment return assumption further from the current assumption of 7.15%.

It is important to note that system assets (i.e., at market value) are not sufficient to cover the liabilities for current retirees. As of October 1, 2023, the shortfall is approximately \$46.2 million (versus an \$82.7 million shortfall as of October 1, 2022). Many steps have been taken to increase the funded ratio from a low point of 52.1% as of October 1, 2012 to the current funded ratio of 76.1%. These include adopting a formal written Funding Policy, strengthening the actuarial assumptions (including lowering the investment return assumption this year), reducing the UAAL amortization period to no more than 25 years, and contributing extra amounts (in excess of the minimum required contribution amount) towards the unfunded actuarial accrued liability.



We note that the Ordinance 2018-11 provides for future COLAS to be granted to Class Members (all of the individuals and estates that are members of the Class in *Murrhee v. City of Coral Gables*, Case No. 13-20731 CA (13) (Fla. 11th Cir. Ct.)) if the rate of return on the market value of assets during a fiscal year exceeds 10%. The City Commission can prevent a future COLA from being granted (or reduce it) by a 4/5 supermajority vote. The City Commission has prevented a COLA from being granted by a supermajority vote in all five years since Ordinance 2018-11 was adopted (the COLAs for 2018, 2019, 2021, 2022 and 2024, which were triggered based on investment experience in fiscal years 2017, 2018, 2020, 2021 and 2023, respectively). Based on this experience, no future COLAs are assumed to be paid for actuarial valuation purposes. We recommend the Board continue to monitor the actual experience of future COLA decisions made by the City Commission over the next several years and then periodically reevaluate the potential need for a future COLA assumption in future actuarial valuations based on this emerging experience.

The remainder of this Report includes detailed actuarial valuation results, information relating to the pension fund, financial accounting information, miscellaneous member data and a summary of plan provisions.



### **Chapter Revenue**

Under Chapter 175 and 185, as amended by Senate Bill 172, state premium tax revenue may be used in any way as long as mutual consent exists between the parties and as long as all Chapter minimum benefits are in place.

As of the valuation date, the only minimum benefit requirement not currently being met is the Early Retirement Benefit for Police Officers and Firefighters who were not eligible for this benefit as of September 30, 2012 and September 30, 2013 respectively.

Actuarial Confirmation of the Use of State Chapter Money											
	Police	Fire	Total								
1. Base Amount Previous Plan Year	\$ 93,559	\$ 52,271	\$ 145,830								
2. Amount Received for Previous Plan Year	814,827	1,319,180	2,134,007								
3. Benefit Improvements	0	0	0								
4. Excess Funds for Previous Plan Year	0	0	0								
5. Accumulated Excess at Beginning of Previous Year	0	0	0								
6. Excess to be Used for Share Plan allocations	721,268	1,266,909	1,988,177								
7. Accumulated Excess as of Valuation Date (Available for Benefit Improvements): (4) + (5) - (6)	0	0	0								
8. Base Amount This Plan Year	93,559	52,271	145,830								

The Accumulated Excess shown in line 7 is being held in reserve to pay for additional benefits. The reserve is subtracted from Plan assets (see Section C of this Report). The Base Amount in line 8 is the former maximum amount the employer has historically taken as a credit against its required contribution; in no event may the employer take credit for more than the actual amount of Chapter revenue received.



# Risks Associated with Measuring the Accrued Liability and Actuarially Determined Contribution

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

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

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

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

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

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



#### **Plan Maturity Measures**

Risks facing a pension plan evolve over time. A young plan with virtually no investments and paying few benefits may experience little investment risk. An older plan with a large number of members in pay status and a significant trust may be much more exposed to investment risk. Generally accepted plan maturity measures include the following:

	2023	2022	2021
Ratio of the market value of assets to total payroll	9.72	9.10	11.17
Ratio of actuarial accrued liability to payroll	13.50	13.71	13.57
Ratio of actives to retirees and beneficiaries	0.59	0.60	0.62
Ratio of net cash flow to market value of assets	-1.9%	-4.5%	-3.1%

### Ratio of Market Value of Assets to Payroll

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

### **Ratio of Actuarial Accrued Liability to Payroll**

The relationship between actuarial accrued liability and payroll is a useful indicator of the potential volatility of contributions for a fully funded plan. A funding policy that targets a funded ratio of 100% is expected to result in the ratio of assets to payroll and the ratio of liability to payroll converging over time. The ratio of liability to payroll may also be used as a measure of sensitivity of the liability itself. For example, if the actuarial accrued liability is 2.5 times the payroll, a change in liability 2% other than assumed would equal 5% of payroll. A higher (lower) or increasing (decreasing) level of this maturity measure generally indicates a higher (lower) or increasing (decreasing) volatility in liability (and also plan sponsor contributions) as a percentage of payroll.

#### **Ratio of Actives to Retirees and Beneficiaries**

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

#### Ratio of Net Cash Flow to Market Value of Assets

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

#### **Additional Risk Assessment**

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



### **Low-Default-Risk Obligation Measure**

Actuarial Standards of Practice No. 4 (ASOP No. 4) was revised and reissued in December 2021 by the Actuarial Standards Board (ASB). It includes a new calculation called a low-default-risk obligation measure (LDROM) to be prepared and issued annually for defined benefit pension plans. The transmittal memorandum for ASOP No. 4 includes the following explanation:

"The ASB believes that the calculation and disclosure of this measure provides appropriate, useful information for the intended user regarding the funded status of a pension plan. The calculation and disclosure of this additional measure is not intended to suggest that this is the "right" liability measure for a pension plan. However, the ASB does believe that this additional disclosure provides a more complete assessment of a plan's funded status and provides additional information regarding the security of benefits that members have earned as of the measurement date."

The following information has been prepared in compliance with this new requirement. Unless otherwise noted, the measurement date, actuarial cost methods, and assumptions used are the same as for the funding valuation covered in this actuarial valuation report.

- A. Low-default-risk Obligation Measure of benefits earned as of the measurement date: \$803,832,575 (compared to AAL of \$623,963,301 developed using funding assumptions)
- B. Discount rate used to calculate the LDROM: <u>4.63% based on Fidelity Investments' "20-Year Municipal GO AA</u> Index" as of September 29, 2023
- C. Other significant assumptions that differ from those used for the funding valuation: None
- D. Actuarial cost method used to calculate the LDROM: Individual Entry-Age Actuarial Cost Method
- E. Valuation procedures to value any significant plan provisions that are difficult to measure using traditional valuation procedures, and that differ from the procedures used in the funding valuation: <u>None</u>
- F. Commentary to help the intended user understand the significance of the LDROM with respect to the funded status of the plan, plan contributions, and the security of participant benefits: The LDROM is a market-based measurement of the pension obligation. It estimates the amount the plan would need to invest in low risk securities to provide the benefits with greater certainty. This measure may not be appropriate for assessing the need for or amount of future contributions. This measure may not be appropriate for assessing the sufficiency of plan assets to cover the estimated cost of settling the plan's benefit obligation.

The difference between the two measures (Valuation and LDROM) is one illustration of the savings the sponsor anticipates by taking on the risk in a diversified portfolio.



# **SECTION B**

**VALUATION RESULTS** 

			P	articipan	t D	ata						
				October 1,	202	3						
				-		General		General Non-				
		Total		Elected		Excludable		Excludable	F	Police Officers		Firefighters
Active Members	1								1		1	
Number		572		0		97		204		156		115
Covered Annual Payroll (expected)	\$	46,233,055	\$	0	\$	9,210,599	\$	11,676,969	\$	13,542,875	\$	11,802,612
Average Annual Salary	\$	80,827	\$	0	\$	94,955	\$	57,240	\$	86,813	\$	102,631
Average Age		41.3		0.0		44.7		45.5		38.2		35.4
Average Past Service		9.9		0.0		9.2		10.4		10.6		8.5
Average Age at Hire		31.4		0.0		35.5		35.1		27.6		26.9
Service Retirees, Beneficiaries &	DROP	Participants	1		1		1				1	
Number		913		4		158		393		199		159
Annual Benefits	\$	44,138,629	\$	52,586	\$	7,080,713	\$	12,529,059	\$	12,955,771	\$	11,520,500
Average Annual Benefit	\$	48,345	\$	13,147	\$	44,815	\$	31,881	\$	65,104	\$	72,456
Average Age		67.2		76.7		69.4		68.1		65.3		65.1
Disability Retirees					1		1		1			
Number		53		0		2		18		24		c
Annual Benefits	\$	2,140,185	\$	0	\$	78,910	\$	416,609	\$	1.210.466	\$	434,200
Average Annual Benefit	\$	40,381	\$	0	\$	39,455	\$	23,145	\$	50,436	\$	48,244
Average Age		64.0		0.0	'	64.9	'	63.4		62.0		70.6
Terminated Vested Members					ļ		ļ				1	
Number		23		0		5		13		5		(
Annual Benefits	\$	708,683	\$	0	\$	232,271	\$	294,732	\$	181,680	\$	(
Average Annual Benefit	\$	30,812	\$	0	\$	46,454	\$	22,672	\$	36,336	\$	,
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		Partic	ipaı	nt Data -	Pric	r Valuati	on					
				October 1,	202	2						
				-		General		General Non-				
		Total		Elected		Excludable		Excludable	F	Police Officers		Firefighters
Active Members			T		T		_		Π		1	
Number		578		0		98		210		160		110
Covered Annual Payroll (expected)	\$	44,975,569	\$	0	\$	8,908,206	\$	11,535,354	\$	13,495,103	\$	11,036,906
Average Annual Salary	\$	77,812	\$	0	\$	90,900	\$	54,930	\$	84,344	\$	100,336
Average Age		41.1		0.0		45.9		44.8		37.8		34.7
Average Past Service		10.0		0.0		9.5		11.2		10.1		7.9
Average Age at Hire		31.1		0.0		36.4		33.6		27.7		26.8
Service Retirees, Beneficiaries &	DROP	Participants					!		<u> </u>		ļ	
		-										
Number		912		4		154		389		200		165
Annual Benefits	\$	43,966,900	\$	52,586	\$	6,865,673	\$	12,362,889	\$	12,857,521	\$	11,828,231
Average Annual Benefit	\$	48,209	\$	13,147	\$	44,582	\$	31,781	\$	64,288	\$	71,686
Average Age		66.8		75.7		69.0		67.8		65.2		64.3
Disability Retirees	· · · · · · · · · · · · · · · · · · ·						·		1		,	
Number		56		0		3		20		24		9
Annual Benefits	\$	2,192,948	\$	0	\$	122,972	\$	455,159	\$	1,180,617	\$	434,200
Average Annual Benefit	\$	39,160	\$	0	\$	40,991	\$	22,758	\$	49,192	\$	48,244
Average Age	<b>*</b>	64.9	*	0.0	*	72.5	*	63.6	•	63.2	*	69.6
Terminated Vested Members			1		<u> </u>		ļ		<u> </u>		ļ	
Number		25		0		5		13	_	7		0
Annual Benefits	\$	801,589	\$	0	\$	228,894	\$	285,575	\$	287,120	\$	0
Average Annual Benefit	\$	32,064	\$	0	\$	45,779	\$	21,967	\$	41,017	\$	0
Average Age		45.7		0.0		46.9		45.1		45.9		0.0



# **Actuarially Determined Contribution (ADC) - After Assumption Changes**

A. Valuation Date			October	1, 2023		
			General	General Non-		
	Total	Elected	Excludable	Excludable	Police Officers	Firefighters
B. ADC to Be Paid During Fiscal Year Ending	9/30/2025	9/30/2025	9/30/2025	9/30/2025	9/30/2025	9/30/2025
C. Assumed City Contribution Date	10/1/2024	10/1/2024	10/1/2024	10/1/2024	10/1/2024	10/1/2024
D. Annual Payment to Amortize						
Unfunded Actuarial Accrued Liability	\$ 15,957,415	\$ 25,433	\$ 2,834,361	\$ 4,662,959	\$ 4,884,153	\$ 3,550,509
E. Total Normal Cost	8,943,703	288	1,392,718	1,590,115	2,915,949	3,044,633
F. Increase in Normal Cost due to Expected						
Payroll Growth	268,311	9	41,782	47,703	87,478_	91,339
G. Total Contribution Requirement	25,169,429	25,730	4,268,861	6,300,777	7,887,580	6,686,481
H. State Contributions	145,830	0	0	0	93,559	52,271
I. State Contributions Discounted to BOY	137,279	0	0	0	88,073	49,206
J. City and Members Combined = G I.	25,032,150	25,730	4,268,861	6,300,777	7,799,507	6,637,275
K. Expected Member Contributions     L. Expected Member Contributions	4,623,306	0	921,060	1,167,697	1,354,288	1,180,261
Discounted to BOY	4,466,389	0	889,799	1,128,065	1,308,323	1,140,202
M. Member Cost Sharing	408,694	0	0	408,694	0	0
N. Member Cost Sharing Discounted to BOY	394,823	0	0	394,823	0	0
O. Net City Contribution* = J L N.	20,170,938	25,730	3,379,062	4,777,889	6,491,184	5,497,073
P. Net City Contribution as % of Covered						
Payroll	43.63 %	N/A	36.69 %	40.92 %	47.93 %	46.58 %

<sup>\*</sup> Interest at the 7.15% annual rate must be added from October 1 to the date(s) of deposit.



# **Actuarially Determined Contribution (ADC) - Before Assumption Changes**

A. Valuation Date			October	1, 2023		
			General	General Non-		
	Total	Elected	Excludable	Excludable	Police Officers	Firefighters
B. ADC to Be Paid During Fiscal Year Ending	9/30/2025	9/30/2025	9/30/2025	9/30/2025	9/30/2025	9/30/2025
C. Assumed City Contribution Date	10/1/2024	10/1/2024	10/1/2024	10/1/2024	10/1/2024	10/1/2024
D. Annual Payment to Amortize						
Unfunded Actuarial Accrued Liability	\$ 15,768,189	\$ 25,359	\$ 2,806,666	\$ 4,615,462	\$ 4,819,678	\$ 3,501,024
E. Total Normal Cost	8,858,947	288	1,380,379	1,577,525	2,886,788	3,013,967
F. Increase in Normal Cost due to Expected						
Payroll Growth	265,769_	9	41,411	47,326	86,604	90,419
G. Total Contribution Requirement	24,892,905	25,656	4,228,456	6,240,313	7,793,070	6,605,410
H. State Contributions	145,830	0	0	0	93,559	52,271
I. State Contributions Discounted to BOY	137,223_	0	00	0	88,037_	49,186
J. City and Members Combined = G I.	24,755,682	25,656	4,228,456	6,240,313	7,705,033	6,556,224
K. Expected Member Contributions     L. Expected Member Contributions	4,623,306	0	921,060	1,167,697	1,354,288	1,180,261
Discounted to BOY	4,465,348	0	889,591	1,127,802	1,308,018	1,139,937
M. Member Cost Sharing	408,694	0	0	408,694	0	0
N. Member Cost Sharing Discounted to BOY	394,731	0	0	394,731	0	0
O. Net City Contribution* = J L N.	19,895,603	25,656	3,338,865	4,717,780	6,397,015	5,416,287
P. Net City Contribution as % of Covered						
Payroll	43.03 %	N/A	36.25 %	40.40 %	47.24 %	45.89 %

<sup>\*</sup> Interest at the 7.20% annual rate must be added from October 1 to the date(s) of deposit.



# **Actuarially Determined Contribution (ADC) - Prior Valuation**

A. Valuation Date			October	1, 2022		
			General	General Non-		
	Total	Elected	Excludable	Excludable	Police Officers	Firefighters
B. ADC to Be Paid During Fiscal Year Ending	9/30/2024	9/30/2024	9/30/2024	9/30/2024	9/30/2024	9/30/2024
C. Assumed City Contribution Date	10/1/2023	10/1/2023	10/1/2023	10/1/2023	10/1/2023	10/1/2023
D. Annual Payment to Amortize						
Unfunded Actuarial Accrued Liability	\$ 17,007,670	\$ 26,511	\$ 2,909,763	\$ 5,075,044	\$ 5,234,522	\$ 3,761,830
E. Total Normal Cost	8,640,602	280	1,303,275	1,585,011	2,937,074	2,814,962
F. Increase in Normal Cost due to Expected						
Payroll Growth	259,217	8_	39,098	47,550	88,112_	84,449
G. Total Contribution Requirement	25,907,489	26,799	4,252,136	6,707,605	8,259,708	6,661,241
H. State Contributions	145,830	0	0	0	93,559	52,271
I. State Contributions Discounted to BOY	137,223	00	00	0	88,037_	49,186
J. City and Members Combined = G I.	25,770,266	26,799	4,252,136	6,707,605	8,171,671	6,612,055
<ul><li>K. Expected Member Contributions</li><li>L. Expected Member Contributions</li></ul>	4,497,557	0	890,821	1,153,535	1,349,510	1,103,691
Discounted to BOY	4,343,895	0	860,385	1,114,124	1,303,403	1,065,983
M. Member Cost Sharing	346,061	0	0	346,061	0	0
N. Member Cost Sharing Discounted to BOY	334,238	0	0	334,238	0	0
O. Net City Contribution* = J L N.	21,092,133	26,799	3,391,751	5,259,243	6,868,268	5,546,072
P. Net City Contribution as % of Covered						
Payroll	46.90 %	N/A	38.07 %	45.59 %	50.89 %	50.25 %

<sup>\*</sup> Interest at the 7.20% annual rate must be added from October 1 to the date(s) of deposit.



## **Actuarial Value of Benefits and Assets - After Assumption Changes**

A. Valuation Date			October	1, 2023		
	Total	Elected	General Excludable	General Non- Excludable	Police Officers	Firefighters
B. Actuarial Present Value (APV) of All Projected Benefits	70141	Liceted	Excludore	Excludio	Tonce Officers	rnejigners
1. Active Members						
a. Service Retirement Benefits	\$ 186,796,359	\$ -	\$ 25,987,816	\$ 33,396,332	\$ 66,268,997	\$ 61,143,214
b. Vesting Benefits	5,569,976	-	1,364,718	860,051	2,036,329	1,308,878
c. Disability Benefits	4,237,236	-	266,101	546,011	2,503,628	921,496
d. Preretirement Death Benefits	3,336,874	-	299,580	361,210	1,204,739	1,471,345
e. Return of Member Contributions	2,549,307		824,194	1,096,710	499,380	129,023
f. Total	202,489,752	-	28,742,409	36,260,314	72,513,073	64,973,956
2. Inactive Members						
a. Service Retirees & Beneficiaries	452,978,787	470,227	71,636,951	127,517,859	135,407,242	117,946,508
b. Disability Retirees	18,685,740	-	579,962	3,392,629	11,411,346	3,301,803
c. Terminated Vested Members	5,285,960	-	1,637,418	2,172,195	1,476,347	-
d. DROP Account Balances	23,886,749		1,468,688	1,678,839	9,526,523	11,212,699
e. Total	500,837,236	470,227	75,323,019	134,761,522	157,821,458	132,461,010
3. Total for All Members	703,326,988	470,227	104,065,428	171,021,836	230,334,531	197,434,966
C. Actuarial Accrued (Past Service) Liability	623,963,301	470,227	93,106,540	161,186,282	205,882,075	163,318,177
D. APV of Accumulated Plan Benefits per FASB ASC 960	594,411,499	470,227	87,764,855	157,005,653	194,084,022	155,086,742
E. Plan Assets						
1. Market Value	449,366,566	213,184	62,482,086	111,514,997	151,286,695	123,869,604
2. Actuarial Value	475,104,163	225,394	66,060,765	117,902,050	159,951,683	130,964,271
F. Unfunded Actuarial Accrued Liability	148,859,138	244,833	27,045,775	43,284,232	45,930,392	32,353,906
G. APV of Projected Covered Payroll	373,479,512	-	68,050,897	69,063,151	104,589,124	131,776,340
H. APV of Projected Member Contributions	37,347,951	-	6,805,090	6,906,315	10,458,912	13,177,634
I. Accumulated Value of Member Contributions	34,821,990	-	6,419,192	12,294,366	8,838,960	7,269,472



# **Actuarial Value of Benefits and Assets - Before Assumption Changes**

A. Valuation Date			October	1, 2023		
			General	General Non-		
	Total	Elected	Excludable	Excludable	Police Officers	Firefighters
B. Actuarial Present Value (APV) of All Projected Benefits						
1. Active Members						
a. Service Retirement Benefits	\$ 184,996,483	\$ -	\$ 25,737,734	\$ 33,124,811	\$ 65,664,752	\$ 60,469,186
b. Vesting Benefits	5,486,385	-	1,337,800	846,116	2,009,667	1,292,802
c. Disability Benefits	4,204,159	-	264,164	542,437	2,483,939	913,619
d. Preretirement Death Benefits	3,307,761	-	297,234	358,474	1,194,366	1,457,687
e. Return of Member Contributions	2,562,014		833,209	1,099,978	499,924	128,903
f. Total	200,556,802	-	28,470,141	35,971,816	71,852,648	64,262,197
2. Inactive Members						
a. Service Retirees & Beneficiaries	451,118,580	468,521	71,350,416	126,991,776	134,842,063	117,465,804
b. Disability Retirees	18,618,409	-	578,287	3,381,355	11,367,016	3,291,751
c. Terminated Vested Members	5,248,383	-	1,626,430	2,156,075	1,465,878	-
d. DROP Account Balances	23,886,749		1,468,688	1,678,839	9,526,523	11,212,699
e. Total	498,872,121	468,521	75,023,821	134,208,045	157,201,480	131,970,254
3. Total for All Members	699,428,923	468,521	103,493,962	170,179,861	229,054,128	196,232,451
C. Actuarial Accrued (Past Service) Liability	621,142,164	468,521	92,674,287	160,458,192	204,937,708	162,603,456
D. APV of Accumulated Plan Benefits per FASB ASC 960	591,776,455	468,521	87,375,336	156,308,873	193,211,144	154,412,581
E. Plan Assets						
1. Market Value	449,366,566	213,184	62,482,086	111,514,997	151,286,695	123,869,604
2. Actuarial Value	475,104,163	225,394	66,060,765	117,902,050	159,951,683	130,964,271
F. Unfunded Actuarial Accrued Liability	146,038,001	243,127	26,613,522	42,556,142	44,986,025	31,639,185
G. APV of Projected Covered Payroll	372,251,840	-	67,843,190	68,871,190	104,249,897	131,287,563
H. APV of Projected Member Contributions	37,225,184	-	6,784,319	6,887,119	10,424,990	13,128,756
I. Accumulated Value of Member Contributions	34,821,990	-	6,419,192	12,294,366	8,838,960	7,269,472



## **Actuarial Value of Benefits and Assets - Prior Valuation**

A. Valuation Date	October 1, 2022						
			General	General Non-			
	Total	Elected	Excludable	Excludable	Police Officers	Firefighters	
B. Actuarial Present Value (APV) of All Projected Benefits							
1. Active Members							
a. Service Retirement Benefits	\$ 180,101,960	\$ -	\$ 25,551,603	\$ 35,453,546	\$ 63,664,669	\$ 55,432,142	
b. Vesting Benefits	5,354,976	-	1,274,313	908,490	1,946,135	1,226,038	
c. Disability Benefits	4,429,238	-	257,294	551,905	2,782,504	837,535	
d. Preretirement Death Benefits	3,400,122	-	305,828	367,973	1,392,710	1,333,611	
e. Return of Member Contributions	2,593,864		775,887	1,123,403	548,946	145,628	
f. Total	195,880,160	-	28,164,925	38,405,317	70,334,964	58,974,954	
2. Inactive Members							
<ul> <li>a. Service Retirees &amp; Beneficiaries</li> </ul>	453,074,811	478,840	69,690,194	126,630,412	135,469,286	120,806,079	
b. Disability Retirees	18,967,578	-	719,979	3,688,003	11,189,091	3,370,505	
c. Terminated Vested Members	6,407,344	-	1,729,381	2,064,722	2,613,241	-	
d. DROP Account Balances	19,925,083		960,478	1,274,159	7,613,494	10,076,952	
e. Total	498,374,816	478,840	73,100,032	133,657,296	156,885,112	134,253,536	
3. Total for All Members	694,254,976	478,840	101,264,957	172,062,613	227,220,076	193,228,490	
C. Actuarial Accrued (Past Service) Liability	616,686,432	478,840	91,193,017	162,094,086	202,453,867	160,466,622	
D. APV of Accumulated Plan Benefits per FASB ASC 960	589,026,977	478,840	86,474,904	157,744,853	191,244,603	153,083,777	
E. Plan Assets							
1. Market Value	409,303,773	198,366	56,688,875	103,059,131	136,432,232	112,925,169	
2. Actuarial Value	460,723,529	223,286	63,810,549	116,006,178	153,571,855	127,111,661	
F. Unfunded Actuarial Accrued Liability	155,962,903	255,554	27,382,468	46,087,908	48,882,012	33,354,961	
G. APV of Projected Covered Payroll	367,378,884	-	63,126,051	70,561,093	105,520,033	128,171,707	
H. APV of Projected Member Contributions	36,737,888	-	6,312,605	7,056,109	10,552,003	12,817,171	
I. Accumulated Value of Member Contributions	33,957,500	-	6,506,884	13,139,999	8,101,431	6,209,186	



# **Calculation of Employer Normal Cost - After Assumption Changes**

A. Valuation Date			Octob	er 1, 2023		
B. Normal Cost for	Total	Elected	General Excludable	General Non- Excludable	Police Officers	Firefighters
<ol> <li>Service Retirement Benefits</li> <li>Vesting Benefits</li> <li>Disability Benefits</li> <li>Preretirement Death Benefits</li> <li>Return of Member Contributions</li> <li>Total for Future Benefits</li> <li>Assumed Amount for Administrative Expenses</li> <li>Total Normal Cost</li> </ol>	\$ 6,877,914 318,965 340,034 259,395 554,941 8,351,249 592,454 8,943,703	\$ - - - - - - 288 288	\$ 1,015,721 72,197 22,171 20,328 179,808 1,310,225 82,493 1,392,718	\$ 1,048,094 60,057 49,881 26,439 257,767 1,442,238 147,877 1,590,115	\$ 2,198,624 116,942 203,322 105,209 93,470 2,717,567 198,382 2,915,949	\$ 2,615,475 69,769 64,660 107,419 23,896 2,881,219 163,414 3,044,633
C. Expected Member Contribution  D. Employer Normal Cost: B8 - C	4,623,306 4,320,397	- 288	921,060 471,658	1,167,697 422,418	1,354,288 1,561,661	1,180,261 1,864,372
E. Employer Normal Cost as a % of Covered Payroll	9.34%	N/A	5.12%	3.62%	11.53%	15.80%



# **Calculation of Employer Normal Cost - Before Assumption Changes**

A. Valuation Date		October 1, 2023					
B. Normal Cost for	Total	Elected	General Excludable	General Non- Excludable	Police Officers	Firefighters	
B. Normal Cost for							
<ol> <li>Service Retirement Benefits</li> <li>Vesting Benefits</li> <li>Disability Benefits</li> <li>Preretirement Death Benefits</li> <li>Return of Member Contributions</li> <li>Total for Future Benefits</li> </ol>	\$ 6,800,090 314,016 337,989 257,634 556,764 8,266,493	\$ - - - - - -	\$ 1,004,351 70,725 22,043 20,176 180,591 1,297,886	\$ 1,036,424 58,916 49,601 26,239 258,468 1,429,648	\$ 2,172,705 115,393 202,067 104,506 93,735 2,688,406	\$ 2,586,610 68,982 64,278 106,713 23,970 2,850,553	
<ul><li>7. Assumed Amount for Administrative Expenses</li><li>8. Total Normal Cost</li></ul>	592,454 8,858,947	288 288	82,493 1,380,379	147,877 1,577,525	198,382 2,886,788	<u>163,414</u> 3,013,967	
C. Expected Member Contribution	4,623,306	-	921,060	1,167,697	1,354,288	1,180,261	
D. Employer Normal Cost: B8 - C	4,235,641	288	459,319	409,828	1,532,500	1,833,706	
E. Employer Normal Cost as a % of Covered Payroll	9.16%	N/A	4.99%	3.51%	11.32%	15.54%	



# **Calculation of Employer Normal Cost - Prior Valuation**

A. Valuation Date			Octob	er 1, 2022		
B. Normal Cost for	Total	Elected	General Excludable	General Non- Excludable	Police Officers	Firefighters
<ol> <li>Service Retirement Benefits</li> <li>Vesting Benefits</li> <li>Disability Benefits</li> <li>Preretirement Death Benefits</li> <li>Return of Member Contributions</li> <li>Total for Future Benefits</li> <li>Assumed Amount for Administrative Expenses</li> <li>Total Normal Cost</li> </ol>	\$ 6,598,364 311,407 356,671 264,006 555,125 8,085,573 555,029 8,640,602	\$ - - - - - - - 280 280	\$ 942,441 69,418 21,823 20,484 172,791 1,226,957 76,318 1,303,275	\$ 1,040,940 63,807 49,004 24,779 267,358 1,445,888 139,123 1,585,011	\$ 2,197,110 113,836 227,709 122,536 92,803 2,753,994 183,080 2,937,074	\$ 2,417,873 64,346 58,135 96,207 22,173 2,658,734 156,228 2,814,962
C. Expected Member Contribution	4,497,557	-	890,821	1,153,535	1,349,510	1,103,691
D. Employer Normal Cost: B8 - C	4,143,045	280	412,454	431,476	1,587,564	1,711,271
E. Employer Normal Cost as a % of Covered Payroll	9.21%	N/A	4.63%	3.74%	11.76%	15.50%



# Increased Contribution Allocations for General Excludable and Non-Excludable Members

A. Valuation Date	October 1, 2023 - After Assumption Changes (For Fiscal Year Ending September 30, 2025)				
	Total	General Excludable	General Non- Excludable		
	70147	Excidadore	Excludable		
B. City Contribution (Before Cost Sharing)		36.69 %	44.30 %		
C. City Contribution 10/1/2009 Baseline		40.31	31.04		
D. Increase, Not Less Than Zero		0.00	13.26		
E. 50% of Percentage Increase (50% x D.)		0.00 %	6.63 %		
F. Total Member Contribution Rate		10.00 %	15.00 %		
(E. + 10%) for Excludable Employees; Min of (E. + 10%, 15%) for Non-Excludable Employees					
G. Adjusted Member Contribution Rate Per Ordinance, Effective from the First Pay Period Following the Last Full Pay Period Before 9/30/2024		10.00 %	13.50 %		
H. Active Payroll as of 10/1/2023 (Expected)		\$ 9,210,599	\$ 11,676,969		
I. Adjusted Cost Sharing Contribution ((G 10%) x H.)	\$ 408,694	\$ -	\$ 408,694		



# Increased Contribution Allocations for General Excludable and Non-Excludable Members (Continued)

A. Valuation Date	October 1, 2023 - Before Assumption Changes (For Fiscal Year Ending September 30, 2025)				
		General	General Non-		
	Total	Excludable	Excludable		
B. City Contribution (Before Cost Sharing)		36.25 %	43.78 %		
C. City Contribution 10/1/2009 Baseline		40.31	31.04		
D. Increase, Not Less Than Zero		0.00	12.74		
E. 50% of Percentage Increase (50% x D.)		0.00 %	6.37 %		
F. Total Member Contribution Rate		10.00 %	15.00 %		
(E. + 10%) for Excludable Employees; Min of (E. + 10%, 15%) for Non-Excludable Employees					
G. Adjusted Member Contribution Rate Per Ordinance, Effective from the First Pay Period Following the Last Full Pay Period Before 9/30/2024		10.00 %	13.50 %		
H. Active Payroll as of 10/1/2023 (Expected)		\$ 9,210,599	\$ 11,676,969		
I. Adjusted Cost Sharing Contribution ((G 10%) x H.)	\$ 408,694	\$ -	\$ 408,694		



# Increased Contribution Allocations for General Excludable and Non-Excludable Members - Prior Valuation

A. Valuation Date	October 1, 2022							
	(For Fiscal	Year Ending Septemb	nber 30, 2024)					
		General	General Non-					
	Total	Excludable	Excludable					
B. City Contribution (Before Cost Sharing)		38.07 %	48.49 %					
C. City Contribution 10/1/2009 Baseline		40.31	31.04					
D. Increase, Not Less Than Zero		0.00	17.45					
E. 50% of Percentage Increase (50% x D.)		0.00 %	8.73 %					
F. Total Member Contribution Rate		10.00 %	15.00 %					
(E. + 10%) for Excludable Employees; Min of (E. + 10%, 15%) for Non-Excludable Employees								
G. Adjusted Member Contribution Rate Per Ordinance, Effective from the First Pay Period After September 30, 2022 through the Last Full Pay Period Before 9/30/2024		10.00 %	13.00 %					
H. Active Payroll as of 10/1/2022 (Expected)		\$ 8,908,206	\$ 11,535,354					
I. Adjusted Cost Sharing Contribution ((G 10%) x H.)	\$ 346,061	\$ -	\$ 346,061					



# **Cumulative Experience Gain/(Loss)**

### **As Measured From 1994**

Plan Year Ending	Experience <pre>Gain/(Loss)</pre>
December 31, 1994	\$ (6,035,838)
December 31, 1995	12,826,310
December 31, 1996	(942,133)
December 31, 1997	14,413,961
December 31, 1998	9,828,307
December 31, 1999	(1,889,769)
December 31, 2000	(26,457,751)
December 31, 2001	(13,298,945)
December 31, 2002	(46,662,623)
December 31, 2003	(23,736,342)
December 31, 2004	(20,236,223)
September 30, 2005	(15,261,034)
September 30, 2006	(7,371,714)
September 30, 2007	19,235,295
September 30, 2008	(27,415,318)
September 30, 2009	(27,577,164)
September 30, 2010	(15,074,929)
September 30, 2011	(20,969,312)
September 30, 2012	(22,681,760)
September 30, 2013	(1,608,800)
September 30, 2014	1,436,491
September 30, 2015	3,038,952
September 30, 2016	4,713,880
September 30, 2017	8,574,453
September 30, 2018	2,374,009
September 30, 2019	469,094
September 30, 2020	6,103,388
September 30, 2021	19,283,793
September 30, 2022	(5,752,406)
September 30, 2023	(8,235,523)

Total from 1994 to Valuation Date \$ (188,909,651)



# **Unfunded Actuarial Accrued Liability**

	A. UAAL Amortization Period and Payments - Total									
	Original U	Current UAAL								
Date Established	Type of Amortization Base	Amortization Period (Years)	Amount	Years Remaining	Amount Before Extra UAL Payments	Amount After Extra UAL Payments	FY 2025 Payment			
1/1/1996	Actuarial (Gain)/Loss	30	(12,826,310)	2	(2,009,201)	(2,009,201)	(1,039,276)			
1/1/1996	Retiree COLA	30	2,751,331	2	290,142	290,142	222,887			
1/1/1997	Retiree COLA	30	1,179,537	3	266,374	266,374	94,989			
1/1/1997	Assumption Change	30	(4,686,714)	3	(1,058,420)	(1,058,420)	(377,432)			
1/1/1998	Actuarial (Gain)/Loss	30	(14,413,961)	4	(4,176,873)	(4,176,873)	(1,154,745)			
1/1/1998	Retiree COLA	30	1,112,438	4	322,359	322,359	89,120			
1/1/1999	Retiree COLA	30	1,416,724	5	494,132	494,132	112,924			
1/1/2000	Retiree COLA	30	1,919,018	6	770,513	770,513	151,564			
1/1/2000	Assumption Change	30	(4,757,004)	6	(1,910,005)	(1,910,005)	(375,706)			
1/1/2001	Asset Method Change	30	(13,323,841)	7	(6,003,472)	(6,003,472)	(1,045,074)			
1/1/2002	Plan Amendment	30	371,833	8	184,759	184,759	29,045			
1/1/2003	Actuarial (Gain)/Loss	30	46,662,623	9	25,177,283	25,177,283	3,629,553			
1/1/2003	Method Change	30	1,594,671	9	860,423	860,423	124,039			
1/1/2003	Retiree COLA	30	3,101,233	9	1,673,296	1,673,296	241,222			
1/1/2003	Assumption Change	30	17,625,471	9	9,509,999	9,509,999	1,370,960			
1/1/2004	Retiree COLA	30	6,640,654	10	3,848,898	3,848,898	514,981			
1/1/2004	Assumption Change	30	14,194,057	10	8,226,824	8,226,824	1,100,747			
1/1/2005	Actuarial (Gain)/Loss	30	20,236,223	1	8,908,194	1,395,676	0			
1/1/2005	Retiree COLA	30	2,818,784	11	1,739,675	1,739,675	218,137			
10/1/2005	Actuarial (Gain)/Loss	30	15,261,034	12	10,138,518	10,138,518	1,200,825			
10/1/2005	Plan Amendment	30	1,128,517	12	749,716	749,716	88,798			
10/1/2006	Actuarial (Gain)/Loss	30	7,371,714	1	5,140,592	580,285	О			
10/1/2006	Retiree COLA	30	4,028,350	13	2,809,131	2,809,131	316,359			
10/1/2007	Retiree COLA	30	5,004,523	14	3,962,133	3,962,133	426,630			
10/1/2007	Actuarial (Gain)/Loss	30	(19,235,295)	14	(15,228,811)	(15,228,811)	(1,639,789)			
10/1/2008	Actuarial (Gain)/Loss	30	27,415,318	15	22,553,223	22,553,223	2,332,929			
10/1/2008	Plan Amendment	30	1,998,907	15	1,644,405	1,644,405	170,099			
10/1/2009	Actuarial (Gain)/Loss	30	27,577,164	16	23,478,591	23,478,591	2,342,648			
10/1/2009	Plan Amendment	30	(15,418,663)	16	(13,137,848)	(13,137,848)	(1,310,869)			
10/1/2010	Actuarial (Gain)/Loss	30	15,074,929	16	13,002,137	13,002,137	1,297,328			
10/1/2011	Actuarial (Gain)/Loss	30	20,969,312	16	18,302,513	18,302,513	1,826,187			
10/1/2011	Assumption Change	30	20,605,952	16	17,985,367	17,985,367	1,794,545			



	A. UAAL Amortization Period and Payments - Total (Continued)								
	Original UAAL				Curre	nt UAAL			
Date Established	Type of Amortization Base	Amortization Period (Years)	Amount	Years Remaining	Amount Before Extra UAL Payments	Amount After Extra UAL Payments	FY 2025 Payment		
10/1/2011	Plan Amendment	30	(8,449,690)	16	(6,622,130)	(6,622,130)	(660,742)		
10/1/2012	Actuarial (Gain)/Loss	30	22,681,760	16	18,389,771	18,389,771	1,834,895		
10/1/2012	Plan Amendment	30	(3,787,231)	16	(3,051,661)	(3,051,661)	(304,489)		
10/1/2012	Plan Amendment	30	297,000	16	240,909	240,909	24,037		
10/1/2013	Plan Amendment	30	3,980	16	3,234	3,234	323		
10/1/2014	Actuarial (Gain)/Loss	25	(1,436,491)	16	(1,178,693)	(1,178,693)	(117,608)		
10/1/2014	Assumption Change	25	3,747,111	16	3,074,653	3,074,653	306,782		
10/1/2015	Actuarial (Gain)/Loss	25	(3,038,952)	17	(2,571,966)	(2,571,966)	(248,415)		
10/1/2016	Actuarial (Gain)/Loss	25	(4,713,880)	18	(4,102,427)	(4,102,427)	(384,748)		
10/1/2016	Assumption Change	25	11,523,530	18	10,028,788	10,028,788	940,557		
10/1/2016	Plan Amendment	25	876,993	18	763,236	763,236	71,581		
10/1/2017	Actuarial (Gain)/Loss	20	(8,574,453)	14	(7,131,674)	(7,131,674)	(767,915)		
10/1/2017	Assumption Change	25	5,112,631	19	4,563,199	4,563,199	416,689		
10/1/2017	Plan Amendment	10	14,426,238	4	7,028,333	7,028,333	1,943,064		
10/1/2017	Plan Interpretation Change	20	(223,169)	14	(185,618)	(185,618)	(19,987)		
10/1/2017	Plan Amendment (Opt-outs)	10	78,581	4	38,284	38,284	10,584		
10/1/2018	Actuarial (Gain)/Loss	20	(2,374,009)	15	(2,052,462)	(2,052,462)	(212,309)		
10/1/2018	Assumption Change	25	2,660,048	20	2,429,636	2,429,636	216,538		
10/1/2019	Actuarial (Gain)/Loss	20	(469,094)	16	(419,916)	(419,916)	(41,899)		
10/1/2019	Assumption Change	25	2,703,859	21	2,522,291	2,522,291	219,872		
10/1/2020	Actuarial (Gain)/Loss	20	(6,103,388)	17	(5,637,960)	(5,637,960)	(544,548)		
10/1/2020	Assumption Change	25	(1,580,475)	22	(1,503,109)	(1,503,109)	(128,405)		
10/1/2020	Plan Amendment (FOP)	20	(27,111)	17	(25,043)	(25,043)	(2,419)		
10/1/2021	Actuarial (Gain)/Loss	20	(19,283,793)	18	(18,332,685)	(18,332,685)	(1,719,345)		
10/1/2021	Assumption Change	25	8,229,143	23	7,968,098	7,968,098	668,184		
10/1/2022	Actuarial (Gain)/Loss	20	5,752,406	19	5,615,124	5,615,124	512,744		
10/1/2022	Assumption Change	25	2,806,104	24	2,762,996	2,762,996	227,797		
10/1/2023	Actuarial (Gain)/Loss	20	8,235,523	20	8,235,523	8,235,523	733,981		
10/1/2023	Assumption Change	25	2,821,137	25	<u>2,821,137</u>	<u>2,821,137</u>	<u>228,991</u>		
					\$ 162,184,435	\$ 150,111,610	\$ 15,957,415		
	Excess Contribution Reserve				(1,252,472)	(1,252,472)			
	Actual Unfunded Liability		\$ 215,292,837		\$ 160,931,963	\$ 148,859,138			

Note: The Bold rows have one payment remaining, which will be paid by the October 1, 2023 City contribution (for FY 2024). The required payment of \$0 shown in this row is for FY 2025 (after the amortization base has already been paid off in full).



### A. UAAL Amortization Period and Payments - Elected

#### **Current UAAL**

Date Established	Type of Amortization Base	Years Remaining	Amount Before Extra UAL Payments	Amount After Extra UAL Payments	FY 2025 Payment
1/1/1996	Actuarial (Gain)/Loss	2	(2,540)	(2,540)	(1,314)
1/1/1996	Retiree COLA	2	367	367	281
1/1/1997	Retiree COLA	3	336	336	120
1/1/1997	Assumption Change	3	(1,339)	(1,339)	(477)
1/1/1998	Actuarial (Gain)/Loss	4	(5,280)	(5,280)	(1,460)
1/1/1998	Retiree COLA	4	406	406	112
1/1/1999	Retiree COLA	5	624	624	143
1/1/2000	Retiree COLA	6	974	974	192
1/1/2000	Assumption Change	6	(2,415)	(2,415)	(475)
1/1/2001	Asset Method Change	7	(7,588)	(7,588)	(1,321)
1/1/2002	Plan Amendment	8	234	234	37
1/1/2003	Actuarial (Gain)/Loss	9	31,822	31,822	4,587
1/1/2003	Method Change	9	1,087	1,087	157
1/1/2003	Retiree COLA	9	2,114	2,114	305
1/1/2003	Assumption Change	9	12,020	12,020	1,733
1/1/2004	Retiree COLA	10	4,866	4,866	651
1/1/2004	Assumption Change	10	10,396	10,396	1,391
1/1/2005	Actuarial (Gain)/Loss	1	11,258	1,764	0
1/1/2005	Retiree COLA	11	2,200	2,200	276
10/1/2005	Actuarial (Gain)/Loss	12	12,814	12,814	1,518
10/1/2005	Plan Amendment	12	948	948	112
10/1/2006	Actuarial (Gain)/Loss	1	6,497	<i>733</i>	0
10/1/2006	Retiree COLA	13	3,550	3,550	400
10/1/2007	Retiree COLA	14	5,007	5,007	539
10/1/2007	Actuarial (Gain)/Loss	14	(19,246)	(19,246)	(2,072)
10/1/2008	Actuarial (Gain)/Loss	15	28,503	28,503	2,948
10/1/2008	Plan Amendment	15	2,079	2,079	215
10/1/2009	Actuarial (Gain)/Loss	16	29,674	29,674	2,961
10/1/2009	Plan Amendment	16	(16,605)	(16,605)	(1,657)
10/1/2010	Actuarial (Gain)/Loss	16	16,433	16,433	1,640
10/1/2011	Actuarial (Gain)/Loss	16	23,132	23,132	2,308
10/1/2011	Assumption Change	16	22,732	22,732	2,268



### A. UAAL Amortization Period and Payments - Elected (Continued)

#### **Current UAAL**

Date Established	Type of Amortization Base	Years Remaining	Amount Before Extra UAL Payments	Amount After Extra UAL Payments	FY 2025 Payment
10/1/2011	Dia a Amana dan sart	16	(0.267)	(0.267)	(025)
10/1/2011	Plan Amendment	16 16	(8,367)	(8,367)	(835)
10/1/2012	Actuarial (Gain)/Loss		23,243	23,243	2,319
10/1/2012	Plan Amendment	16	(3,854)	(3,854)	(385)
10/1/2012	Plan Amendment	16	304	304	30
10/1/2013	Plan Amendment	16	0	0	0
10/1/2014	Actuarial (Gain)/Loss	16	(6,785)	(6,785)	(677)
10/1/2014	Assumption Change	16	(5,726)	(5,726)	(571)
10/1/2015	Actuarial (Gain)/Loss	17	34,796	34,796	3,361
10/1/2016	Actuarial (Gain)/Loss	18	(21,660)	(21,660)	(2,031)
10/1/2016	Assumption Change	18	16,745	16,745	1,570
10/1/2016	Plan Amendment	18	0	0	0
10/1/2017	Actuarial (Gain)/Loss	14	1,617	1,617	174
10/1/2017	Assumption Change	19	3,599	3,599	329
10/1/2017	Plan Amendment	4	7,461	7,461	2,063
10/1/2017	Plan Interpretation Change	14	0	0	0
10/1/2017	Plan Amendment (Opt-outs)	4	0	0	0
10/1/2018	Actuarial (Gain)/Loss	15	1,951	1,951	202
10/1/2018	Assumption Change	20	1,833	1,833	163
10/1/2019	Actuarial (Gain)/Loss	16	5,374	5,374	536
10/1/2019	Assumption Change	21	1,821	1,821	159
10/1/2020	Actuarial (Gain)/Loss	17	3,046	3,046	294
10/1/2020	Assumption Change	22	(3,583)	(3,583)	(306)
10/1/2020	Plan Amendment (FOP)	17	0	0	0
10/1/2021	Actuarial (Gain)/Loss	18	(2,718)	(2,718)	(255)
10/1/2021	Assumption Change	23	5,276	5,276	442
10/1/2022	Actuarial (Gain)/Loss	19	12,139	12,139	1,108
10/1/2022	Assumption Change	24	1,741	1,741	144
10/1/2023	Actuarial (Gain)/Loss	20	15,072	15,072	1,343
10/1/2023	Assumption Change	25	<u>1,706</u>	<u>1,706</u>	138
_, ,			\$ 260,091	\$ 244,833	\$ 25,433
	Excess Contribution Reserve		0	0	
	Actual Unfunded Liability		\$ 260,091	\$ 244,833	

Note: The Bold rows have one payment remaining, which will be paid by the October 1, 2023 City contribution (for FY 2024). The required payment of \$0 shown in this row is for FY 2025 (after the amortization base has already been paid off in full).



# A. UAAL Amortization Period and Payments - General Excludable

### **Current UAAL**

	Type of		Amount Before	Amount After	
Date	Amortization	Years	Extra UAL	Extra UAL	FY 2025
Established	Base	Remaining	Payments	Payments	Payment
1/1/1996	Actuarial (Gain)/Loss	2	(306,591)	(306,591)	(158,587)
1/1/1996	Retiree COLA	2	44,275	44,275	34,011
1/1/1997	Retiree COLA	3	40,646	40,646	14,494
1/1/1997	Assumption Change	3	(161,509)	(161,509)	(57,594)
1/1/1998	Actuarial (Gain)/Loss	4	(637,363)	(637,363)	(176,206)
1/1/1998	Retiree COLA	4	49,189	49,189	13,599
1/1/1999	Retiree COLA	5	75,401	75,401	17,231
1/1/2000	Retiree COLA	6	117,576	117,576	23,128
1/1/2000	Assumption Change	6	(291,453)	(291,453)	(57,330)
1/1/2001	Asset Method Change	7	(916,088)	(916,088)	(159,471)
1/1/2002	Plan Amendment	8	28,193	28,193	4,432
1/1/2003	Actuarial (Gain)/Loss	9	3,841,889	3,841,889	553,846
1/1/2003	Method Change	9	131,295	131,295	18,927
1/1/2003	Retiree COLA	9	255,334	255,334	36,809
1/1/2003	Assumption Change	9	1,451,163	1,451,163	209,199
1/1/2004	Retiree COLA	10	587,316	587,316	78,583
1/1/2004	Assumption Change	10	1,255,359	1,255,359	167,967
1/1/2005	Actuarial (Gain)/Loss	1	1,359,328	212,971	0
1/1/2005	Retiree COLA	11	265,462	265,462	33,286
10/1/2005	Actuarial (Gain)/Loss	12	1,547,071	1,547,071	183,238
10/1/2005	Plan Amendment	12	114,401	114,401	13,550
10/1/2006	Actuarial (Gain)/Loss	1	784,419	88,548	0
10/1/2006	Retiree COLA	13	428,657	428,657	48,274
10/1/2007	Retiree COLA	14	604,596	604,596	65,101
10/1/2007	Actuarial (Gain)/Loss	14	(2,323,816)	(2,323,816)	(250,221)
10/1/2008	Actuarial (Gain)/Loss	15	3,441,478	3,441,478	355,990
10/1/2008	Plan Amendment	15	250,926	250,926	25,956
10/1/2009	Actuarial (Gain)/Loss	16	3,582,679	3,582,679	357,473
10/1/2009	Plan Amendment	16	(2,004,749)	(2,004,749)	(200,030)
10/1/2010	Actuarial (Gain)/Loss	16	1,984,040	1,984,040	197,964
10/1/2011	Actuarial (Gain)/Loss	16	2,792,844	2,792,844	278,664
10/1/2011	Assumption Change	16	2,744,450	2,744,450	273,836



## A. UAAL Amortization Period and Payments - General Excludable (Continued)

#### **Current UAAL**

Date	Type of Amortization	Years	Amount Before	A	mount After Extra UAL	EV 2025
Established	Base	Remaining	Payments		Payments	FY 2025 Payment
10/1/2011	Plan Amendment	16	(1,010,49	5)	(1,010,495)	(100,825)
10/1/2012	Actuarial (Gain)/Loss	16	2,806,15	3	2,806,158	279,993
10/1/2012	Plan Amendment	16	(465,66	5)	(465,665)	(46,463)
10/1/2012	Plan Amendment	16	36,76	2	36,762	3,668
10/1/2013	Plan Amendment	16		)	0	0
10/1/2014	Actuarial (Gain)/Loss	16	(331,82	2)	(331,822)	(33,109)
10/1/2014	Assumption Change	16	(362,62	0)	(362,620)	(36,182)
10/1/2015	Actuarial (Gain)/Loss	17	(812,79	0)	(812,790)	(78,504)
10/1/2016	Actuarial (Gain)/Loss	18	(256,49	3)	(256,493)	(24,055)
10/1/2016	Assumption Change	18	2,538,58	5	2,538,585	238,083
10/1/2016	Plan Amendment	18		)	0	0
10/1/2017	Actuarial (Gain)/Loss	14	(1,377,44	3)	(1,377,448)	(148,319)
10/1/2017	Assumption Change	19	633,40	5	633,405	57 <b>,</b> 839
10/1/2017	Plan Amendment	4	1,047,54	3	1,047,548	289,607
10/1/2017	Plan Interpretation Change	14	(74,98	5)	(74,985)	(8,074)
10/1/2017	Plan Amendment (Opt-outs)	4	19,62	3	19,623	5,425
10/1/2018	Actuarial (Gain)/Loss	15	635,20	3	635,203	65,706
10/1/2018	Assumption Change	20	345,11	L	345,111	30,758
10/1/2019	Actuarial (Gain)/Loss	16	673,99	9	673,999	67,250
10/1/2019	Assumption Change	21	366,85	L	366,851	31,979
10/1/2020	Actuarial (Gain)/Loss	17	(377,79	5)	(377,796)	(36,490)
10/1/2020	Assumption Change	22	1,310,84	5	1,310,846	111,979
10/1/2020	Plan Amendment (FOP)	17		)	0	0
10/1/2021	Actuarial (Gain)/Loss	18	(1,777,34	7)	(1,777,347)	(166,690)
10/1/2021	Assumption Change	23	1,212,31	5	1,212,315	101,662
10/1/2022	Actuarial (Gain)/Loss	19	173,12	3	173,128	15,809
10/1/2022	Assumption Change	24	416,81	5	416,816	34,365
10/1/2023	Actuarial (Gain)/Loss	20	2,218,75	5	2,218,756	197,744
10/1/2023	Assumption Change	25	432,25	3	432,253	<u>35,086</u>
			\$ 29,156,31	5 \$	27,314,088	\$ 2,834,361
	Excess Contribution Reserve		(268,31	<u>3)</u>	(268,313)	
	Actual Unfunded Liability		\$ 28,888,00	3 \$	27,045,775	

Note: The Bold rows have one payment remaining, which will be paid by the October 1, 2023 City contribution (for FY 2024). The required payment of \$0 shown in this row is for FY 2025 (after the amortization base has already been paid off in full).



# A. UAAL Amortization Period and Payments - General Non-Excludable

### **Current UAAL**

Date Established	Type of Amortization Base	Years Remaining	Amount Before Extra UAL Payments	Amount After Extra UAL Payments	FY 2025 Payment
4/4/4006	And a stable Costs VIII and	<u> </u>	-	<u> </u>	-
1/1/1996	Actuarial (Gain)/Loss	2 2	(652,552)	(652,552)	(337,538)
1/1/1996	Retiree COLA		94,233	94,233	72,390
1/1/1997	Retiree COLA	3	86,515	86,515	30,851
1/1/1997	Assumption Change	3	(343,754)	(343,754)	(122,583)
1/1/1998	Actuarial (Gain)/Loss	4	(1,356,572)	(1,356,572)	(375,040)
1/1/1998	Retiree COLA	4	104,698	104,698	28,945
1/1/1999	Retiree COLA	5	160,487	160,487	36,676
1/1/2000	Retiree COLA	6	250,248	250,248	49,225
1/1/2000	Assumption Change	6	(620,334)	(620,334)	(122,022)
1/1/2001	Asset Method Change	7	(1,949,819)	(1,949,819)	(339,421)
1/1/2002	Plan Amendment	8	60,007	60,007	9,433
1/1/2003	Actuarial (Gain)/Loss	9	8,177,120	8,177,120	1,178,813
1/1/2003	Method Change	9	279,451	279,451	40,286
1/1/2003	Retiree COLA	9	543,455	543,455	78,344
1/1/2003	Assumption Change	9	3,088,674	3,088,674	445,263
1/1/2004	Retiree COLA	10	1,250,051	1,250,051	167,256
1/1/2004	Assumption Change	10	2,671,925	2,671,925	357,503
1/1/2005	Actuarial (Gain)/Loss	1	2,893,223	453,290	0
1/1/2005	Retiree COLA	11	565,014	565,014	70,847
10/1/2005	Actuarial (Gain)/Loss	12	3,292,805	3,292,805	390,006
10/1/2005	Plan Amendment	12	243,494	243,494	28,840
10/1/2006	Actuarial (Gain)/Loss	1	1,669,570	188,466	0
10/1/2006	Retiree COLA	13	912,355	912,355	102,748
10/1/2007	Retiree COLA	14	1,286,829	1,286,829	138,562
10/1/2007	Actuarial (Gain)/Loss	14	(4,946,039)	(4,946,039)	(532,574)
10/1/2008	Actuarial (Gain)/Loss	15	7,324,872	7,324,872	757,693
10/1/2008	Plan Amendment	15	534,071	534,071	55,245
10/1/2009	Actuarial (Gain)/Loss	16	7,625,415	7,625,415	760,849
10/1/2009	Plan Amendment	16	(4,266,932)	(4,266,932)	(425,746)
10/1/2010	Actuarial (Gain)/Loss	16	4,222,857	4,222,857	421,348
10/1/2011	Actuarial (Gain)/Loss	16	5,944,320	5,944,320	593,112
10/1/2011	Assumption Change	16	5,841,318	5,841,318	582,835



## A. UAAL Amortization Period and Payments - General Non-Excludable (Continued)

#### **Current UAAL**

Date Established	Type of Amortization Base	Years Remaining	Amount Before Extra UAL Payments	Amount After Extra UAL Payments	FY 2025 Payment
10/1/0011			1	-	-
10/1/2011	Plan Amendment	16	(2,150,747)	(2,150,747)	(214,597)
10/1/2012	Actuarial (Gain)/Loss	16	5,972,660	5,972,660	595,940
10/1/2012	Plan Amendment	16	(991,123)	(991,123)	(98,892)
10/1/2012	Plan Amendment	16	78,241	78,241	7,807
10/1/2013	Plan Amendment	16	0	0	0
10/1/2014	Actuarial (Gain)/Loss	16	(621,010)	(621,010)	(61,963)
10/1/2014	Assumption Change	16	1,761,403	1,761,403	175,749
10/1/2015	Actuarial (Gain)/Loss	17	(1,528,751)	(1,528,751)	(147,656)
10/1/2016	Actuarial (Gain)/Loss	18	(1,877,088)	(1,877,088)	(176,044)
10/1/2016	Assumption Change	18	3,882,944	3,882,944	364,165
10/1/2016	Plan Amendment	18	0	0	0
10/1/2017	Actuarial (Gain)/Loss	14	(2,898,277)	(2,898,277)	(312,077)
10/1/2017	Assumption Change	19	1,310,108	1,310,108	119,633
10/1/2017	Plan Amendment	4	2,082,409	2,082,409	575,706
10/1/2017	Plan Interpretation Change	14	(110,633)	(110,633)	(11,913)
10/1/2017	Plan Amendment (Opt-outs)	4	6,001	6,001	1,659
10/1/2018	Actuarial (Gain)/Loss	15	(1,566,980)	(1,566,980)	(162,090)
10/1/2018	Assumption Change	20	684,232	684,232	60,981
10/1/2019	Actuarial (Gain)/Loss	16	(2,041,887)	(2,041,887)	(203,735)
10/1/2019	Assumption Change	21	684,158	684,158	59,639
10/1/2020	Actuarial (Gain)/Loss	17	(2,466,704)	(2,466,704)	(238,249)
10/1/2020	Assumption Change	22	412,974	412,974	35,278
10/1/2020	Plan Amendment (FOP)	17	0	0	0
10/1/2021	Actuarial (Gain)/Loss	18	(5,075,294)	(5,075,294)	(475,990)
10/1/2021	Assumption Change	23	2,136,890	2,136,890	179,194
10/1/2022	Actuarial (Gain)/Loss	19	1,614,788	1,614,788	147,454
10/1/2022	Assumption Change	24	729,710	729,710	60,161
10/1/2023	Actuarial (Gain)/Loss	20	2,037,101	2,037,101	181,554
10/1/2023	Assumption Change	25	<u>728,090</u>	<u>728,090</u>	<u>59,099</u>
			\$ 47,780,220	\$ 43,859,183	\$ 4,662,959
	Excess Contribution Reserve		<u>(574,951)</u>	<u>(574,951)</u>	
	Actual Unfunded Liability		\$ 47,205,269	\$ 43,284,232	

Note: The Bold rows have one payment remaining, which will be paid by the October 1, 2023 City contribution (for FY 2024). The required payment of \$0 shown in this row is for FY 2025 (after the amortization base has already been paid off in full).



# A. UAAL Amortization Period and Payments - Police Officers

#### **Current UAAL**

Date	Type of Amortization	Years	Amount Before Extra UAL	Amount After Extra UAL	FY 2025
Established	Base	Remaining	Payments	Payments	Payment
1/1/1996	Actuarial (Gain)/Loss	2	(558,383)	(558,383)	(288,828)
1/1/1996	Retiree COLA	2	80,633	80,633	61,943
1/1/1997	Retiree COLA	3	74,029	74,029	26,399
1/1/1997	Assumption Change	3	(294,149)	(294,149)	(104,893)
1/1/1998	Actuarial (Gain)/Loss	4	(1,160,808)	(1,160,808)	(320,919)
1/1/1998	Retiree COLA	4	89,588	89,588	24,768
1/1/1999	Retiree COLA	5	137,324	137,324	31,383
1/1/2000	Retiree COLA	6	214,136	214,136	42,121
1/1/2000	Assumption Change	6	(530,817)	(530,817)	(104,414)
1/1/2001	Asset Method Change	7	(1,668,445)	(1,668,445)	(290,440)
1/1/2002	Plan Amendment	8	51,346	51,346	8,072
1/1/2003	Actuarial (Gain)/Loss	9	6,997,102	6,997,102	1,008,701
1/1/2003	Method Change	9	239,122	239,122	34,472
1/1/2003	Retiree COLA	9	465,033	465,033	67,039
1/1/2003	Assumption Change	9	2,642,955	2,642,955	381,008
1/1/2004	Retiree COLA	10	1,069,660	1,069,660	143,120
1/1/2004	Assumption Change	10	2,286,346	2,286,346	305,912
1/1/2005	Actuarial (Gain)/Loss	1	2,475,706	387,877	0
1/1/2005	Retiree COLA	11	483,478	483,478	60,623
10/1/2005	Actuarial (Gain)/Loss	12	2,817,627	2,817,627	333,725
10/1/2005	Plan Amendment	12	208,356	208,356	24,678
10/1/2006	Actuarial (Gain)/Loss	1	1,428,640	161,269	0
10/1/2006	Retiree COLA	13	780,693	780,693	87,920
10/1/2007	Retiree COLA	14	1,101,129	1,101,129	118,566
10/1/2007	Actuarial (Gain)/Loss	14	(4,232,291)	(4,232,291)	(455,719)
10/1/2008	Actuarial (Gain)/Loss	15	6,267,840	6,267,840	648,352
10/1/2008	Plan Amendment	15	457,003	457,003	47,273
10/1/2009	Actuarial (Gain)/Loss	16	6,525,013	6,525,013	651,053
10/1/2009	Plan Amendment	16	(3,651,182)	(3,651,182)	(364,308)
10/1/2010	Actuarial (Gain)/Loss	16	3,613,465	3,613,465	360,544
10/1/2011	Actuarial (Gain)/Loss	16	5,086,512	5,086,512	507,522
10/1/2011	Assumption Change	16	4,998,372	4,998,372	498,728



## A. UAAL Amortization Period and Payments - Police Officers (Continued)

#### **Current UAAL**

Date Established	Type of Amortization Base	Years Remaining	E	ount Before xtra UAL ayments	E	nount After Extra UAL Payments	ı	FY 2025 Payment
10/1/2011	Plan Amendment	16		(1,840,379)		(1,840,379)		(183,629)
10/1/2012	Actuarial (Gain)/Loss	16		5,110,761		5,110,761		509,942
10/1/2012	Plan Amendment	16		(848,098)		(848,098)		(84,622)
10/1/2012	Plan Amendment	16		66,953		66,953		6,680
10/1/2013	Plan Amendment	16		3,234		3,234		323
10/1/2014	Actuarial (Gain)/Loss	16		(568,785)		(568,785)		(56,752)
10/1/2014	Assumption Change	16		1,176,433		1,176,433		117,382
10/1/2015	Actuarial (Gain)/Loss	17		356,579		356,579		34,441
10/1/2016	Actuarial (Gain)/Loss	18		(773,862)		(773,862)		(72 <i>,</i> 577)
10/1/2016	Assumption Change	18		2,521,025		2,521,025		236,436
10/1/2016	Plan Amendment	18		763,236		763,236		71,581
10/1/2017	Actuarial (Gain)/Loss	14		(1,974,782)		(1,974,782)		(212,638)
10/1/2017	Assumption Change	19		1,461,564		1,461,564		133,463
10/1/2017	Plan Amendment	4		2,152,434		2,152,434		595,065
10/1/2017	Plan Interpretation Change	14		0		0		0
10/1/2017	Plan Amendment (Opt-outs)	4		12,660		12,660		3,500
10/1/2018	Actuarial (Gain)/Loss	15		(108,778)		(108,778)		(11,252)
10/1/2018	Assumption Change	20		786,629		786,629		70,107
10/1/2019	Actuarial (Gain)/Loss	16		1,382,823		1,382,823		137,975
10/1/2019	Assumption Change	21		830,218		830,218		72,371
10/1/2020	Actuarial (Gain)/Loss	17		(1,564,432)		(1,564,432)		(151,102)
10/1/2020	Assumption Change	22		(1,511,353)		(1,511,353)		(129,108)
10/1/2020	Plan Amendment (FOP)	17		(25,043)		(25,043)		(2,419)
10/1/2021	Actuarial (Gain)/Loss	18		(5,469,130)		(5,469,130)		(512,927)
10/1/2021	Assumption Change	23		2,629,621		2,629,621		220,513
10/1/2022	Actuarial (Gain)/Loss	19		2,849,926		2,849,926		260,241
10/1/2022	Assumption Change	24		924,887		924,887		76,253
10/1/2023	Actuarial (Gain)/Loss	20		1,501,851		1,501,851		133,851
10/1/2023	Assumption Change	25		944,367		944,367		76,654
			\$	49,285,592	\$	45,930,392	\$	4,884,153
	Excess Contribution Reserve			<u>0</u>		<u>0</u>		
	Actual Unfunded Liability		\$	49,285,592	\$	45,930,392		

Note: The Bold rows have one payment remaining, which will be paid by the October 1, 2023 City contribution (for FY 2024). The required payment of \$0 shown in this row is for FY 2025 (after the amortization base has already been paid off in full).



# A. UAAL Amortization Period and Payments - Firefighters

### **Current UAAL**

Date Established	Type of Amortization Base	Years Remaining	Amount Before Extra UAL Payments	Amount After Extra UAL Payments	FY 2025 Payment
1/1/1996	Actuarial (Gain)/Loss	2	(489,135)	(489,135)	(253,009)
1/1/1996	Retiree COLA	2	70,634	70,634	54,262
1/1/1997	Retiree COLA	3	64,848	64,848	23,125
1/1/1997	Assumption Change	3	(257,669)	(257,669)	(91,885)
1/1/1998	Actuarial (Gain)/Loss	4	(1,016,850)	(1,016,850)	(281,120)
1/1/1998	Retiree COLA	4	78,478	78,478	21,696
1/1/1999	Retiree COLA	5	120,296	120,296	27,491
1/1/2000	Retiree COLA	6	187,579	187,579	36,898
1/1/2000	Assumption Change	6	(464,986)	(464,986)	(91,465)
1/1/2001	Asset Method Change	7	(1,461,532)	(1,461,532)	(254,421)
1/1/2002	Plan Amendment	8	44,979	44,979	7,071
1/1/2003	Actuarial (Gain)/Loss	9	6,129,350	6,129,350	883,606
1/1/2003	Method Change	9	209,468	209,468	30,197
1/1/2003	Retiree COLA	9	407,360	407,360	58,725
1/1/2003	Assumption Change	9	2,315,187	2,315,187	333,757
1/1/2004	Retiree COLA	10	937,005	937,005	125,371
1/1/2004	Assumption Change	10	2,002,798	2,002,798	267,974
1/1/2005	Actuarial (Gain)/Loss	1	2,168,679	339,774	0
1/1/2005	Retiree COLA	11	423,521	423,521	53,105
10/1/2005	Actuarial (Gain)/Loss	12	2,468,201	2,468,201	292,338
10/1/2005	Plan Amendment	12	182,517	182,517	21,618
10/1/2006	Actuarial (Gain)/Loss	1	1,251,466	141,269	0
10/1/2006	Retiree COLA	13	683,876	683,876	77,017
10/1/2007	Retiree COLA	14	964,572	964,572	103,862
10/1/2007	Actuarial (Gain)/Loss	14	(3,707,419)	(3,707,419)	(399,203)
10/1/2008	Actuarial (Gain)/Loss	15	5,490,530	5,490,530	567,946
10/1/2008	Plan Amendment	15	400,326	400,326	41,410
10/1/2009	Actuarial (Gain)/Loss	16	5,715,810	5,715,810	570,312
10/1/2009	Plan Amendment	16	(3,198,380)	(3,198,380)	(319,128)
10/1/2010	Actuarial (Gain)/Loss	16	3,165,342	3,165,342	315,832
10/1/2011	Actuarial (Gain)/Loss	16	4,455,705	4,455,705	444,581
10/1/2011	Assumption Change	16	4,378,495	4,378,495	436,878



## A. UAAL Amortization Period and Payments - Firefighters (Continued)

#### **Current UAAL**

Date Established	Type of Amortization Base	Years Remaining	Amount Before Extra UAL Payments	Amount After Extra UAL Payments	FY 2025 Payment
10/1/2011	Plan Amendment	16	(1,612,142)	(1,612,142)	(160,856)
10/1/2012	Actuarial (Gain)/Loss	16	4,476,949	4,476,949	446,701
10/1/2012	Plan Amendment	16	(742,921)	(742,921)	(74,127)
10/1/2012	Plan Amendment	16	58,649	58,649	5,852
10/1/2013	Plan Amendment	16	0	0	0
10/1/2014	Actuarial (Gain)/Loss	16	349,709	349,709	34,893
10/1/2014	Assumption Change	16	505,163	505,163	50,404
10/1/2015	Actuarial (Gain)/Loss	17	(621,800)	(621,800)	(60,057)
10/1/2016	Actuarial (Gain)/Loss	18	(1,173,324)	(1,173,324)	(110,041)
10/1/2016	Assumption Change	18	1,069,489	1,069,489	100,303
10/1/2016	Plan Amendment	18	0	0	0
10/1/2017	Actuarial (Gain)/Loss	14	(882,784)	(882,784)	(95,055)
10/1/2017	Assumption Change	19	1,154,523	1,154,523	105,425
10/1/2017	Plan Amendment	4	1,738,481	1,738,481	480,623
10/1/2017	Plan Interpretation Change	14	0	0	0
10/1/2017	Plan Amendment (Opt-outs)	4	0	0	0
10/1/2018	Actuarial (Gain)/Loss	15	(1,013,858)	(1,013,858)	(104,875)
10/1/2018	Assumption Change	20	611,831	611,831	54,529
10/1/2019	Actuarial (Gain)/Loss	16	(440,225)	(440,225)	(43,925)
10/1/2019	Assumption Change	21	639,243	639,243	55,724
10/1/2020	Actuarial (Gain)/Loss	17	(1,232,074)	(1,232,074)	(119,001)
10/1/2020	Assumption Change	22	(1,711,993)	(1,711,993)	(146,248)
10/1/2020	Plan Amendment (FOP)	17	0	0	0
10/1/2021	Actuarial (Gain)/Loss	18	(6,008,196)	(6,008,196)	(563,483)
10/1/2021	Assumption Change	23	1,983,996	1,983,996	166,373
10/1/2022	Actuarial (Gain)/Loss	19	965,143	965,143	88,132
10/1/2022	Assumption Change	24	689,842	689,842	56,874
10/1/2023	Actuarial (Gain)/Loss	20	2,462,743	2,462,743	219,489
10/1/2023	Assumption Change	25	<u>714,721</u>	<u>714,721</u>	<u>58,014</u>
			\$ 35,702,216	\$ 32,763,114	\$ 3,550,509
	Excess Contribution Reserve		(409,208)	<u>(409,208)</u>	
	Actual Unfunded Liability		\$ 35,293,008	\$ 32,353,906	

Note: The Bold rows have one payment remaining, which will be paid by the October 1, 2023 City contribution (for FY 2024). The required payment of \$0 shown in this row is for FY 2025 (after the amortization base has already been paid off in full).



The UAAL is being amortized as a level dollar amount over the number of years remaining in each amortization period. The following schedule illustrates the expected amortization of the UAAL:

Amortization Schedule				
Year	Expected UAAL			
2023	\$ 148,859,138			
2024	141,278,848			
2025	134,281,915			
2026	125,909,941			
2027	116,636,733			
2028	107,652,007			
2029	98,145,872			
2030	87,719,880			
2031	75,428,633			
2032	62,289,683			
2033	53,960,725			
2034	46,767,499			
2035	39,293,691			
2036	32,667,337			
2037	25,906,177			
2038	16,517,458			
2039	8,911,951			
2040	8,253,654			
2041	6,696,037			
2042	3,857,021			
2043	1,810,903			
2044	636,968			
2045	-			

Excess Contribution Reserve	
1. Sum of October 1, 2023 Outstanding Amortization Balances	\$ 150,111,610
2. October 1, 2023 Actual UAAL	148,859,138
3. Excess Contribution Reserve: 1 - 2	\$ 1,252,472



# Supplemental Unfunded Actuarial Accrued Liability (UAAL) Amortization Schedules Reflecting Phase-In of Market Value (Gains)/Losses With vs. Without Projected Extra City UAAL Payments

# Amortization Schedule (Reflecting Phase-in of Market Value (G)/L's But No Extra City Payments Towards UAAL)

But No Extra City Payments Towards UAAL)				
Year	Expected UAAL			
2023 2024 2025 2026 2027 2028 2029 2030 2031	\$ 148,859,138 145,074,627 144,450,143 155,053,737 141,298,381 131,619,121 121,368,793 110,145,398 96,999,734			
2032 2033 2034 2035 2036 2037	50,999,734 82,945,276 73,635,351 65,391,018 56,790,950 48,957,808 40,903,574			
2038 2039 2040 2041 2042 2043 2044 2045 2046	30,129,327 21,039,227 18,790,188 15,528,091 10,862,725 6,859,672 3,588,859 682,279			

# Amortization Schedule (Reflecting Phase-in of Market Value (G)/L's, AND Extra City Payments Towards UAAL)

Year	Expected UAAL
2023	\$ 148,859,138
2024	134,462,099
2025	124,026,060
2026	125,363,024
2027	103,571,239
2028	83,724,741
2029	62,212,232
2030	38,914,258
2031	13,702,905
2032	-

**Note:** This amortization schedule assumes a total City contribution of \$30,783,466 in October 2024, increasing 1.25% per year until UAAL is paid off.



## **Actuarial Gains and Losses**

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

				General	General		
		Total	Elected	Excludable	Non-Excludable	Police Officers	Firefighters
1.	Last Year's UAAL	\$155,962,903	\$255,554	\$27,382,468	\$46,087,908	\$48,882,012	\$33,354,961
2.	Last Year's Employer Normal Cost	4,143,045	280	412,454	431,476	1,587,564	1,711,271
3.	Last Year's Employer Contributions  a. Made at the beginning of the year  b. Made at the end of the year  c. Total	22,397,975 <u>9,457,121</u> 31,855,096	28,030 <u>16,151</u> 44,181	3,717,290 <u>1,416,455</u> 5,133,745	5,729,974 <u>2,843,859</u> 8,573,833	7,116,908 <u>2,989,886</u> 10,106,794	5,805,773 <u>2,190,770</u> 7,996,543
4.	Last Year's Member Cost-Sharing Contributions (In Excess of 10% Rate)	350,722	0	0	350,722	0	0
5.	Interest at the Assumed Rate on: a. 1 and 2 for one year b. 3 and 4 from dates paid c. a - b	11,527,628 <u>1,625,280</u> 9,902,348	18,420 <u>2,018</u> 16,402	2,001,234 <u>267,645</u> 1,733,589	3,349,396 <u>425,184</u> 2,924,212	3,633,809 <u>512,417</u> 3,121,392	2,524,769 <u>418,016</u> 2,106,753
6.	This Year's Expected UAAL (before changes): = 1 + 2 - 3 - 4 + 5c	137,802,478	228,055	24,394,766	40,519,041	43,484,174	29,176,442
7.	Change in UAAL Due to Plan Amendments and/or Changes in Actuarial Assumptions	2,821,137	1,706	432,253	728,090	944,367	714,721
8.	This Year's Expected UAAL (after changes): = 6 + 7	140,623,615	229,761	24,827,019	41,247,131	44,428,541	29,891,163
9.	This Year's Actual UAAL (after changes):	148,859,138	244,833	27,045,775	43,284,232	45,930,392	32,353,906
10.	Net Actuarial Gain/(Loss):	(8,235,523)	(15,072)	(2,218,756)	(2,037,101)	(1,501,851)	(2,462,743)
11.	Gain/(Loss) Due to Investments:	(10,634,482)	(5,396)	(1,445,210)	(2,812,513)	(3,429,922)	(2,941,441)
12.	Gain/(Loss) Due to Other Sources:	2,398,959	(9,676)	(773,546)	775,412	1,928,071	478,698



The annual experience (gains)/losses in previous years have been as follows:

	Experience
Year Ending	(Gain)/Loss
12/31/1987	1,553,614
12/31/1988	(1,274,382)
12/31/1989	(2,127,490)
12/31/1990	4,224,229
12/31/1991	(6,086,043)
12/31/1992	2,997,588
12/31/1993	1,619,324
12/31/1994	6,035,838
12/31/1995	(12,826,310)
12/31/1996	942,133
12/31/1997	(14,413,961)
12/31/1998	(9,828,307)
12/31/1999	1,889,769
12/31/2000	26,457,751
12/31/2001	13,298,945
12/31/2002	46,662,623
12/31/2003	23,736,342
12/31/2004	20,236,223
9/30/2005	15,261,034
9/30/2006	7,371,714
9/30/2007	(19,235,295)
9/30/2008	27,415,318
9/30/2009	27,577,164
9/30/2010	15,074,929
9/30/2011	20,969,312
9/30/2012	22,681,760
9/30/2013	1,608,800
9/30/2014	(1,436,491)
9/30/2015	(3,038,952)
9/30/2016	(4,713,880)
9/30/2017	(8,574,453)
9/30/2018	(2,374,009)
9/30/2019	(469,094)
9/30/2020	(6,103,388)
9/30/2021	(19,283,793)
9/30/2022	5,752,406
9/30/2023	8,235,523



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

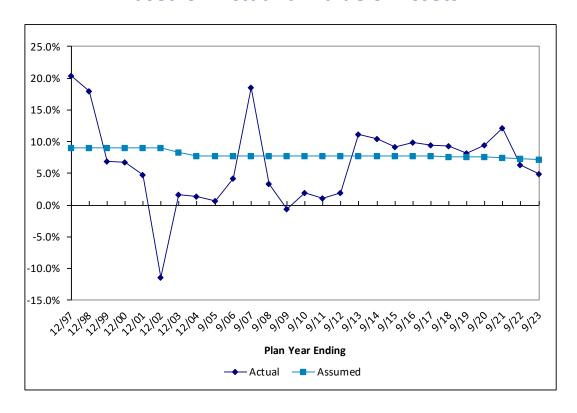
	Investme	nt Return	Salary Ir	ncreases
Year Ending	Actual	Assumed	Actual	Assumed
12/31/1997	20.4	9.00	2.7	6.1
12/31/1998	18.0	9.00	11.5	6.1
12/31/1999	6.9	9.00	2.3	6.1
12/31/2000	6.8	9.00	12.6	6.1
12/31/2001	4.7	9.00	3.8	6.1
12/31/2002	(11.4)	9.00	4.7	6.1
12/31/2003	1.6	8.25	8.2	5.4
12/31/2004	1.3	7.75	11.6	5.0
9/30/2005	0.6	7.75	7.7	5.0
9/30/2006	4.2	7.75	5.0	4.9
9/30/2007	18.6	7.75	(5.6)	4.9
9/30/2008	3.4	7.75	16.8	4.9
9/30/2009	(0.6)	7.75	4.9	4.1
9/30/2010	1.9	7.75	(0.2)	4.6
9/30/2011	1.1	7.75	(2.7)	4.8
9/30/2012	1.9	7.75	2.4	5.3
9/30/2013 *	11.2	7.75	2.7	1.4
9/30/2014	10.5	7.75	2.9	4.7
9/30/2015	9.1	7.75	5.5	5.8
9/30/2016	9.9	7.75	4.4	4.5
9/30/2017	9.4	7.75	8.0	4.5
9/30/2018	9.3	7.65	10.0	4.5
9/30/2019	8.1	7.60	1.9	4.6
9/30/2020	9.4	7.55	3.6	4.6
9/30/2021	12.2	7.40	3.3	4.9
9/30/2022	6.3	7.25	5.1	4.9
9/30/2023	4.9	7.20	5.8	4.6
Average	6.5 %	7.98 %	5.1 %	5.0 %

<sup>\*</sup>Salary Increase experience excludes Police Officers due to the change in the definition of pay effective 9/30/2012.

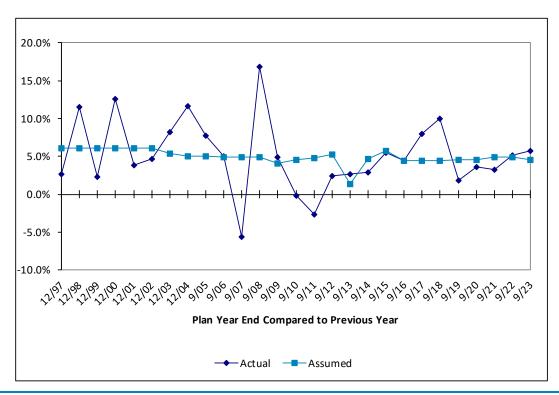
The actual investment return rates shown above are based on the actuarial value of assets. The actual salary increase rates shown above are the increases received by those active members who were included in the actuarial valuations both at the beginning and end of each period.



# History of Investment Return Based on Actuarial Value of Assets



# **History of Salary Increases**





#### Number Added To and Removed from Active Participation Actual (A) Compared to Expected (E) - Totals

Year	Number Added During Year A E		& D	vice ROP ement	Disab Retire	,	Died In Service		Vested	als	Active Members End of		
Ended	Α	E	Α	E	Α	E	Α	E	Α	Α	Α	E	Year
9/30/2013 9/30/2014	45 68	75 76	44 43	27 23	0 0	2	0	1	5	26 27	31 31	22 20	565 557
9/30/2015	52	37	22	20	1	0	0	1	1	13	14	29	572
9/30/2016 9/30/2017	69 49	53 38	26 18	27 24	2	1 1	0	1 1	2	23 18	25 20	32 35	588 599
9/30/2018	54	51	20	31	0	1	2	1	3	26	29	31	602
9/30/2019 9/30/2020	63 51	43 59	13 29	28 30	4 2	1 1	0	1	1 3	25 25	26 28	33 33	622 614
9/30/2021	39	54	23	25	0	1	0	1	4	27	31	30	599
9/30/2022 9/30/2023	45 53	66 59	21 18	22 29	1 1	1 1	0 1	1 1	6 7	38 32	44 39	27 24	578 572
11-Year Totals	588	611	277	286	11	12	5	11	38	280	318	316	

Number Added To and Removed from Active Participation Actual (A) Compared to Expected (E) - Elected Officials

Year	Number Added During Year A E		& D Retire	vice ROP ement	Disak Retire	ment	Died Sen	vice	Vested	als	Active Members End of		
Ended	Α	E	Α	E	Α	E	Α	E	Α	Α	Α	E	Year
9/30/2013	0	0	0	0.3	0	0	0	0	_	0	0	0	1
9/30/2014 9/30/2015	0 0	0 1	0 1	0.3 0.2	0	0	0	0	0	0	0	0	1 0
9/30/2016	0	0	0	0	0	0	0	0	0	0	0	0	0
9/30/2017	0	0	0	0	0	0	0	0	_	0	0	0	0
9/30/2018	0	0	0	0	0	0	0	0	_	0	0	0	0
9/30/2019	0	0	0	0	0	0	0	0	_	0	0	0	0
9/30/2020	0	0	0	0	0	0	0	0	0	0	0	0	0
9/30/2021	0	0	0	0	0	0	0	0	0	0	0	0	0
9/30/2022	0	0	0	0	0	0	0	0	0	0	0	0	0
9/30/2023	0	0	0	0	0	0	0	0	0	0	0	0	0
11-Year Totals	0	1	1	0.8	0	0	0	0	0	0	0	0	

Number Added To and Removed from Active Participation Actual (A) Compared to Expected (E) - General Excludable

Year	Number Added During Year A E		& D	vice ROP ement	Disab Retire	•	Died In Service		Vested	als	Active Members End of		
Ended	Α	E	Α	E	Α	E	Α	E	Α	Α	Α	E	Year
9/30/2013 9/30/2014	18 22	16 17	8 7	6.2 4.7	0	0.4 0.4	0	0.2		7 10	8 10	4.0 4.4	96 101
9/30/2015	11	8	3	3.7	0	0.1	0	0.2	-	5	5	6.1	104
9/30/2016	15	14	2	3.3	0	0.1	0	0.2	1	11	12	5.9	105
9/30/2017	16	10	4	4.2	0	0.1	0	0.3	1	5	6	5.1	111
9/30/2018	17	11	2	4.1	0	0.1	1	0.3	0	8	8	5.6	117
9/30/2019	19	16	6	5.4	0	0.1	0	0.3	0	10	10	6.1	120
9/30/2020	8	8	6	5.1	0	0.1	0	0.3	0	2	2	5.8	120
9/30/2021	9	17	7	3.9	0	0.1	0	0.2	0	10	10	7.8	112
9/30/2022	11	25	5	4.2	1	0.1	0	0.2	4	15	19	7.1	98
9/30/2023	12	13	5	6.7	0	0.1	0	0.1	2	6	8	5.2	97
11-Year Totals	158	155	55	51.5	1	1.7	1	2.5	9	89	98	63.1	



#### Number Added To and Removed from Active Participation Actual (A) Compared to Expected (E) - General Non-Excludable

Year	Number Added During Year A E		& D	vice ROP ement	Disab Retire	ment	Died In Service		Vested	als	Active Members End of		
Ended	Α	E	Α	E	Α	E	Α	E	Α	Α	Α	E	Year
9/30/2013 9/30/2014	18 23	37 32	21 17	13.1 11.1	0	0.8	0	0.4 0.4	_	13 11	16 14	12.4 11.2	250 241
9/30/2015	22	16	13	10.5	0	0.2	0	0.4	_	3	3	16.6	247
9/30/2016	32	22	13	14.6	0	0.2	0	0.3	1	8	9	19.2	257
9/30/2017	9	15	4	9.6	0	0.2	0	0.5	1	10	11	22.3	251
9/30/2018	13	19	8	13.3	0	0.2	1	0.5	2	8	10	17.8	245
9/30/2019	14	16	3	9.5	3	0.2	0	0.5	0	10	10	19.0	243
9/30/2020	18	25	10	11.9	0	0.2	0	0.6	2	13	15	18.7	236
9/30/2021	6	23	8	13.3	0	0.3	0	0.4	4	11	15	12.6	219
9/30/2022	18	27	7	11.5	0	0.3	0	0.4	2	18	20	10.5	210
9/30/2023	25	31	10	13.5	0	0.3	1	0.3	5	15	20	10.3	204
11-Year Totals	198	263	114	131.9	3	3.7	3	4.7	23	120	143	170.6	

#### Number Added To and Removed from Active Participation Actual (A) Compared to Expected (E) - Police Officers

Year	Number Added During Year A E		& D	vice ROP ement	Disab Retire	,	Died In Service		Vested	als	Active Members End of		
Ended	Α	E	Α	E	Α	E	Α	E	Α	Α	Α	E	Year
9/30/2013 9/30/2014	6 16	12 12	6 5	3.8 5.6	0	0.2 0.2	0	0.1 0.1	1	5 6	6 7	4.1 3.8	138 142
9/30/2015	14	9	2	3.5	1	0.1	0	0.1	1	5	6	6.0	147
9/30/2016	12	10	5	5.6	2	0.1	0	0.1	0	3	3	6.2	149
9/30/2017	14	7	5	6.5	0	0.1	0	0.2	0	2	2	6.5	156
9/30/2018	16	15	7	10.9	0	0.1	0	0.2	1	7	8	7.0	157
9/30/2019	11	8	2	9.5	1	0.1	0	0.2	1	4	5	7.2	160
9/30/2020	18	22	9	11.1	2	0.1	0	0.2	1	10	11	7.1	156
9/30/2021	13	11	5	5.6	0	0.3	0	0.2	0	6	6	7.2	158
9/30/2022	13	11	6	3.5	0	0.3	0	0.2	0	5	5	6.9	160
9/30/2023	8	12	3	6.7	1	0.3	0	0.2	0	8	8	6.9	156
11-Year Totals	141	129	55	72.3	7	1.9	0	1.8	6	61	67	68.9	

# Number Added To and Removed from Active Participation Actual (A) Compared to Expected (E) - Firefighters

Year	Number Added During Year A E		& D	vice ROP ement	Disab Retire	•	Died In Service		Terminations Vested Other Totals				Active Members End of
Ended	Α	E	Α	E	Α	E	Α	E	Α	Α	Α	E	Year
9/30/2013 9/30/2014	3 7	10 15	9 14	3.4 1.6	0	0.2 0.2	0	0.1 0.1	_	1	1	1.1 1.0	80 72
9/30/2015	5	3	3	2.0	0	0.1	0	0.1	_	0	0	0.7	
9/30/2016	10	7	6	3.3	0	0.1	0	0.1	0	1	1	0.8	77
9/30/2017	10	6	5	3.9	0	0.1	0	0.1	0	1	1	0.8	81
9/30/2018	8	6	3	3.0	0	0.1	0	0.1	0	3	3	1.0	83
9/30/2019	19	3	2	3.7	0	0.1	0	0.1	0	1	1	1.0	99
9/30/2020	7	4	4	2.1	0	0.1	0	0.1	0	0	0	1.3	102
9/30/2021	11	3	3	2.3	0	0.1	0	0.1	0	0	0	2.3	110
9/30/2022	3	3	3	2.9	0	0.1	0	0.1	0	0	0	2.4	110
9/30/2023	8	3	0	1.9	0	0.1	0	0.1	0	3	3	2.0	115
11-Year Totals	91	63	52	30.1	0	1.3	1	1.1	0	10	10	14.4	



#### **Recent History of Valuation Results** Number of Actuarial **Total Normal Cost** Valuation Value of Active Inactive Covered Funded Date Members Members Annual Payroll Assets UAAL Ratio Amount % of Payroll 1/1/2000 764 569 \$32,792,227 \$221,616,352 (\$10,470,328) 105.0 % \$4,594,136 14.01 % 765 585 99.2 1/1/2001 36,079,840 227,724,737 1,900,063 5,480,700 15.19 609 1/1/2002 755 40,076,259 228,682,300 15,129,093 93.8 6,292,874 15.70 1/1/2003 753 615 40,840,669 194,878,768 83,533,529 70.0 6,420,291 15.72 1/1/2004 651 42,380,291 195,058,670 60.6 762 126,868,280 6,646,712 15.68 726 650 44,782,104 1/1/2005 197,516,417 145,862,261 57.5 7,724,072 17.25 10/1/2005 758 680 48,011,978 206,804,749 157,437,777 56.8 8,418,556 17.53 10/1/2006 781 692 51,043,831 237,825,593 59.6 161,018,543 9,449,437 18.51 10/1/2007 761 715 46,125,613 258,488,666 144,584,515 64.1 9,222,398 19.99 10/1/2008 781 728 53,451,877 265,381,290 168,522,940 61.2 9,899,872 18.52 755 768 57.0 10/1/2009 52,692,558 262,434,347 197,974,718 8,776,789 16.66 10/1/2010 672 817 46,949,522 265,080,873 195,653,796 57.5 8,196,034 17.46 10/1/2011 614 853 40,863,780 264,628,498 226,570,157 53.9 6,951,139 17.01 10/1/2012 595 889 38,843,813 265,431,205 244,027,058 52.1 6,364,084 16.38 10/1/2013 \* 565 920 37,158,283 288,832,252 243,372,636 54.3 6,419,393 17.28 10/1/2014 \* 557 965 37,013,103 313,297,551 239,939,061 56.6 6,007,692 16.23 10/1/2015 \* 572 965 59.4 6,200,674 16.19 38,301,821 332,327,655 226,729,657 10/1/2016 \* 588 986 38,659,035 224,896,425 60.8 6,299,172 16.29 349,225,598 10/1/2017 \* 599 974 41,314,804 365,878,904 226,918,398 61.7 6,726,494 16.28 10/1/2018 \* 602 979 44,405,705 382,523,777 219,566,238 63.5 7,272,619 16.38 10/1/2019 \* 622 986 45,616,279 391,598,190 209,895,291 65.1 7,701,915 16.88 10/1/2020 \* 614 996 45,886,247 415,697,593 189,668,756 68.7 8,273,928 18.03 995 10/1/2021 599 45,284,440 163,701,041 73.4 8,832,706 19.50 450,868,731 10/1/2022 578 993 44,975,569 460,723,529 155,962,903 74.7 8,640,602 19.21 10/1/2023 989 46,233,055 475,104,163 148,859,138 8,943,703 19.34 572 76.1



<sup>\*</sup> Reflects all Actuarial Impact Statements completed after actuarial valuation report.

# **Recent History of Required and Actual Contributions**

	End of Year		R	equired Cor	ntributions	s <sup>#</sup>				
	to which	Employer 8	k State	Estimate	d State	Net Empl	oyer	Actu	tions	
Valuation Date	Valuation Applies	Amount	% of Payroll	Amount*	% of Payroll	Amount	% of Payroll	Employer	State	Total
10/1/2009	9/30/2011	\$ 21,774,775	41.32 %	\$145,830	0.28 %	\$ 21,628,945	41.05 %	\$ 21,628,945	\$ 145,830	\$ 21,774,775
10/1/2010	9/30/2012	23,146,379	49.30	145,830	0.31	23,000,549	48.99	23,000,549		23,146,379
10/1/2011	9/30/2013	23,592,738	57.74	145,830	0.36	23,446,908	57.38	23,446,908	145,830	23,592,738
10/1/2012	9/30/2014	25,678,422	66.11	145,830	0.38	25,532,592	65.73	25,554,746	145,830	25,700,576
10/1/2013	9/30/2015 *	24,288,466	65.37	136,610	0.37	24,151,856	65.00	28,228,636	145,830	28,374,466
10/1/2014	9/30/2016 *	23,838,224	64.41	136,610	0.37	23,701,614	64.04	26,975,010	145,830	27,120,840
10/1/2015	9/30/2017 *	23,082,353	60.26	136,610	0.35	22,945,743	59.91	26,293,017	145,830	26,438,847
10/1/2016	9/30/2018 *	23,281,270	60.22	136,610	0.35	23,144,660	59.87	25,562,264	145,830	25,708,094
10/1/2017	9/30/2019 *	25,231,083	61.07	136,721	0.33	25,094,362	60.74	29,066,424	145,830	29,212,254
10/1/2018	9/30/2020 *	24,418,414	54.99	136,776	0.31	24,281,638	54.68	29,308,926	145,830	29,454,756
10/1/2019	9/30/2021 *	23,936,560	52.47	136,832	0.30	23,799,728	52.17	30,558,549	145,830	30,704,379
10/1/2020	9/30/2022 *	23,032,324	50.20	136,999	0.30	22,895,325	49.90	30,528,631	145,830	30,674,461
10/1/2021	9/30/2023	22,535,142	49.76	137,167	0.30	22,397,975	49.46	31,709,266	145,830	31,855,096
10/1/2022	9/30/2024	21,229,356	47.20	137,223	0.30	21,092,133	46.90			
10/1/2023	9/30/2025	20,308,217	43.93	137,279	0.30	20,170,938	43.63			

<sup>#</sup> Reflects an interest discount to the beginning of the year starting with the 10/1/2013 valuation.



<sup>\*</sup> Reflects all Actuarial Impact Statements completed after actuarial valuation report.

## **Actuarial Assumptions and Methods**

### Valuation Methods

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

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

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

**Financing of Unfunded Actuarial Accrued Liabilities** - Unfunded Actuarial Accrued Liabilities (full funding credit if assets exceed liabilities) are amortized by level (principal & interest combined) dollar contributions over a reasonable period of future years. The scheduled amortization payments (the required contributions towards the Unfunded Actuarial Accrued Liability) are credited to the prior year's outstanding amortization bases. Any excess or shortfall (due to the one-year contribution lag) is applied to an excess contribution reserve. This excess contribution reserve cannot be used to reduce future required contributions, but it can be used to reduce or eliminate outstanding amortization bases. Intentional excess City contributions are applied to specific amortization bases (as directed by the City).

All UAAL amortization periods in excess of 25 years as of October 1, 2014 were reduced to 25 years as of October 1, 2014. All UAAL amortization bases which originated from October 1, 2014 through October 1, 2016 were amortized over 25 years. All UAAL amortization bases which originated October 1, 2017 and later are amortized in accordance with the Funding Policy adopted by the Board of Trustees in January 2017. The UAAL impact of plan amendments affecting inactive members only are amortized over 10 years. The UAAL impact of plan amendments affecting active members and actuarial experience (gains)/losses are amortized over 20 years. The UAAL impact of changes in actuarial methods or assumptions are amortized over 25 years.

**Actuarial Value of Assets** - The Actuarial Value of Assets was written down to Market Value as of December 31, 2001. Effective December 31, 2001, the Actuarial Value of Assets phases in the difference between the expected and actual return on market value of assets at the rate of 20% per year. The Actuarial Value of Assets is further adjusted to the extent necessary to fall within the corridor whose lower limit is 80% of the Market Value of plan assets and whose upper limit is 120% of the Market Value of plan assets. During periods when investment performance exceeds the assumed rate, Actuarial Value of Assets will tend to be less than Market Value. During periods when investment performance is less than assumed rate, Actuarial Value of Assets will tend to be greater than Market Value.

## **Valuation Assumptions**

**The actuarial assumptions** used in the valuation are shown in this section. The economic and demographic assumptions used in this valuation were established following the Experience Study Report dated April 5, 2021.



## **Economic Assumptions**

**The investment return rate** assumed in the valuation is 7.15% per year, compounded annually (net after investment expenses). This rate will be reevaluated annually and future reductions of 5 to 10 basis points per year are anticipated.

**The general inflation rate** assumed in the valuation is 2.15% per year. This assumption is used to project future maximum annual pension benefits for Police Officers, maximum annual pension benefits for General Non-Excludable Employees, Internal Revenue Code (IRC) Section 401(a)(17) and IRC Section 415(b) limitations, and administrative expenses for the current year. The inflation rate is defined to be the long-term rate of annual increases in the prices of goods and services.

**The assumed real rate of return** over general inflation is defined to be the portion of total investment return that is more than the assumed inflation rate. Considering other economic assumptions, the 7.15% investment return rate translates to an assumed real rate of return over general inflation of 5.00%.

The active member population is assumed to remain constant. Covered payroll is assumed to increase 3.00% per year for purposes of projecting covered payroll from the valuation date to the contribution year.

**Pay increase assumptions** for individual active members are shown below. Part of the assumption is for promotions, merit, productivity and/or seniority increase, and 2.15% recognizes general inflation.

**The rates of salary increase** used are in accordance with the following tables. This assumption is used to project a member's current salary to the salaries upon which benefits will be based.

SALARY INCI	SALARY INCREASE ASSUMPTION - GENERAL EXCLUDABLE EMPLOYEES												
Rounded Attained Age	Attained Assumed Productivity Total												
Under 30 30 - 39 40 - 49 50 - 54 55 & Over	2.15% 2.15% 2.15% 2.15% 2.15%	5.00% 3.85% 2.35% 1.75% 1.50%	7.15% 6.00% 4.50% 3.90% 3.65%										



SALARY INCREA	SALARY INCREASE ASSUMPTION - GENERAL NON-EXCLUDABLE EMPLOYEES											
Rounded Years of Service	Years of Assumed Productivity Total											
0 - 1	2.15%	2.85%	5.00%									
2 - 3	2.15%	2.25%	4.40%									
4 - 11	2.15%	1.30%	3.45%									
12 - 17	2.15%	0.65%	2.80%									
18 & Over	2.15%	0.45%	2.60%									

SALARY INCREASE ASSUMPTION - POLICE OFFICERS				
Rounded Years of Service	Assumed Inflation	Promotion, Productivity & Seniority	Total Rate	
0 - 2 3 & Over	2.15% 2.15%	3.75% 2.35%	5.90% 4.50%	

SALARY INCREASE ASSUMPTION - FIREFIGHTERS				
Rounded Years of Service	Assumed Inflation	Promotion, Productivity & Seniority	Total Rate	
0 - 3 4 - 11 12 - 15 16 & Over	2.15% 2.15% 2.15% 2.15%	7.75% 4.35% 2.10% 1.50%	9.90% 6.50% 4.25% 3.65%	



## **Demographic Assumptions**

The mortality table used for General Employees (Excludable and Non-Excludable) and Elected Officials is the PUB-2010 Headcount Weighted General Below Median Employee Mortality Table (for pre-retirement mortality) and the PUB-2010 Headcount Weighted General Below Median Healthy Retiree Mortality Table (for post-retirement mortality), with separate rates for males and females and ages set back one year for males, with mortality improvements projected to all future years after 2010 using Scale MP-2018. These are the same rates used for (non-Teacher) Regular Class members in the July 1, 2022 actuarial valuation of the Florida Retirement System (FRS) Pension Plan (based on the 2019 FRS experience study report), in accordance with Florida Statutes Chapter 112.63.

Sample Attained	(Active) Proba	<u>-</u>	Future Expectance	
Ages (in 2023)	Men	Women	Men	Women
20	0.04 %	0.01 %	69.14	72.06
25	0.05	0.02	63.82	66.72
30	0.07	0.03	58.53	61.39
35	0.10	0.04	53.30	56.09
40	0.12	0.06	48.13	50.83
45	0.14	0.07	42.98	45.60
50	0.19	0.11	37.88	40.41
55	0.29	0.17	32.87	35.28
60	0.45	0.26	28.01	30.25
65	0.64	0.37	23.31	25.32
70	0.89	0.56	18.74	20.49
75	1.33	0.92	14.30	15.80
80	2.10	1.55	9.99	11.28

Sample	(Inactive) Prob	pability of	Future	Life
Attained	Dying Nex	t Year	Expectance	y (years)
Ages (in 2023)	Men	Women	Men	Women
20	0.04 %	0.01 %	65.38	69.38
25	0.05	0.02	59.95	63.94
30	0.07	0.03	54.54	58.52
35	0.10	0.04	49.18	53.13
40	0.12	0.06	43.87	47.76
45	0.14	0.07	38.58	42.42
50	0.19	0.57	33.34	37.13
55	0.95	0.57	28.97	32.68
60	1.12	0.59	24.86	28.13
65	1.28	0.68	20.78	23.53
70	1.78	1.08	16.75	19.05
75	2.83	1.85	13.03	14.86
80	4.74	3.34	9.74	11.09



The mortality table used for Police Officers and Firefighters is the PUB-2010 Headcount Weighted Safety Below Median Employee Mortality Table for males (pre-retirement), the PUB-2010 Headcount Weighted Safety Employee Mortality Table for females (pre-retirement), the PUB-2010 Headcount Weighted Safety Below Median Healthy Retiree Mortality Table for males (post-retirement), and the PUB-2010 Safety Healthy Retiree Mortality Table for females (post-retirement), with ages set forward one year for males and females, and with mortality improvements projected to all future years after 2010 using Scale MP-2018. These are the same rates used for Special Risk Class members in the July 1, 2022 actuarial valuation of the Florida Retirement System (FRS) Pension Plan (based on the 2019 FRS experience study report), in accordance with Florida Statutes Chapter 112.63.

Sample Attained	•	(Active) Probability of Dying Next Year		Life y (years)
Ages (in 2023)	Men	Women	Men	Women
20	0.05 %	0.02 %	67.12	71.28
25	0.06	0.02	61.83	65.95
30	0.08	0.04	56.57	60.64
35	0.09	0.05	51.35	55.37
40	0.11	0.07	46.15	50.14
45	0.12	0.08	40.97	44.92
50	0.16	0.10	35.82	39.73
55	0.25	0.16	30.74	34.59
60	0.42	0.22	25.78	29.51
65	0.68	0.30	21.00	24.49
70	1.17	0.54	16.46	19.58
75	2.05	1.05	12.21	14.87
80	6.19	4.08	8.29	10.46

Sample	(Inactive) Prob	pability of	Future	Life
Attained	Dying Next	t Year	Expectance	y (years)
Ages (in 2023)	Men	Women	Men	Women
20	0.05 %	0.02 %	64.09	68.53
25	0.06	0.02	58.70	63.11
30	0.08	0.04	53.34	57.71
35	0.09	0.05	48.02	52.34
40	0.11	0.07	42.72	47.00
45	0.33	0.12	37.52	41.70
50	0.42	0.20	32.69	36.52
55	0.55	0.35	27.91	31.48
60	0.91	0.60	23.31	26.68
65	1.31	0.92	19.03	22.15
70	2.07	1.43	14.99	17.88
75	3.49	2.38	11.38	13.95
80	6.19	4.08	8.29	10.46

This assumption is used to measure the probabilities of each benefit payment being made after retirement. 75% of active member deaths are assumed to be service-connected.



For General Employee disabled retirees, the mortality table used is the PUB-2010 Headcount Weighted General Disabled Retiree Mortality Table, with separate rates for males and females and ages set forward 3 years for both males and females, with no provision being made for future mortality improvements. These are the same rates used for Regular Class members in the July 1, 2022 actuarial valuation of the FRS Pension Plan (based on the 2019 FRS experience study report), in accordance with Florida Statutes Chapter 112.63.

Sample	Probabili	ty of	Future	Life
Attained	Dying Nex	t Year	Expectanc	y (years)
Ages	Men	Women	Men	Women
50	2.02 %	1.64 %	20.99	23.92
55	2.53	1.91	18.18	20.88
60	3.08	2.27	15.50	17.88
65	3.93	2.83	12.94	14.91
70	5.08	3.79	10.53	12.07
75	6.98	5.46	8.29	9.45
80	10.12	8.31	6.33	7.19

For Police Officer and Firefighter disabled retirees, the mortality table used is 80% of the PUB-2010 Headcount Weighted General Disabled Retiree Mortality Table and 20% of the PUB-2010 Headcount Weighted Safety Disabled Retiree Mortality Table, with separate rates for males and females, with no provision being made for future mortality improvements. These are the same rates used for Special Risk Class members in the July 1, 2022 Actuarial Valuation of the Florida Retirement System (FRS) Pension Plan (based on the 2019 FRS experience study report), as required under Florida Statutes, Chapter 112.63.

Sample	Probabili	ty of	Future	Life
Attained	Dying Nex	t Year	Expectanc	y (years)
Ages	Men	Women	Men	Women
50	1.45 %	1.25 %	24.04	26.84
55	1.91	1.50	20.88	23.54
60	2.37	1.81	17.92	20.32
65	3.00	2.22	15.07	17.17
70	3.91	2.90	12.39	14.10
75	5.30	4.13	9.87	11.22
80	7.66	6.21	7.60	8.67



**The rates of retirement** used to measure the probability of eligible members retiring during the next year are as follows:

RETIREMENT RATES GENERAL EXCLUDABLE EMPLOYEES				
Age	Years of Service	Expected Percentage Retiring During the Next Year		
Under 55	Under 24 24 25 & Over	5% 30% 100%		
55 - 61	Under 21 21 - 24 25 & Over	12% 30% 100%		
62	Under 25 25 & Over	80% 100%		
63 -74	Under 20 20 & Over	25% 100%		
75 & Over	Any	100%		



RETIREMENT RATES GENERAL NON-EXCLUDABLE EMPLOYEES				
Age	Years of Service	Expected Percentage Retiring During the Next Year		
Under 49	Under 25 25 - 26 27 & Over	40% 80% 100%		
49 - 51	Under 22 22 - 24 25 & Over	45% 15% 100%		
52 - 54	Under 20 20 - 23 24 - 25 26 & Over	5% 10% 50% 100%		
55 - 59	Under 21 21 - 24 25 & Over	5% 50% 100%		
60 - 64	Under 15 15 - 18 19 - 21 22 & Over	60% 20% 70% 100%		
65 & Over	Under 10 10 & Over	50% 100%		



RETIREMENT RATES POLICE OFFICERS				
Age	Year of Eligibility and Years of Service (YOS)	Expected Percentage Retiring During the Next Year		
Under 55	1st Year Elig; Under 25 YOS 2nd+ Year Elig; Under 25 YOS Any Year Elig; 25+ YOS	45% 5% 100%		
55 & Over	Any Year Elig; Under 20 YOS Any Year Elig; 20 - 24 YOS Any Year Elig; 25+ YOS	75% 35% 100%		

RETIREMENT RATES  FIREFIGHTERS HIRED ON OR BEFORE 9/30/2013 AND  FIREFIGHTERS HIRED AFTER 9/30/2013 WITH HIRE AGE OVER 35				
Age	Years of Service	Expected Percentage Retiring During the Next Year		
Under 50	Under 25 25 & Over	70% 100%		
50 - 51	Under 25 25 & Over	15% 100%		
52 & Over	Any	100%		

RETIREMENT RATES FIREFIGHTERS HIRED AFTER 9/30/2013 WITH HIRE AGE UNDER 36								
Years of Service								
Under 25	Any	10%						
25 and Over	25 and Over Any 100%							



**Rates of separation from active membership** are as shown below (rates do not apply to members eligible to retire and do not include separation on account of death or disability). This assumption measures the probabilities of members separating from employment.

SEPARATION RATES GENERAL EXCLUDABLE EMPLOYEES							
Years of Service Males Females							
9.0% 4.5%	12.5% 4.5% 1.7%						
	<b>Males</b> 9.0%						

SEPARATION RATES GENERAL NON-EXCLUDABLE EMPLOYEES					
Years of Service Males and Females					
Under 3 3 - 6 7 - 9 10 - 14 15 & Over	12.0% 9.0% 3.0% 2.0% 1.0%				

SEPARATION RATES POLICE OFFICERS					
Years of Service	Males	Females			
Under 1	15.0%	11.0%			
1 - 6	6.0%	11.0%			
7 & Over	0.8%	1.5%			

SEPARATION RATES FIREFIGHTERS					
Years of Service Males and Females					
Under 1	7.0%				
1 - 4	3.5%				
5 & Over	0.4%				



Rates of disability among active members (75% of disabilities are assumed to be service-connected) are based on the July 1, 2022 actuarial valuation of the Florida Retirement System (FRS) Pension Plan (based on the 2019 FRS experience study report): for General Excludable Employees and Firefighters, the FRS disability rates for non-Special Risk Class employees and Special Risk Class employees, without any adjustments, respectively; for General Non-Excludable Employees, 2.0 times the FRS disability rates for non-Special Risk Class employees; for Police Officers, 3.0 times the FRS disability rates for Special Risk Class employees. Sample rates are shown below.

DISABILITY RATES - GENERAL Age EXCLUDABLE EMPLOYEES		DISABILITY RATES - GENERAL GENERAL NON-EXCLUDABLE EMPLOYEES  EMPLOYEES		DISABILITY RATES - POLICE OFFICERS		DISABILITY RATES - FIREFIGHTERS		
	Males	Females	Males	Females	Males	Females	Males	Females
20	0.001%	0.001%	0.002%	0.002%	0.075%	0.075%	0.025%	0.025%
25	0.011%	0.011%	0.022%	0.022%	0.075%	0.075%	0.025%	0.025%
30	0.011%	0.011%	0.022%	0.022%	0.135%	0.135%	0.045%	0.045%
35	0.011%	0.011%	0.022%	0.022%	0.135%	0.135%	0.045%	0.045%
40	0.021%	0.021%	0.042%	0.042%	0.135%	0.135%	0.045%	0.045%
45	0.041%	0.041%	0.082%	0.082%	0.270%	0.270%	0.090%	0.090%
50	0.082%	0.082%	0.164%	0.164%	0.360%	0.360%	0.120%	0.120%
55	0.165%	0.165%	0.330%	0.330%	0.480%	0.480%	0.160%	0.160%
60	0.216%	0.216%	0.432%	0.432%	0.480%	0.480%	0.160%	0.160%

### Changes since the previous valuation:

The investment return rate assumed in the previous valuation was 7.20% per year, compounded annually (net after investment expenses).



## **Miscellaneous and Technical Assumptions**

Administrative & Investment Expenses

The investment return assumption is intended to be the return net of investment expenses. Annual administrative expenses are assumed to be equal to the prior year administrative expenses adjusted for the assumed inflation rate (2.15%). Assumed administrative expenses are added to the Normal Cost, and they are allocated to each division by the same ratio as assets are allocated.

Data Assumptions/ Adjustments

Where complete participant data was not available, we have used data assumptions which we believe are reasonable and internally consistent.

Benefit Service

Service calculated based on completed months is used to determine the

amount of benefit payable.

**Decrement Operation** 

Disability and mortality decrements operate during retirement eligibility.

**Decrement Timing** 

Decrements of all types are assumed to occur at the beginning of the year.

**Eligibility Testing** 

Eligibility for benefits is determined based upon the age nearest birthday and service nearest whole year on the date the decrement is assumed to occur.

**Forfeitures** 

For vested separations from service, it is assumed that members separating will only withdraw their contributions and forfeit an employer financed benefit if the value of their accumulated contributions exceeds the present value of their deferred monthly benefit. It was further assumed that the liability at termination is the greater of the vested deferred benefit (if any) or the member's accumulated contributions.

**Incidence of Contributions** 

The annual Employer contribution is assumed to be paid in full on the first day of the fiscal year to which it applies. Member contributions are assumed to be received continuously throughout the year based upon the computed percent of payroll shown in this report and the actual payroll payable at the time contributions are made.

**Marriage Assumption** 

80% of males and females are assumed to be married for purposes of death-in-service benefits. Males are assumed to be three years older than their female spouses for valuation purposes.

Normal Form of Benefit

A 10-year certain and life annuity is the normal form of benefit for Police Officers and Firefighters. A life annuity is the normal form of benefit for General Employees.

Pay Increase Timing

Beginning of fiscal year. This is equivalent to assuming that reported pays represent amounts paid to members during the year ended on the valuation date.

**Service Credit Accruals** 

It is assumed that members accrue one year of service credit per year.



## **Glossary**

Actuarial Accrued
Liability (AAL)

The difference between the Actuarial Present Value of Future Benefits, and the Actuarial Present Value of Future Normal Costs.

Actuarial Assumptions Assumptions about future plan experience that affect costs or liabilities, such as: mortality, withdrawal, disablement, and retirement; future increases in salary; future rates of investment earnings; future investment and administrative expenses; characteristics of members not specified in the data, such as marital status; characteristics of future members; future elections made by members; and other items.

Actuarial Cost Method A procedure for allocating the Actuarial Present Value of Future Benefits between the Actuarial Present Value of Future Normal Costs and the Actuarial Accrued Liability.

Actuarially Equivalent

Of equal Actuarial Present Value, determined as of a given date and based on a given set of Actuarial Assumptions.

Actuarial Present Value (APV)

The amount of funds required to provide a payment or series of payments in the future. It is determined by discounting the future payments with an assumed interest rate and with the assumed probability each payment will be made.

Actuarial Present Value of Future Benefits (APVFB) The Actuarial Present Value of amounts which are expected to be paid at various future times to active members, retired members, beneficiaries receiving benefits, and inactive, nonretired members entitled to either a refund or a future retirement benefit. Expressed another way, it is the value that would have to be invested on the valuation date so that the amount invested plus investment earnings would provide sufficient assets to pay all projected benefits and expenses when due.

**Actuarial Valuation** 

The determination, as of a valuation date, of the Normal Cost, Actuarial Accrued Liability, Actuarial Value of Assets, and related Actuarial Present Values for a plan. An Actuarial Valuation for a governmental retirement system typically also includes the Funded Ratio and the Actuarially Determined Contribution (ADC).

Actuarial Value of Assets The value of the assets as of a given date, used by the actuary for valuation purposes. This may be the market or fair value of plan assets or a smoothed value in order to reduce the year-to-year volatility of calculated results, such as the funded ratio and the Actuarially Determined Contribution (ADC).

Actuarially Determined Contribution (ADC) The employer's periodic required contributions, expressed as a dollar amount or a percentage of covered plan compensation. The ADC consists of the Employer Normal Cost and Amortization Payment.

Amortization Method A method for determining the Amortization Payment. The most common methods used are level dollar and level percentage of payroll. Under the Level Dollar method, the Amortization Payment is one of a stream of payments, all equal, whose Actuarial Present Value is equal to the UAAL. Under the Level Percentage of Pay method, the Amortization Payment is one of a stream of increasing payments, whose Actuarial Present Value is equal to the UAAL. Under the Level Percentage of Pay method, the stream of payments increases at the rate at which total covered payroll of all active members is assumed to increase.



Amortization Payment That portion of the plan contribution or ADC which is designed to pay interest on and to amortize the Unfunded Actuarial Accrued Liability.

**Amortization Period** 

The period used in calculating the Amortization Payment.

Closed Amortization Period A specific number of years that is reduced by one each year, and declines to zero with the passage of time. For example if the amortization period is initially set at 30 years, it is 29 years at the end of one year, 28 years at the end of two years, etc.

Employer Normal Cost

The portion of the Normal Cost to be paid by the employer. This is equal to the Normal Cost less expected member contributions.

Equivalent Single
Amortization Period

For plans that do not establish separate amortization bases (separate components of the UAAL), this is the same as the Amortization Period. For plans that do establish separate amortization bases, this is the period over which the UAAL would be amortized if all amortization bases were combined upon the current UAAL payment.

Experience Gain/Loss A measure of the difference between the normal cost rate from last year and the normal cost rate from this year.

**Funded Ratio** The ratio of the Actuarial Value of Assets to the Actuarial Accrued Liability.

**GASB** Governmental Accounting Standards Board.

GASB Statement Nos. 67 and 68 These are the governmental accounting standards that set the accounting rules for public retirement systems and the employers that sponsor or contribute to them. Statement No. 68 sets the accounting rules for the employers that sponsor or contribute to public retirement systems, while Statement No. 67 sets the rules for the systems themselves.

Normal Cost

The annual cost assigned, under the Actuarial Cost Method, to the current plan year.

Open Amortization Period An open amortization period is one which is used to determine the Amortization Payment but which does not change over time. In other words, if the initial period is set as 30 years, the same 30-year period is used in determining the Amortization Period each year. In theory, if an Open Amortization Period is used to amortize the Unfunded Actuarial Accrued Liability, the UAAL will never completely disappear, but will become smaller each year, either as a dollar amount or in relation to covered payroll.

Unfunded Actuarial Accrued Liability The difference between the Actuarial Accrued Liability and Actuarial Value of Assets.

**Valuation Date** 

The date as of which the Actuarial Present Value of Future Benefits are determined. The benefits expected to be paid in the future are discounted to this date.





**PENSION FUND INFORMATION** 

# **Statement of Plan Assets at Market Value**

			nber 30		
		Item	2023		2022
A.	. Cash and Cash Equivalents (Operating Cash)		\$ 12,574,328	\$	14,881,596
В.	Rece	eivables			
	1.	Member Contributions	\$ 474,142	\$	153,837
	2.	Employer Contributions	9,311,291		7,630,097
	3.	Buybacks Receivable	26,483		-
	4.	Securities Proceeds	538,983		4,846,180
	5.	Investment Income and Other Receivables	 870,742		751,103
	6.	Total Receivables	\$ 11,221,641	\$	13,381,217
C.	Inve	stments			
	1.	Short Term Investments	\$ -	\$	-
	2.	Domestic Equities	174,965,901		147,169,266
	3.	International Equities	64,421,358		51,115,294
	4.	Fixed Income	48,469,643		56,332,765
	5.	Real Estate	39,085,975		47,290,820
	6.	Other Securities (Alternatives)	 99,299,047		81,475,017
	7.	Total Investments	\$ 426,241,924	\$	383,383,162
D.	Liab	ilities			
	1.	Benefits Payable	\$ -	\$	-
	2.	Accrued Expenses and Other Payables	(239,686)		(166,878)
	3.	Reserve for UBS Settlement	-		-
	4.	Securities Purchase	 (431,641)		(2,175,324)
	5.	Total Liabilities	\$ (671,327)	\$	(2,342,202)
Ε.	Tota	al Market Value of Assets Available for Benefits	\$ 449,366,566	\$	409,303,773
F.	Allo	cation of Investments			
	1.	Short Term Investments	0.0%		0.0%
	2.	Domestic Equities	41.0%		38.4%
	3.	International Equities	15.1%		13.3%
	4.	Fixed Income	11.4%		14.7%
	5.	Real Estate	9.2%		12.3%
	6.	Other Securities (Alternatives / Venture Capital)	 23.3%		21.3%
	7.	Total Investments	100.0%		100.0%



# **Reconciliation of Plan Assets**

			September 30					
Item				2023		2022		
A.	Market Value of Assets at Beginning of Year		\$	409,303,773	\$	506,026,522		
В.	Revenue	s and Expenditures						
	1. Conf	tributions						
	a.	Member Contributions	\$	4,856,197	\$	5,164,756		
	b.	Employer Contributions		31,709,266		30,528,631		
	C.	State Contributions		145,830		145,830		
	d.	Purchased Service Credit						
	e.	Total	\$	36,711,293	\$	35,839,217		
	2. Inve	stment Income						
	a.	Interest, Dividends, and Other Income	\$	7,105,829	\$	6,381,425		
	b.	Net Unrealized/Realized Gains/(Losses)		43,682,083		(82,142,453)		
	c.	Investment Expenses		(2,401,906)		(2,562,058)		
	d.	Net Investment Income	\$	48,386,006	\$	(78,323,086)		
	3. Bene	efits and Refunds						
	a.	Regular Monthly Benefits	\$	(40,821,658)	\$	(40,107,337)		
	b.	Refunds		(1,362,393)		(1,160,074)		
	c.	Lump Sum Benefits Paid		-		-		
	d.	DROP Distributions		(2,270,472)		(12,428,122)		
	e.	Total	\$	(44,454,523)	\$	(53,695,533)		
	4. Adm	inistrative and Miscellaneous Expenses	\$	(579,983)	\$	(543,347)		
5. Transfers		\$	-	\$	-			
C.	C. Market Value of Assets at End of Year			449,366,566	\$	409,303,773		



# **Reconciliation of DROP Accounts**

Year Ended 9/30	Balance at End of Prior Year	Balancing Adjustment	Balance at Beginning of Year	Credits	Interest	Distributions	Balance at End of Year
2011	\$ 14,774,841	\$ (1,084)	\$ 14,773,757	\$ 6,925,259	\$ 1,334,109	\$ (2,628,105)	\$ 20,405,020
2012	20,405,020	(58,477)	20,346,543	8,431,790	899,003	(4,359,818)	25,317,518
2013	25,317,518	64,566	25,382,084	9,834,829	1,859,447	(6,419,845)	30,656,515
2014	30,656,515	31,712	30,688,227	10,389,452	2,544,224	(5,856,374)	37,765,529
2015	37,765,529	121,227	37,886,756	10,439,527	2,391,967	(10,989,367)	39,728,883
2016	39,728,883	(8,853)	39,720,030	9,428,649	1,433,797	(13,873,484)	36,708,992
2017	36,708,992	620	36,709,612	8,313,473	1,684,127	(12,871,720)	33,835,492
2018	33,835,492	(2,187)	33,833,305	8,016,980	2,486,597	(7,017,789)	37,319,093
2019	37,319,093	51,500	37,370,593	7,169,620	1,394,790	(18,227,172)	27,707,831
2020	27,707,831	-	27,707,831	5,983,149	1,665,546	(7,610,002)	27,746,524
2021	27,746,524	2,638	27,749,162	6,022,657	1,782,309	(10,344,080)	25,210,048
2022	25,210,048	18,184	25,228,232	5,542,905	1,582,068	(12,428,122)	19,925,083
2023	19,925,083	(198,028)	19,727,055	5,561,369	868,797	(2,270,472)	23,886,749



# **Actuarial Value of Assets**

	Year Ending September 30	2022	2023	2024	2025	2026	2027
Α	. Actuarial Value of Assets Beginning of Year	\$ 450,868,731	\$ 460,723,529				_
В	. Market Value End of Year	409,303,773	449,366,566				
C	. Market Value Beginning of Year	506,026,522	409,303,773				
D	. Non-Investment/Administrative Net Cash Flow	(18,399,663)	(8,323,213)				
E	. Investment Income						
	E1. Actual Market Total: B - C - D	(78,323,086)	48,386,006				
	E2. Assumed Rate of Return	7.25%	7.20%	7.15%			
	E3. Assumed Amount of Return	36,568,130	29,636,107				
	E4. Amount Subject to Phase-In: E1 - E3	(114,891,216)	18,749,899				
F	Phased-In Recognition of Investment Income						
	F1. Current Year: 0.2 * E4	(22,978,243)	3,749,980				
	F2. First Prior Year	12,764,730	(22,978,243)	3,749,980			
	F3. Second Prior Year	2,667,752	12,764,730	(22,978,243)	3,749,980		
	F4. Third Prior Year	(3,136,477)	2,667,752	12,764,730	(22,978,243)	3,749,980	
	F5. Fourth Prior Year	2,368,569	(3,136,479)	2,667,754	12,764,730	(22,978,244)	3,749,979
	F6. Total Phase-Ins	(8,313,669)	(6,932,260)	(3,795,779)	(6,463,533)	(19,228,264)	3,749,979
G	. Actuarial Value of Assets End of Year						
	G1. Preliminary Actuarial Value of Assets End of Year:						
	A+D+E3+F6	460,723,529	475,104,163				
	G2. Upper Corridor Limit: 120% * B	491,164,528	539,239,879				
	G3. Lower Corridor Limit: 80% * B	327,443,018	359,493,253				
	G4. Actuarial Value of Assets End of Year	460,723,529	475,104,163				
Н	. Difference between Market & Actuarial Value of Assets	(51,419,756)	(25,737,597)				
I.	Actuarial Rate of Return	6.3%	4.9%				
J.	Market Value Rate of Return	-15.5%	11.8%				
Κ	. Ratio of Actuarial Value of Assets to Market Value	112.6%	105.7%				

The Actuarial Value of Assets recognizes assumed investment return (line E3) fully each year. Differences between actual and assumed investment income on the Market Value of Assets (Line E4) are phased-in over a closed 5-year period. During periods when investment performance exceeds the assumed rate, Actuarial Value of Assets will tend to be less than Market Value. During periods when investment performance is less than the assumed rate, Actuarial Value of Assets will tend to be greater than Market Value. If assumed rates are exactly realized for 5 consecutive years, Actuarial Value of Assets will become equal to Market Value.



# **Asset Allocation**

A. Valuation Date			October	· 1, 2023							
	Total Elected		General Excludable	General Non- Excludable	Police Officers	Firefighters					
B. Market Value of Assets as of October 1, 2022	\$ 409,303,773	\$ 198,366	\$ 56,688,875	\$ 103,059,131	\$ 136,432,232	\$ 112,925,169					
C. Contributions (All)	36,711,293	44,181	6,025,202	10,093,629	11,439,275	9,109,006					
D. Investment Return	50,787,912	24,672	7,071,687	12,676,718	17,006,223	14,008,612					
E. Benefit Payments (All)	(44,454,523)	(52,586)	(6,992,442)	(13,466,238)	(12,592,556)	(11,350,701)					
F. Expenses	(2,981,889)	(1,449)	(415,197)	(744,282)	(998,479)	(822,482)					
G. Asset Transfer (for Transfer of Members Between Divisions)	0	0	103,961	(103,961)	0	0_					
H. Market Value of Assets as of October 1, 2023	449,366,566	213,184	62,482,086	111,514,997	151,286,695	123,869,604					
Actuarial Value of Assets as     of October 1, 2023	475,104,163	225,394	66,060,765	117,902,050	159,951,683	130,964,271					



# **Asset Allocation - Prior Valuation**

A. Valuation Date		October 1, 2022							
	Total	Elected	General Excludable	General Non- Excludable	Police Officers	Firefighters			
B. Market Value of Assets as of October 1, 2021	\$ 506,026,522	\$ 253,194	\$ 68,761,648	\$ 126,632,819	\$ 165,498,384	\$ 144,880,477			
C. Contributions (All)	35,839,217	37,581	5,935,490	10,024,084	10,801,640	9,040,422			
D. Investment Return	(75,761,028)	(38,255)	(10,417,389)	(18,990,133)	(24,990,310)	(21,324,941)			
E. Benefit Payments (All)	(53,695,533)	(52,586)	(7,302,992)	(13,690,123)	(13,853,141)	(18,796,691)			
F. Expenses	(3,105,405)	(1,568)	(427,003)	(778,395)	(1,024,341)	(874,098)			
G. Asset Transfer (for Transfer of Members Between Divisions)	0	0	139,121_	(139,121)	0	0_			
H. Market Value of Assets as of October 1, 2022	409,303,773	198,366	56,688,875	103,059,131	136,432,232	112,925,169			
I. Actuarial Value of Assets as of October 1, 2022	460,723,529	223,286	63,810,549	116,006,178	153,571,855	127,111,661			



# **Investment Rate of Return**

#### **Investment Rate of Return**

	investment r	Rate of Return
Period Ending	Market Value	Actuarial Value
12/31/1997	20.4 %	20.4 %
12/31/1998	18.0	18.0
12/31/1999	6.9	6.9
12/31/2000	1.2	6.8
12/31/2001	(2.7)	4.7
12/31/2002	(14.7)	(11.4)
12/31/2003	23.8	1.6
12/31/2004	8.5	1.3
9/30/2005 *	2.4	0.6
9/30/2006	5.7	4.2
9/30/2007	12.7	18.6
9/30/2008	(15.7)	3.4
9/30/2009	(1.8)	(0.6)
9/30/2010	9.1	1.9
9/30/2011	3.1	1.1
9/30/2012	18.2	1.9
9/30/2013	13.6	11.2
9/30/2014	9.9	10.5
9/30/2015	2.0	9.1
9/30/2016	8.3	9.9
9/30/2017	14.3	9.4
9/30/2018	10.8	9.3
9/30/2019	3.7	8.1
9/30/2020	10.9	9.4
9/30/2021	22.4	12.2
9/30/2022	(15.5)	6.3
9/30/2023	11.8	4.9
Average Returns:		
Last 5 Years	5.9 %	8.2 %
Last 10 Years	7.4 %	8.9 %
All Years Shown (26.75)	6.5 %	6.5 %

<sup>\*</sup> Return for the nine month period

The above rates are based on the retirement system's financial information reported to the actuary. They may differ from figures that the investment consultant reports, in part because of differences in the handling of administrative and investment expenses, and in part because of differences in the handling of cash flows.





FINANCIAL ACCOUNTING INFORMATION

# **FASB ASC 960 Information**

A. Valuation Date	October 1, 2023								
B. Actuarial Present Value of Accumulated Plan Benefits	Total	Elected	General Excludable	General Non- Excludable	Police Officers	Firefighters			
1. Vested Benefits									
<ul> <li>a. Members Currently Receiving Payments</li> <li>b. Terminated Vested Members</li> <li>c. Other Members</li> <li>c. DROP Accounts</li> <li>e. Total</li> </ul>	\$ 471,664,527 5,285,960 78,777,313 23,886,749 579,614,549	\$ 470,227 0 0 0 0 470,227	\$ 72,216,913 1,637,418 9,728,240 1,468,688 85,051,259	\$ 130,910,488 2,172,195 18,681,415 1,678,839 153,442,937	\$ 146,818,588 1,476,347 31,371,986 9,526,523 189,193,444	\$ 121,248,311 0 18,995,672 11,212,699 151,456,682			
2. Non-Vested Benefits	14,796,950	0	2,713,596	3,562,716	4,890,578	3,630,060			
<ol> <li>Total Actuarial Present Value of Accumulated Plan Benefits: 1d + 2</li> </ol>	594,411,499	470,227	87,764,855	157,005,653	194,084,022	155,086,742			
Accumulated Contributions of Active Members     C. Changes in the Actuarial Present Value of     Accumulated Plan Benefits	34,821,990	0	6,419,192	12,294,366	8,838,960	7,269,472			
1. Total Value at Beginning of Year	589,026,977								
<ol><li>Increase/(Decrease) During the Period Attributable to:</li></ol>									
<ul> <li>a. Plan Amendments</li> <li>b. Change in Actuarial Assumptions</li> <li>c. Latest Member Data, Benefits Accumulated and Decrease in the Discount Period</li> <li>d. Benefits Paid</li> <li>e. Net Increase</li> <li>3. Total Value at End of Period</li> <li>D. Market Value of Assets</li> <li>E. Actuarial Assumptions - See page entitled Actuarial Assumptions and Methods</li> </ul>	0 2,635,044 47,204,001 (44,454,523) 5,384,522 594,411,499 449,366,566								



# **FASB ASC 960 Information - Prior Valuation**

A. Valuation Date			Octob	er 1, 2022		
B. Actuarial Present Value of Accumulated     Plan Benefits     1. Vested Benefits	Total	Elected	General Excludable	General Non- Excludable	Police Officers	Firefighters
<ul> <li>a. Members Currently Receiving Payments</li> <li>b. Terminated Vested Members</li> <li>c. Other Members</li> <li>c. DROP Accounts</li> <li>e. Total</li> <li>2. Non-Vested Benefits</li> <li>3. Total Actuarial Present Value of Accumulated Plan Benefits: 1d + 2</li> <li>4. Accumulated Contributions of Active Members</li> <li>C. Changes in the Actuarial Present Value of Accumulated Plan Benefits</li> </ul>	\$ 472,042,389 6,407,344 77,225,802 19,925,083 575,600,618 13,426,359 589,026,977 33,957,500	\$ 478,840 0 0 0 478,840 0 478,840	\$ 70,410,173 1,729,381 11,138,434 960,478 84,238,466 2,236,438 86,474,904 6,506,884	\$ 130,318,415 2,064,722 20,369,190 1,274,159 154,026,486 3,718,367 157,744,853 13,139,999	\$ 146,658,377 2,613,241 29,920,717 7,613,494 186,805,829 4,438,774 191,244,603 8,101,431	\$ 124,176,584 0 15,797,461 10,076,952 150,050,997 3,032,780 153,083,777 6,209,186
Total Value at Beginning of Year     Increase/(Decrease) During the Period     Attributable to:	588,895,238					
<ul> <li>a. Plan Amendments</li> <li>b. Change in Actuarial Assumptions</li> <li>c. Latest Member Data, Benefits Accumulated and Decrease in the Discount Period</li> <li>d. Benefits Paid</li> <li>e. Net Increase</li> </ul>	0 2,631,325 51,195,947 (53,695,533) 131,739					
Total Value at End of Period     Market Value of Assets	589,026,977 409,303,773					
E. Actuarial Assumptions - See page entitled Actuarial Assumptions and Methods						



# Schedule of Changes in the Employer's Net Pension Liability and Related Ratios **GASB Statement No. 67**

Fiscal year ending September 30,	2023	2022	2021	2020	2019	2018	2017	2016	2015	2014
Total Pension Liability										
Service Cost	\$ 8,004,044	\$ 7,893,821	\$ 7,257,463	\$ 7,128,279	\$ 6,666,376	\$ 6,203,806	\$ 5,733,127	\$ 5,758,174	\$ 5,665,063	\$ 6,066,834
Interest	43,353,945	43,453,151	44,414,130	44,182,458	43,940,121	43,295,229	42,056,963	41,971,722	40,961,329	40,360,719
Benefit Changes	-	-	(29,902)	-	461,420	15,359,754	1,018,772	-	-	7,175
Difference between actual & expected experience	1,792,856	195,398	736,475	1,365,571	3,854,666	(3,085,670)	1,421,593	54,306	6,273,657	-
Assumption Changes	2,795,714	8,203,136	(1,948,628)	2,693,639	2,644,957	5,080,632	12,563,730	-	4,037,512	-
Benefit Payments	(43,092,129)	(52,535,459)	(49,899,182)	(46,075,511)	(54,941,086)	(47,007,332)	(46,396,280)	(45,697,331)	(41,290,270)	(34,523,344)
Refunds	(1,362,393)	(1,160,074)	(660,821)	(525,780)	(581,573)	(637,548)	(533,309)	(691,627)	(307,461)	(445,210)
Net Change in Total Pension Liability	11,492,037	6,049,973	(130,465)	8,768,656	2,044,881	19,208,871	15,864,596	\$ 1,395,244	15,339,830	11,466,174
Total Pension Liability - Beginning	612,208,668	606,158,695	606,289,160	597,520,504	595,475,623	576,266,752	560,402,156	559,006,912	543,667,082	532,200,908
Total Pension Liability - Ending (a)	\$ 623,700,705	\$ 612,208,668	\$ 606,158,695	\$ 606,289,160	\$ 597,520,504	\$ 595,475,623	\$ 576,266,752	\$ 560,402,156	\$ 559,006,912	\$ 543,667,082
Plan Fiduciary Net Position										
Contributions - Employer (City)	\$ 30,028,072	\$ 29,657,355	\$ 28,827,016	\$ 28,253,347	\$ 27,566,259	\$ 26,437,994	\$ 26,219,139	\$ 27,778,394	\$ 24,151,856	\$ 25,554,746
Contributions - Employer (State)	145,830	145,830	145,830	145,830	145,830	145,830	145,830	145,830	145,830	145,830
Contributions - Member	4,856,197	5,164,756	4,891,103	4,920,649	4,970,732	5,000,505	4,600,399	4,393,660	4,704,069	4,095,928
Net Investment Income	48,386,007	(78,323,086)	95,413,125	43,440,434	14,869,600	40,945,125	49,719,894	26,707,410	6,282,235	30,421,080
Benefit Payments	(43,092,129)	(52,535,459)	(49,899,182)	(46,075,511)	(54,941,086)	(47,007,332)	(46,396,280)	(45,697,331)	(41,290,270)	(34,523,344)
Refunds	(1,362,393)	(1,160,074)	(660,821)	(525,780)	(581,573)	(637,548)	(533,309)	(691,627)	(307,461)	(445,210)
Administrative Expense	(579,985)	(543,347)	(683,207)	(419,510)	(489,845)	(472,543)	(402,793)	(352,193)	(431,707)	(334,272)
Other		-	-	-	-	-	-	-	-	
Net Change in Plan Fiduciary Net Position	38,381,599	(97,594,025)	78,033,864	29,739,459	(8,460,083)	24,412,031	33,352,880	\$ 12,284,143	(6,745,448)	24,914,758
Plan Fiduciary Net Position - Beginning	401,673,676	499,267,701	421,233,837	391,494,378	399,954,461	375,542,430	342,189,550	329,905,407	336,650,855	311,736,097
Plan Fiduciary Net Position - Ending (b)	\$ 440,055,275	\$ 401,673,676	\$ 499,267,701	\$ 421,233,837	\$ 391,494,378	\$ 399,954,461	\$ 375,542,430	\$ 342,189,550	\$ 329,905,407	\$ 336,650,855
Net Pension Liability - Ending (a) - (b)	183,645,430	210,534,992	106,890,994	185,055,323	206,026,126	195,521,162	200,724,322	\$ 218,212,606	229,101,505	207,016,227
Plan Fiduciary Net Position as a Percentage										
of Total Pension Liability	70.56 %	65.61 %	82.37 %	69.48 %	65.52 %	67.17 %	65.17 %	61.06 %	59.02 %	61.92 %
Covered Payroll	\$ 44,988,374	\$ 44,238,275	\$ 44,231,011	\$ 44,323,277	\$ 43,411,406	\$ 43,147,050	\$ 43,191,753	\$ 37,305,296	\$ 36,758,806	\$ 35,930,894
Net Pension Liability as a Percentage										
of Covered Payroll	408.21 %	475.91 %	241.67 %	417.51 %	474.59 %	453.15 %	464.73 %	584.94 %	623.26 %	576.15 %



# Schedule of the Employer's Net Pension Liability GASB Statement No. 67

				Plan Fiduciary		Net Pension
	Total			Net Position		Liability
FY Ending	Pension	Plan Fiduciary	Net Pension	as a % of Total	Covered	as a % of
September 30,	Liability	Net Position	Liability	Pension Liability	Payroll	Covered Payroll
2014	\$ 543,667,082	\$ 336,650,855	\$ 207,016,227	61.92%	\$ 35,930,894	576.15%
2015	\$ 559,006,912	\$ 329,905,407	\$ 229,101,505	59.02%	\$ 36,758,806	623.26%
2016	\$ 560,402,156	\$ 342,189,550	\$ 218,212,606	61.06%	\$ 37,305,296	584.94%
2017	\$ 576,266,752	\$ 375,542,430	\$ 200,724,322	65.17%	\$ 43,191,753	464.73%
2018	\$ 595,475,623	\$ 399,954,461	\$ 195,521,162	67.17%	\$ 43,147,050	453.15%
2019	\$ 597,520,504	\$ 391,494,378	\$ 206,026,126	65.52%	\$ 43,411,406	474.59%
2020	\$ 606,289,160	\$ 421,233,837	\$ 185,055,323	69.48%	\$ 44,323,277	417.51%
2021	\$ 606,158,695	\$ 499,267,701	\$ 106,890,994	82.37%	\$ 44,231,011	241.67%
2022	\$ 612,208,668	\$ 401,673,676	\$ 210,534,992	65.61%	\$ 44,238,275	475.91%
2023	\$ 623,700,705	\$ 440,055,275	\$ 183,645,430	70.56%	\$ 44,988,374	408.21%



# Notes to Schedule of the Employer's Net Pension Liability GASB Statement No. 67

Valuation Date: October 1, 2022
Measurement Date: September 30, 2023

#### Methods and Assumptions Used to Determine Net Pension Liability:

Roll-Forward Procedures The Total Pension Liability was developed by using standard actuarial techniques to roll-forward

amounts from the actuarial valuation date one year to the measurement date.

Actuarial Cost Method Entry Age Normal, Level Percent of Pay

Inflation 2.15%

Salary Increases 2.60% to 9.90% depending on age or service and group, including inflation

Investment Rate of Return 7.20%

Experience Studies The most recent experience study was completed April 5, 2021. This experience study examined

experience during the five-year period ending September 30, 2019. Based on the results of this experience study, certain assumptions were revised effective with the October 1, 2020 actuarial

valuation.

Retirement Age Experience-based table of rates that are specific to the type of eligibility condition

Mortality The same versions of Pub-2010 Headcount-Weighted Mortality Tables as used by the Florida Retirement

System (FRS) in their July 1, 2021 actuarial valuation (with mortality improvements projected to all future years after 2010 using Scale MP-2018). Florida Statutes Chapter 112.63(1)(f) mandates the use of mortality tables from one of the two most recently published FRS actuarial valuation reports.

Other Information:

Notes Effective as of October 1, 2022, the assumed investment rate of return was lowered from 7.25% to

7.20%. The effect of this assumption change caused an \$2,795,714 increase in the Total Pension Liability

as of September 30, 2023.

See the Discussion of Valuation Results in the October 1, 2022 Actuarial Valuation Report dated April 12,

2023 for further details.



# **Schedule of Contributions GASB Statement No. 67**

FY Ending September 30,	Actuarially Determined Contribution	Actual Contribution	Contribution Deficiency (Excess)	Covered Payroll	Actual Contribution as a % of Covered Payroll
2014	\$ 25,678,422	\$ 25,700,576	\$ (22,154)	\$ 35,930,894	71.53%
2015	\$ 24,288,466	\$ 24,297,686	\$ (9,220)	\$ 36,758,806	66.10%
2016	\$ 23,838,224	\$ 27,924,224	\$ (4,086,000)	\$ 37,305,296	74.85%
2017	\$ 23,082,353	\$ 26,364,969	\$ (3,282,616)	\$ 43,191,753	61.04%
2018	\$ 23,290,490	\$ 26,583,824	\$ (3,293,334)	\$ 43,147,050	61.61%
2019	\$ 25,240,192	\$ 27,712,089	\$ (2,471,897)	\$ 43,411,406	63.84%
2020	\$ 24,427,468	\$ 28,399,177	\$ (3,971,709)	\$ 44,323,277	64.07%
2021	\$ 23,945,558	\$ 28,972,846	\$ (5,027,288)	\$ 44,231,011	65.50%
2022	\$ 23,041,155	\$ 29,803,185	\$ (6,762,030)	\$ 44,238,275	67.37%
2023	\$ 22,543,805	\$ 30,173,902	\$ (7,630,097)	\$ 44,988,374	67.07%



# Notes to Schedule of Contributions GASB Statement No. 67

Valuation Date: October 1, 2021

Notes Actuarially determined contribution rates are calculated as of October 1, which is

two years prior to the end of the fiscal year in which contributions are reported.

#### Methods and Assumptions Used to Determine Contribution Rates:

Actuarial Cost Method Entry Age Normal, Level Percent of Pay

Amortization Method Level Dollar, Closed

Remaining Amortization Period 25 years (longest remaining period); 14 years (single equivalent period)

Asset Valuation Method 5-year smoothed market; 20% corridor

Inflation 2.15%

Salary Increases 2.60% to 9.90% depending on age or service and group, including inflation

Investment Rate of Return 7.25%

Experience Studies The most recent experience study was completed April 5, 2021. This experience

study examined experience during the five-year period ending September 30, 2019. Based on the results of this experience study, certain assumptions were revised

effective with the October 1, 2020 actuarial valuation.

Retirement Age Experience-based table of rates that are specific to the type of eligibility condition

Mortality The same versions of Pub-2010 Headcount-Weighted Mortality Tables as used by

the Florida Retirement System (FRS) in their July 1, 2020 actuarial valuation (with mortality improvements projected to all future years after 2010 using Scale MP-2018). Florida Statutes Chapter 112.63(1)(f) mandates the use of mortality tables from one of the two most recently published FRS actuarial valuation reports.

Other Information:

**Notes** 

Effective as of October 1, 2021, the assumed investment rate of return was lowered from 7.40% to 7.25%. See the October 1, 2021 Actuarial Valuation Report dated

May 5, 2022 for further details.



# Single Discount Rate GASB Statement No. 67

A single discount rate of 7.20% was used to measure the total pension liability. This single discount rate was based on the expected rate of return on pension plan investments of 7.20%. The projection of cash flows used to determine this single discount rate assumed that plan member contributions will be made at the current contribution rate and that employer contributions will be made at rates equal to the difference between the total actuarially determined contribution rates and the member rate. Based on these assumptions, the pension plan's fiduciary net position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the long-term expected rate of return on pension plan investments (7.20%) was applied to all periods of projected benefit payments to determine the total pension liability.

Regarding the sensitivity of the net pension liability to changes in the single discount rate, the following presents the plan's net pension liability, calculated using a single discount rate of 7.20%, as well as what the plan's net pension liability would be if it were calculated using a single discount rate that is 1-percentage-point lower or 1-percentage-point higher:

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

	Current Single Discount	
1% Decrease	Rate Assumption	1% Increase
6.20%	7.20%	8.20%
\$244.885.491	\$183.645.430	\$131.882.337





**M**ISCELLANEOUS INFORMATION

	Reconciliation of Membership Data									
		From 10/1/22 To 10/1/23	From 10/1/21 To 10/1/22							
A.	Active Members									
1.	Number Included in Last Valuation	578	599							
2.	New Members Included in Current Valuation	53	44							
3.	Non-Vested Employment Terminations	(31)	(34)							
4.	Vested Employment Terminations	(7)	(6)							
5.	DROP Retirements	(12)	(15)							
6.	Service Retirements	(6)	(6)							
7.	Disability Retirements	(1)	(1)							
8.	Deaths	(1)	0							
9.	Transfers to 401(a) Defined Contribution Plan	(1)	(4)							
10.	Other - Data Adjustments	0_	1_							
11.	Number Included in This Valuation	572	578							
В.	Terminated Vested Members									
1.	Number Included in Last Valuation	25	23							
2.	Additions from Active Members	7	6							
2. 3.	Additions from Active Members  Lump Sum Payments/Refund of Contributions	7 (5)	6 (1)							
		_								
3.	Lump Sum Payments/Refund of Contributions	(5)	(1)							
3. 4.	Lump Sum Payments/Refund of Contributions Payments Commenced	(5) (4)	(1) (3)							
3. 4. 5.	Lump Sum Payments/Refund of Contributions Payments Commenced Deaths	(5) (4) 0	(1) (3) 0							
3. 4. 5. 6.	Lump Sum Payments/Refund of Contributions Payments Commenced Deaths Other	(5) (4) 0 0 23	(1) (3) 0 <u>0</u> 25							
3. 4. 5. 6. 7.	Lump Sum Payments/Refund of Contributions Payments Commenced Deaths Other Number Included in This Valuation	(5) (4) 0 0 23	(1) (3) 0 <u>0</u> 25							
3. 4. 5. 6. 7.	Lump Sum Payments/Refund of Contributions Payments Commenced Deaths Other Number Included in This Valuation  DROP Retirees, Service Retirees, Disability Retire	(5) (4) 0 0 23	(1) (3) 0 0 25							
3. 4. 5. 6. 7. <b>C.</b>	Lump Sum Payments/Refund of Contributions Payments Commenced Deaths Other Number Included in This Valuation  DROP Retirees, Service Retirees, Disability Retirements Number Included in Last Valuation	(5) (4) 0 0 23 rees and Bene	(1) (3) 0 0 25 ficiaries							
3. 4. 5. 6. 7. <b>C.</b> 1. 2.	Lump Sum Payments/Refund of Contributions Payments Commenced Deaths Other Number Included in This Valuation  DROP Retirees, Service Retirees, Disability Reti Number Included in Last Valuation Additions from Active Members	(5) (4) 0 0 23 rees and Bene 968 19	(1) (3) 0 0 25 ficiaries							
3. 4. 5. 6. 7. <b>C.</b> 1. 2. 3.	Lump Sum Payments/Refund of Contributions Payments Commenced Deaths Other Number Included in This Valuation  DROP Retirees, Service Retirees, Disability Retirement Produced in Last Valuation Additions from Active Members Additions from Terminated Vested Members	(5) (4) 0 0 23 rees and Bene 968 19 4	(1) (3) 0 0 25 ficiaries 972 22 3							
3. 4. 5. 6. 7.  C. 1. 2. 3. 4.	Lump Sum Payments/Refund of Contributions Payments Commenced Deaths Other Number Included in This Valuation  DROP Retirees, Service Retirees, Disability Retirement Number Included in Last Valuation Additions from Active Members Additions from Terminated Vested Members Deaths Resulting in No Further Payments	(5) (4) 0 0 23 rees and Bene 968 19 4 (23)	(1) (3) 0 0 25 ficiaries 972 22 3 (23)							
3. 4. 5. 6. 7. <b>C.</b> 1. 2. 3. 4. 5.	Lump Sum Payments/Refund of Contributions Payments Commenced Deaths Other Number Included in This Valuation  DROP Retirees, Service Retirees, Disability Retirement Number Included in Last Valuation Additions from Active Members Additions from Terminated Vested Members Deaths Resulting in No Further Payments New Survivors Resulting from Deaths	(5) (4) 0 0 23 rees and Bene 968 19 4 (23) 1	(1) (3) 0 0 25 ficiaries 972 22 3 (23) 0							
3. 4. 5. 6. 7. <b>C.</b> 1. 2. 3. 4. 5. 6.	Lump Sum Payments/Refund of Contributions Payments Commenced Deaths Other Number Included in This Valuation  DROP Retirees, Service Retirees, Disability Retirements Number Included in Last Valuation Additions from Active Members Additions from Terminated Vested Members Deaths Resulting in No Further Payments New Survivors Resulting from Deaths End of Certain Period - No Further Payments	(5) (4) 0 0 23 rees and Bene 968 19 4 (23) 1 (2)	(1) (3) 0 0 25 ficiaries 972 22 3 (23) 0 (6)							



# **General Employees – Excludable**

			Years	of Service to	Valuation Da	te				9/30/202	3 Earnings
Age Group	0-1	1-4	5-9	10-14	15-19	20-24	25-29	30+	Total	Total	Average
< 25	1	-	-	-	=	-	-	-	1	\$ 51,225	\$ 51,225
25-29	3	7	1	-	-	-	-	-	11	670,865	60,988
30-34	2	1	7	-	-	-	-	-	10	748,094	74,809
35-39	2	2	6	2	1	-	-	-	13	1,166,944	89,765
40-44	1	1	5	1	6	1	-	-	15	1,418,659	94,577
45-49	1	3	5	2	4	-	-	-	15	1,533,072	102,205
50-54	-	3	3	1	3	2	1	-	13	1,417,336	109,026
55-59	-	1	1	-	4	1	-	-	7	579,609	82,801
60-64	1	2	3	2	1	-	-	-	9	894,508	99,390
65-69	-	-	1	1	-	-	-	-	2	211,021	105,511
70+	-	-	-	-	-	1	-	-	1	99,493	99,493
Total	11	20	32	9	19	5	1	-	97	8,790,826	90,627

Average Age: 44.7

Average Service: 9.2



# **General Employees – Non-Excludable**

	Years of Service to Valuation Date										
Age Group	0-1	1-4	5-9	10-14	15-19	20-24	25-29	30+	Total	Total	Average
< 25	5	5	-	-	-	-	-	-	10	\$ 432,495	\$ 43,250
25-29	3	12	3	-	-	-	-	-	18	758,905	42,161
30-34	5	6	5	1	-	-	-	-	17	795,315	46,783
35-39	2	5	9	2	4	-	-	-	22	1,082,246	49,193
40-44	2	4	8	-	5	3	-	-	22	1,261,243	57,329
45-49	1	2	5	4	10	8	-	-	30	1,794,755	59,825
50-54	1	3	9	2	10	8	3	-	36	2,182,794	60,633
55-59	3	2	5	4	12	5	2	-	33	1,998,148	60,550
60-64	3	2	4	3	1	_	-	-	13	837,232	64,402
65-69	1	-	2	-	-	-	-	-	3	140,661	46,887
70+	-	-	-	-	=	-	-	-	-	-	-
Total	26	41	50	16	42	24	5	-	204	11,283,794	55,313

Average Age: 45.5

Average Service: 10.4



# **Police Officers**

			Years	of Service to	Valuation Da	te				9/30/202	3 Earnings
Age Group	0-1	1-4	5-9	10-14	15-19	20-24	25-29	30+	Total	Total	Average
< 25	3	1	-	-	-	-	-	-	4	\$ 241,476	\$ 60,369
25-29	3	20	4	-	-	-	-	-	27	1,708,746	63,287
30-34	2	12	17	1	-	-	-	-	32	2,185,637	68,301
35-39	-	6	16	9	2	-	-	-	33	2,452,019	74,304
40-44	-	2	2	2	16	1	-	-	23	2,248,145	97,745
45-49	-	-	-	3	6	10	1	-	20	2,211,833	110,592
50-54	-	-	-	-	5	6	2	-	13	1,436,766	110,520
55-59	-	1	-	-	1	1	1	-	4	448,544	112,136
60-64	-	-	-	-	-	-	-	-	-	-	-
65-69	-	-	-	-	-	-	-	-	-	-	-
70+	-	-	-	-	-	-	-	-	-	-	-
Total	8	42	39	15	30	18	4	-	156	12,933,166	82,905

Average Age: 38.2

Average Service: 10.6



# **Firefighters**

			Years	of Service to	Valuation Da	te				9/30/202	3 Earnings
Age Group	0-1	1-4	5-9	10-14	15-19	20-24	25-29	30+	Total	Total	Average
< 25	1	3	-	-	-	-	-	-	4	\$ 266,818	\$ 66,705
25-29	6	22	6	-	-	-	-	-	34	2,537,655	74,637
30-34	1	9	20	1	-	-	-	-	31	2,705,326	87,269
35-39	-	2	4	3	5	-	-	-	14	1,513,494	108,107
40-44	-	-	1	1	8	-	-	-	10	1,232,566	123,257
45-49	-	1	1	-	9	2	-	-	13	1,604,650	123,435
50-54	-	-	1	1	3	2	-	-	7	887,904	126,843
55-59	-	-	-	1	1	-	-	-	2	359,190	179,595
60-64	-	-	-	-	-	-	-	-	-	-	-
65-69	-	-	-	-	-	-	-	-	-	-	-
70+	-	-	-	-	-	-	-	-	-	-	_
Total	8	37	33	7	26	4	=	=	115	11,107,603	96,588

Average Age: 35.4

Average Service: 8.5



# **All Members**

			Years	of Service to	Valuation Dat	te				9/30/202	9/30/2023 Earnings	
Age Group	0-1	1-4	5-9	10-14	15-19	20-24	25-29	30+	Total	Total	Average	
< 25	10	9	-	-	-	-	-	-	19	\$ 992,014	\$ 52,211	
25-29	15	61	14	-	-	-	-	-	90	5,676,171	63,069	
30-34	10	28	49	3	-	-	-	-	90	6,434,372	71,493	
35-39	4	15	35	16	12	-	-	-	82	6,214,703	75,789	
40-44	3	7	16	4	35	5	-	-	70	6,160,613	88,009	
45-49	2	6	11	9	29	20	1	-	78	7,144,310	91,594	
50-54	1	6	13	4	21	18	6	-	69	5,924,800	85,867	
55-59	3	4	6	5	18	7	3	-	46	3,385,491	73,598	
60-64	4	4	7	5	2	-	-	-	22	1,731,740	78,715	
65-69	1	-	3	1	-	-	-	-	5	351,682	70,336	
70+	-	-	-			1	-	-	1	99,493	99,493	
Total	53	140	154	47	117	51	10	-	572	44,115,389	77,125	

Average Age: 41.3

Average Service: 9.9



# **Inactive Members (Including DROP Members) as of October 1, 2023**

# **All Members**

	<b>Terminated Vested</b>		<b>Disabled Retirees</b>		Service Ret	irees & DROP	Benef	iciaries	Grand Total	
	7	otal	-	Гotal	Т	otal	To	tal	7	Total
<u>Age</u>	Number	<u>Benefits</u>	<u>Number</u>	<u>Benefits</u>	Number	<u>Benefits</u>	Number	<u>Benefits</u>	Number	<b>Benefits</b>
Under 25	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0
25 - 29	0	0	0	0	0	0	4	72,993	4	72,993
30 - 34	0	0	0	0	0	0	2	5,533	2	5,533
35 - 39	3	70,379	1	64,611	0	0	5	61,311	9	196,301
40 - 44	7	180,814	3	95,585	0	0	2	59,842	12	336,241
45 - 49	10	296,070	1	77,069	8	475,811	1	41,972	20	890,922
50 - 54	2	44,402	8	473,318	73	4,302,605	6	117,817	89	4,938,142
55 - 59	1	82,292	7	309,165	144	8,641,293	5	148,849	157	9,181,599
60 - 64	0	34,726	12	513,896	171	9,567,576	9	157,059	192	10,273,257
65 - 69	0	0	3	61,296	133	6,773,393	10	262,625	146	7,097,314
70 - 74	0	0	7	202,553	111	5,274,384	13	488,504	131	5,965,441
75 - 79	0	0	4	154,035	67	3,040,918	17	332,514	88	3,527,467
80 - 84	0	0	6	171,185	49	1,880,706	14	396,934	69	2,448,825
85 - 89	0	0	1	17,472	30	1,048,245	17	466,172	48	1,531,889
90 - 94	0	0	0	0	12	348,700	2	90,821	14	439,521
95 - 99	0	0	0	0	4	45,255	3	33,228	7	78,483
100 & Over	0	0	0	0	1	3,569	0	0	1	3,569
Total	23	708,683	53	2,140,185	803	41,402,455	110	2,736,174	989	46,987,497
Average Age:		45.8		64.0		66.9		70.1		66.6





**SUMMARY OF PLAN PROVISIONS** 

# **Summary of Plan Provisions General Employees**

#### A. Ordinances

The Plan was established under the Code of Ordinances for the City of Coral Gables, Florida, Chapter 50 (recodified under Chapter 46), Article I, and was most recently amended in accordance with the Actuarial Impact Statement dated October 7, 2021. The Plan is also governed by certain provisions of Chapter 175 and Chapter 185, Florida Statutes, Part VII, Chapter 112, Florida Statutes and the Internal Revenue Code.

#### **B.** Effective Date

January 1, 1957

#### C. Plan Year

October 1 through September 30

# D. Type of Plan

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

## E. Eligibility Requirements

Any person employed by the city on a regular full-time basis, and any member of the city commission, regardless of whether the commissioner is employed full time. Membership is optional for appointed City officials, for any department director hired on or after September 8, 2015, and for all new employees hired on or after December 8, 2015.

#### F. Credited Service

Years and completed months of full-time service with the City during which time prescribed employee contributions are made. Members may purchase up to 5 years of military service or service with another public employer. No service is credited for any periods of employment for which the member received a refund of their contributions.

## **G.** Compensation

For hourly paid employees, hourly wages, inclusive of shift differential and special assignment pay, but excluding all overtime, lump sum payments for accumulated compensatory time and annual leave, annual and sick leave payouts upon termination of employment, vehicle allowance, uniform, equipment and all other payments, plus any workers' compensation benefits received by the employee. For salaried employees, salary only exclusive of all other remuneration, plus any workers compensation benefits received by the employee.

# H. Average Final Compensation (AFC)

The average of Compensation over the highest 3 years of Credited Service as of 9/30/2010 for the frozen accrued benefit as of 9/30/2010. For post-9/30/2010 benefits, AFC is the greater of the frozen 9/30/2010 3-year average and the highest 5-year average including all years.



#### I. Normal Retirement

Eligibility:

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

If member had 10 or more years of Credited Service as of 9/30/2010:

- (1) Rule of 70;
- (2) Age 52 and 10 years of Credited Service; or
- (3) Age 65 regardless of Credited Service.

If member had less than 10 years of Credited Service as of 9/30/2010:

- Rule of 80;
- (2) Age 62 and 10 years of Credited Service; or
- (3) Age 65 and 6 years of Credited Service.

#### Benefit:

#### Appointed and Other Excludable Employees:

3.0% of Frozen 9/30/2010 AFC for each year of Credited Service through 9/30/2010 plus 3.0% of AFC for each year of Credited Service after 9/30/2010.

### Managerial Employees:

3.0% of Frozen 9/30/2010 AFC for each year of Credited Service through 9/30/2010 plus 3.0% of AFC for the first 10 years of Credited Service after 9/30/2010 plus 2.25% of AFC for all years of Credited Service thereafter.

### Professional and Supervisory Employees:

3.0% of Frozen 9/30/2010 AFC for each year of Credited Service through 9/30/2010 plus 2.5% of AFC for the first 10 years of Credited Service after 9/30/2010 plus 2.25% of AFC for all years of Credited Service thereafter.

# Confidential, Elected, and Non-Excludable Employees:

3.0% of Frozen 9/30/2010 AFC for each year of Credited Service through 9/30/2010 plus 2.25% of AFC for each year of Credited Service after 9/30/2010.

For General Excludable Employees, the maximum benefit is 75% of AFC.

For General Non-Excludable Employees, effective March 13, 2018, the maximum retirement benefit in the normal annuity form shall not exceed the lesser of: \$50,000 annually or 75% of final average compensation for participants with less than 10 years of credited service on March 13, 2018; and \$67,500 annually or 75% of final average compensation for participants with 10 or more years of credited service on March 13, 2018; provided in no event shall a participant's benefit be less than the accrued benefit on March 13, 2018.

**Normal Form** 

of Benefit: Life Annuity; other options are also available.

COLA: Cost of living increases are paid only if the rate of return on the Market Value of Assets is

greater than or equal to 10%. In this case the COLA will be 50% of the CPI from

September of the year of the last increase to September of the most recent year, with a maximum annual increase of 2.75%. If a COLA cannot be provided because the rate of



return on the Market Value of Assets is less than 10%, then the maximum COLA in subsequent years will be 2.75% times the number of years since the last COLA was given, with a maximum increase of 8.0%. Effective February 10, 2015, a COLA will not be paid if the present value of the impact of the COLA is greater than the net actuarial experience gain accumulated from all sources of gains and losses since July 1, 1994.

For Class Members in Murrhee v. City of Coral Gables, Case No. 13-20731 CA (13) (Fla. 11th Cir. Ct.), and for members who opted out of the Class in Murrhee v. City of Coral Gables but advised the City in writing on or before August 30, 2018 that they wish to be treated in the same manner as Class Members, or the designated beneficiaries of such members, paragraph 8.3 of the Class Action Settlement Agreement dated September 18, 2017 will govern cost of living increases for the fiscal year ending September 30, 2017 and each year thereafter. The Retirement Board will make a separate determination as to whether Class Members are entitled to a COLA and the amount of the COLA based solely on the factors identified in the 2013 version of Section 50-230(c) without regard to net Actuarial Experience. The City Commission can prevent a future COLA from being granted (or reduce it) by a 4/5 supermajority vote. Under this Settlement Agreement, 50% of the COLAs that would have been granted to Class Members as of January 1, 2013 and January 1, 2014 are granted retroactively (without interest) to January 1, 2013 or January 1, 2014, respectively. These COLA percentages are 2.975% as of January 1, 2013 and 0.25% as of January 1, 2014.

#### J. Early Retirement

Eligibility: A member may elect to retire earlier than the Normal Retirement Eligibility after

attainment of age 47 and 25 years of Credited Service.

Benefit: The Normal Retirement Benefit is reduced by 6.0% per year for each year by which the

Early Retirement date precedes the Normal Retirement date.

Normal Form

of Benefit: Life Annuity; other options are also available.

COLA: Same as Normal Retirement.

#### K. Delayed Retirement

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

## L. Service Connected Disability

Eligibility: Any member who becomes totally and permanently disabled as a result of an act

occurring in the performance of service for the City is immediately eligible for a disability

benefit.

Benefit: For a service connected disability occurring prior to October 1, 2010, the disability benefit

is equal to 75% of the member's salary in effect on the date of disability for the first 24 months, and it is then reduced to 66.67% of salary. For a service connected disability occurring after September 30, 2010 the benefit shall be the greater of the member's accrued benefit (unreduced for immediate commencement) or 42% of the member's

salary in effect on the date of disability.



Normal Form

of Benefit: Payable until death or recovery from disability or until the member reaches Early or

Normal Retirement Age and elects to receive Early or Normal Retirement Benefits in lieu

of disability benefits. Other options are also available.

COLA: Same as Normal Retirement.

## M. Non-Service Connected Disability

Eligibility: Any member with 6 years of Credited Service who becomes totally and permanently

disabled (non-service related) is immediately eligible for a disability benefit.

Benefit: The greater of the accrued Normal Retirement Benefit (unreduced for immediate

commencement) or 25% of AFC.

**Normal Form** 

of Benefit: Payable until death or recovery from disability or until the member reaches Early or

Normal Retirement Age and elects to receive Early or Normal Retirement Benefits in lieu

of disability benefits. Other options are also available.

COLA: Same as Normal Retirement.

#### N. Pre-Retirement Death

Eligibility: Any member whose death is determined to be the result of a service incurred injury is

eligible for survivor benefits regardless of Credited Service.

Benefit: Monthly Benefit that is actuarially equivalent to the following:

< 3 years of Credited Service – 50% times Rate of Pay at date of death.
3-6.99 years of Credited Service – 100% times Rate of Pay at date of death.
7-11.99 years of Credited Service – 150% times Rate of Pay at date of death.
12 or more years of Credited Service – Max of 200% times Rate of Pay at date of

death and the Present Value of the member's Accrued Benefit.

Normal Form

of Benefit: Payable to the beneficiary in the form of a 5-Year Certain and Life Thereafter annuity, or

if no designated beneficiary, payable for 5 years to the member's estate. Other options

are available subject to approval by the Retirement Board of Trustees.

COLA: Same as Normal Retirement.

### O. Post-Retirement Death

Benefit determined by the form of benefit elected upon retirement.

#### P. Optional Forms

In lieu of electing the Normal Form of benefit, the optional forms of benefits available to all retirees include a 10 Year Certain and Life Annuity, 50%, 66 2/3%, 75% and 100% Joint and Survivor options and 50%, 66 2/3%, 75% and 100% Joint and Last Survivor options.



#### Q. Vested Termination

Eligibility: A member has earned a non-forfeitable right to Plan benefits after the completion of 10

years of Credited Service.

Benefit: The benefit is the member's accrued Normal Retirement Benefit. The benefit begins on

the date that would have been the member's Normal Retirement date based on years of

Credited Service at the termination date.

Normal Form

of Benefit: Life Annuity; other options are also available.

COLA: None.

#### R. Refunds

Eligibility: All members terminating employment with less than 10 years of Credited Service are

eligible.

Benefit: Refund of the member's contributions without interest.

#### S. Member Contributions

10% of Compensation plus 50% cost sharing of the increase in the City contribution rate since October 1, 2009, as adjusted by ordinance for certain fiscal years.

The following groups are exempt from cost sharing:

General Appointed: 5% of Compensation without cost sharing General Elected: 5% of Compensation without cost sharing

Effective March 13, 2018, the member contribution rate for Non-Excludable General Employees is capped as follows:

- o 15% of compensation through March 18, 2018;
- 14.5% of compensation from March 19, 2018 through the last full pay period before October 1, 2018;
- 14% of compensation from the first pay period after October 1, 2018 through the last full pay period before October 1, 2019;
- 13.5% of compensation from the first pay period after October 1, 2019 through the last full pay period before September 30, 2022;
- 13.0% of compensation from the first pay period following the last full pay period before September 30, 2022 through the last full pay period before September 30, 2024;
- 13.5% of compensation effective the first pay period following the last full pay period before September 30, 2024.

#### For General Excludable Employees:

- Effective March 19, 2018, participants shall contribute at a rate equal to 0.5% less than the
  percent of compensation determined in accordance with the cost-sharing provisions of Section
  46-29(2) of the City Ordinance, but in no event less than 10% of compensation.
- Effective the first pay period after October 1, 2018, participants shall contribute at a rate equal to 1.0% less than the percent of compensation determined in accordance with the cost-sharing



- provisions of Section 46-29(2) of the City Ordinance, but in no event less than 10% of compensation.
- Effective the first pay period after October 1, 2019, participants shall contribute at a rate equal
  to 1.5% less than the percent of compensation determined in accordance with the cost-sharing
  provisions of Section 46-29(2) of the City Ordinance, but in no event less than 10% of
  compensation.
- Effective the first pay period after September 30, 2020, participants shall contribute in accordance with the cost-sharing provisions of Section 46-29(2) and Section 46-34 of the City Ordinance.

#### T. State Contributions

None.

## **U. Employer Contributions**

Any additional amount determined by the actuary needed to fund the plan properly according to State laws.

## V. Cost of Living Increases

Cost of living increases are payable on Retirement Benefits only, whether paid directly or through the DROP, and are paid only if the rate of return on the Market Value of Assets is greater than or equal to 10%. In this case the COLA will be 50% of the CPI from September of the year of the last increase to September of the most recent year, with a maximum annual increase of 2.75%. If a COLA cannot be provided because the rate of return is less than 10%, then the maximum COLA in subsequent years will be 2.75% times the number of years since the last COLA was given, with a maximum increase of 8.0%. Effective February 10, 2015, a COLA will not be paid if the present value of the impact of the COLA is greater than the net actuarial experience gain accumulated from all sources of gains and losses since July 1, 1994.

For Class Members in Murrhee v. City of Coral Gables, Case No. 13-20731 CA (13) (Fla. 11th Cir. Ct.), and for members who opted out of the Class in Murrhee v. City of Coral Gables but advised the City in writing on or before August 30, 2018 that they wish to be treated in the same manner as Class Members, or the designated beneficiaries of such members, paragraph 8.3 of the Class Action Settlement Agreement dated September 18, 2017 will govern cost of living increases for the fiscal year ending September 30, 2017 and each year thereafter. The Retirement Board will make a separate determination as to whether Class Members are entitled to a COLA and the amount of the COLA based solely on the factors identified in the 2013 version of Section 50-230(c) without regard to net Actuarial Experience. The City Commission can prevent a future COLA from being granted (or reduce it) by a 4/5 supermajority vote. Under this Settlement Agreement, 50% of the COLAs that would have been granted to Class Members as of January 1, 2013 and January 1, 2014 are granted retroactively (without interest) to January 1, 2013 or January 1, 2014, respectively. These COLA percentages are 2.975% as of January 1, 2013 and 0.25% as of January 1, 2014.

## W. Deferred Retirement Option Plan

Eligibility: Plan members who had 10 or more years of Credited Service as of 9/30/2010, and have

met one of the following criteria are eligible to enter the DROP:

(1) Rule of 70 and 25 years of Credited Service;



- (2) Rule of 80;
- (3) Age 62 and 10 years of Credited Service; or
- (4) Age 65 regardless of Credited Service.

Plan members who had less than 10 years of Credited Service as of 9/30/2010, and have met one of the following criteria are eligible to enter the DROP:

- Rule of 80;
- (2) Age 62 and 10 years of Credited Service; or
- (3) Age 65 and 6 years of Credited Service.

Benefit: The member's Credited Service and AFC are frozen upon entry into the DROP. The

monthly retirement benefit as described under Normal Retirement is calculated based

upon the frozen Credited Service and AFC.

Maximum

DROP Period: 60 months; DROP Entry may be delayed up to 3 years past the earliest DROP eligibility

date. If DROP Entry is delayed more than 3 years past the earliest DROP eligibility date, then the maximum DROP period decreases by one month for each month of delayed

DROP entry.

Interest

Credited: The actual rate of return on the Market Value of Assets, with a minimum of 3% and a

maximum of the assumed rate of return for actuarial purposes, compounded annually.

**Normal Form** 

of Benefit: Lump Sum, Direct Rollover, or Partial Lump Sum with a Direct Rollover of the remaining

balance.

COLA: Same as Normal Retirement.

# X. Other Ancillary Benefits

There are no ancillary retirement type benefits not required by statutes but which might be deemed a City of Coral Gables Retirement System liability if continued beyond the availability of funding by the current funding source.

## Y. Changes from Previous Valuation

None.



# **Summary of Plan Provisions Police Officers**

#### A. Ordinances

The Plan was established under the Code of Ordinances for the City of Coral Gables, Florida, Chapter 50 (recodified under Chapter 46), Article I, and was most recently amended in accordance with the Actuarial Impact Statement dated July 13, 2021. The Plan is also governed by certain provisions of Chapter 175 and Chapter 185, Florida Statutes, Part VII, Chapter 112, Florida Statutes and the Internal Revenue Code.

#### **B.** Effective Date

January 1, 1957

#### C. Plan Year

October 1 through September 30

# D. Type of Plan

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

# E. Eligibility Requirements

Any police officer employed by the city on a regular full-time basis.

#### F. Credited Service

Years and completed months of full-time service with the City during which time prescribed employee contributions are made. Members may purchase up to 5 years of military service or service with another public employer. No service is credited for any periods of employment for which the member received a refund of their contributions.

## G. Compensation

Remuneration paid by the City, <u>including</u> regular pay, temporary assignment pay, disability pay, holiday pay, incentive pay, loyalty pay and pay for all approved leave actually taken. Pensionable earnings <u>excludes</u> all payments for unused compensatory time, unused annual leave, unused sick leave and excess sick leave, all special unit allowances, all payments for the sale of annual leave and compensatory time, all overtime payments, all shift differentials, tuition reimbursement, uniform allowances, and all other payments.

#### H. Average Final Compensation (AFC)

For those eligible for Normal Retirement as of September 30, 2012, AFC is the average of Compensation over the highest 3 years of Credited Service. Otherwise the AFC is the average of Compensation over the highest 5 years of Credited Service phased in through 2014 (maximum of highest 3-year average as of 9/30/2012 and highest 4-year average through 9/30/2013; maximum of highest 4-year average as of 9/30/2013 and highest 5-year average through 9/30/2014).



#### I. Normal Retirement

Eligibility:

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

If member had 10 or more years of Credited Service as of 9/30/2012:

- (1) Rule of 70;
- (2) Age 52 and 10 years of Credited Service; or
- (3) Age 65 regardless of Credited Service.

If member had less than 10 years of Credited Service as of 9/30/2012:

- (1) Age 55 and 10 years of Credited Service, or
- (2) 25 years of Credited Service regardless of age.

Benefit:

If eligible for Normal Retirement at 9/30/2012: 3% of AFC for each year of Credited Service.

If not eligible for Normal Retirement at 9/30/2012:

3.0% of AFC for each year of Credited Service through 9/30/2012, or until completion of 10 years of Credited Service if after 9/30/2012, plus 2.5% of AFC for each year Credited Service thereafter.

Effective 2/28/2017, the benefit percentage earned in the 25<sup>th</sup> year of Credited Service shall be equal to the amount needed to increase the cumulative benefit percentage (for all years of Credited Service) to 75% of AFC.

The maximum benefit is 75% of AFC for all Police Officers. For bargaining unit members who are not eligible for Normal Retirement as of 2/28/2017 and whose accrued annual pension benefit as of 2/28/2017 does not exceed \$95,000 per year, the total pension benefit will be capped at \$95,000 per year. This cap was increased to \$96,900 effective September 30, 2019 and to \$98,838 effective September 30, 2022.

Normal Form of Benefit:

10 Years Certain and Life thereafter; other options are also available.

COLA:

Cost of living increases are paid only if the rate of return on the Market Value of Assets is greater than or equal to 10%. In this case the COLA will be 50% of the CPI from September of the year of the last increase to September of the most recent year, with a maximum annual increase of 2.75%. If a COLA cannot be provided because the rate of return on the Market Value of Assets is less than 10%, then the maximum COLA in subsequent years will be 2.75% times the number of years since the last COLA was given, with a maximum increase of 8.0%. Effective February 10, 2015, a COLA will not be paid if the present value of the impact of the COLA is greater than the net actuarial experience gain accumulated from all sources of gains and losses since July 1, 1994.

For Class Members in Murrhee v. City of Coral Gables, Case No. 13-20731 CA (13) (Fla. 11th Cir. Ct.), and for members who opted out of the Class in Murrhee v. City of Coral Gables but advised the City in writing on or before August 30, 2018 that they wish to be treated in the same manner as Class Members, or the designated beneficiaries of such members, paragraph 8.3 of the Class Action Settlement Agreement dated September 18, 2017 will govern cost of living increases for the fiscal year ending September 30, 2017 and each year thereafter. The Retirement Board will make a separate determination as



to whether Class Members are entitled to a COLA and the amount of the COLA based solely on the factors identified in the 2013 version of Section 50-230(c) without regard to net Actuarial Experience. The City Commission can prevent a future COLA from being granted (or reduce it) by a 4/5 supermajority vote. Under this Settlement Agreement, 50% of the COLAs that would have been granted to Class Members as of January 1, 2013 and January 1, 2014 are granted retroactively (without interest) to January 1, 2013 or January 1, 2014, respectively. These COLA percentages are 2.975% as of January 1, 2013 and 0.25% as of January 1, 2014.

## J. Early Retirement

Eligibility: A member may elect to retire earlier than the Normal Retirement Eligibility after

attainment of age 50 and 10 years of Credited Service, but only if the member had attained age 50 and 10 years of Credited Service on or before September 30, 2012.

Benefit: The Normal Retirement Benefit is reduced by 3.0% per year for each year by which the

Early Retirement date precedes the Normal Retirement date.

Normal Form

of Benefit: 10 Years Certain and Life thereafter; other options are also available.

COLA: Same as Normal Retirement.

#### K. Delayed Retirement

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

#### L. Service Connected Disability

Eligibility: Any member who becomes totally and permanently disabled as a result of an act

occurring in the performance of service for the City is immediately eligible for a disability

benefit.

Benefit: The maximum of 75% of the member's total salary in effect on the date of disability and

the member's accrued benefit (unreduced for immediate commencement).

Normal Form

of Benefit: Payable until death or recovery from disability or until the member reaches Early or

Normal Retirement Age and elects to receive Early or Normal Retirement Benefits in lieu

of disability benefits. Other options are also available.

COLA: Same as Normal Retirement.

## M. Non-Service Connected Disability

Eligibility: Any member with 6 years of Credited Service who becomes totally and permanently

disabled is immediately eligible for a disability benefit.

Benefit: The greater of the accrued Normal Retirement Benefit (unreduced for immediate

commencement) and 25% of AFC.



Normal Form

of Benefit: Payable until death or recovery from disability or until the member reaches Early or

Normal Retirement Age and elects to receive Early or Normal Retirement Benefits in lieu

of disability benefits. Other options are also available.

COLA: Same as Normal Retirement.

## N. Death in the Line of Duty

Eligibility: Any member whose death is determined to be the result of a service incurred injury is

eligible for survivor benefits regardless of Credited Service.

Benefit: 75% of the member's total salary in effect on the date of death.

**Normal Form** 

of Benefit: Payable to children until age 22, then payable for the life of spouse. If there was no

designated beneficiary, payable for 5 years to the member's estate.

COLA: Same as Normal Retirement.

#### O. Other Pre-Retirement Death

Eligibility: All members whose death is not service related and which occurs on or prior to Normal

or actual retirement date while in service.

Benefit: Monthly Benefit that is actuarially equivalent to the following:

< 3 years of Credited Service – 50% times Rate of Pay at date of death. 3-6.99 years of Credited Service – 100% times Rate of Pay at date of death. 7-11.99 years of Credited Service – 150% times Rate of Pay at date of death. 12+ years of Credited Service – 200% times Rate of Pay at date of death.

The Present Value of the member's Accrued Benefit is the minimum benefit if the member had 10 or more years of Credited Service as of the date of death.

**Normal Form** 

of Benefit: Payable to the beneficiary in the form of a 5-Year Certain and Life Thereafter annuity, or

if no designated beneficiary, payable for 5 years to the member's estate. Other options

are available subject to approval by the Retirement Board of Trustees.

COLA: Same as Normal Retirement.

#### P. Post-Retirement Death

Benefit determined by the form of benefit elected upon retirement.

## Q. Optional Forms

In lieu of electing the Normal Form of benefit, the optional forms of benefits available to all retirees are a 5 Year Certain and Life Annuity, 50%, 66 2/3%, 75% and 100% Joint and Survivor options, and 50%, 66 2/3%, 75% and 100% Joint and Last Survivor options.



#### R. Vested Termination

Eligibility: A member has earned a non-forfeitable right to Plan benefits after the completion of 10

years of Credited Service.

Benefit: The benefit is the member's accrued Normal Retirement Benefit. The benefit begins on

the date that would have been the member's Normal Retirement date based on years of

Credited Service at the termination date.

Normal Form

of Benefit: 10 Years Certain and Life thereafter; other options are also available.

COLA: None.

#### S. Refunds

Eligibility: All members terminating employment with less than 10 years of Credited Service are

eligible.

Benefit: Refund of the member's contributions without interest.

#### T. Member Contributions

10% of Compensation effective September 30, 2014. This was 5% of Compensation prior to September 30, 2014.

#### **U. State Contributions**

Chapter 185 Premium Tax Distributions allocated from the Share Plan.

#### V. Employer Contributions

Any additional amount determined by the actuary needed to fund the plan properly according to State laws.

#### W. Cost of Living Increases

Cost of living increases are payable on Retirement Benefits only, whether paid directly or through the DROP, and are paid only if the rate of return on the Market Value of Assets is greater than or equal to 10%. In this case the COLA will be 50% of the CPI from September of the year of the last increase to September of the most recent year, with a maximum annual increase of 2.75%. If a COLA cannot be provided because the rate of return is less than 10%, then the maximum COLA in subsequent years will be 2.75% times the number of years since the last COLA was given, with a maximum increase of 8.0%. Effective February 10, 2015, a COLA will not be paid if the present value of the impact of the COLA is greater than the net actuarial experience gain accumulated from all sources of gains and losses since July 1, 1994.

For Class Members in Murrhee v. City of Coral Gables, Case No. 13-20731 CA (13) (Fla. 11th Cir. Ct.), and for members who opted out of the Class in Murrhee v. City of Coral Gables but advised the City in writing on or before August 30, 2018 that they wish to be treated in the same manner as Class Members, or the designated beneficiaries of such members, paragraph 8.3 of the Class Action Settlement Agreement dated September 18, 2017 will govern cost of living increases for the fiscal year ending September 30, 2017 and each year thereafter. The Retirement Board will make a separate determination as to whether



Class Members are entitled to a COLA and the amount of the COLA based solely on the factors identified in the 2013 version of Section 50-230(c) without regard to net Actuarial Experience. The City Commission can prevent a future COLA from being granted (or reduce it) by a 4/5 supermajority vote. Under this Settlement Agreement, 50% of the COLAs that would have been granted to Class Members as of January 1, 2013 and January 1, 2014 are granted retroactively (without interest) to January 1, 2013 or January 1, 2014, respectively. These COLA percentages are 2.975% as of January 1, 2013 and 0.25% as of January 1, 2014.

### X. Deferred Retirement Option Plan

Eligibility: Same as Normal Retirement.

Benefit: The member's Credited Service and AFC are frozen upon entry into the DROP. The

monthly retirement benefit as described under Normal Retirement is calculated based

upon the frozen Credited Service and AFC.

Maximum

DROP Period: 96 months.

Interest

Credited: The actual rate of return on the Market Value of Assets, with a minimum of 3% and a

maximum of the assumed rate of return for actuarial purposes, compounded annually.

**Normal Form** 

of Benefit: Lump Sum, Direct Rollover, or Partial Lump Sum with a Direct Rollover of the remaining

balance.

COLA: Same as Normal Retirement.

# Y. Other Ancillary Benefits

There are no ancillary retirement type benefits not required by statutes but which might be deemed a City of Coral Gables Retirement System liability if continued beyond the availability of funding by the current funding source.

#### Z. Changes from Previous Valuation

None.



# **Summary of Plan Provisions Firefighters**

#### A. Ordinances

The Plan was established under the Code of Ordinances for the City of Coral Gables, Florida, Chapter 50 (recodified under Chapter 46), Article I, and was most recently amended in accordance with the Actuarial Impact Statement dated September 30, 2020. The Plan is also governed by certain provisions of Chapter 175 and Chapter 185, Florida Statutes, Part VII, Chapter 112, Florida Statutes and the Internal Revenue Code.

#### **B.** Effective Date

January 1, 1957

#### C. Plan Year

October 1 through September 30

# D. Type of Plan

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

# E. Eligibility Requirements

Any firefighter employed by the city on a regular full-time basis.

#### F. Credited Service

Years and completed months of full-time service with the City during which time prescribed employee contributions are made. Members may purchase up to 5 years of military service or service with another public employer. No service is credited for any periods of employment for which the member received a refund of their contributions.

#### **G.** Compensation

Remuneration paid by the City to firefighters, <u>including</u> regular pay, paramedic certification pay, EMT certification pay, certified assigned paramedic pay, driver pay, temporary assignment pay, disability pay, holiday pay, loyalty pay, incentive pay, payments for unused compensatory time up to the amount of compensatory time accrued on June 1, 2013, and pay for approved leave and compensatory time actually taken; but <u>excludes</u> all payments for unused comp. time in excess of the amount of comp. time accrued on June 1, 2013, unused annual leave, unused sick leave and excess sick leave, special assignment except as specifically included above, all payments for the sale of annual leave and comp. time, all overtime payments, tuition reimbursement, and all other payments.

#### H. Average Final Compensation (AFC)

For those eligible for Normal Retirement as of September 30, 2013, AFC is the average of Compensation over the highest 3 years of Credited Service. For those entering the DROP between September 30, 2013 and September 30, 2014, AFC is the average of Compensation over the highest 4 years of Credited Service and includes payment of compensatory time. Otherwise, the AFC is the average of Compensation over the highest 5 years of Credited Service phased in through 2015.



#### I. Normal Retirement

Eligibility:

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

If member had 10 or more years of Credited Service as of 9/30/2013:

- (1) Rule of 70;
- (2) Age 52 and 10 years of Credited Service; or
- (3) Age 65 regardless of Credited Service.

If member had less than 10 years of Credited Service as of 9/30/2013:

- (1) Age 51 and 25 years of Credited Service, or
- (2) Rule of 76, or
- (3) 25 years of Credited Service regardless of age (effective October 1, 2019).

If member had less than 10 years of Credited Service as of 9/30/2013, but was within 12 months of completing 10 years if Credited Service on October 15, 2013 and would be older than age 59 before reaching the "Rule of 76":

- (1) Rule of 70; or
- (2) Age 51 and 25 Years of Credited Service.

Benefit:

If member was hired before 9/30/2013:

3.0% of AFC for each year of Credited Service.

If member was hired after 9/30/2013:

3.0% of AFC for the first 10 years of Credited Service plus 2.5% of AFC for each year of Credited Service thereafter. Effective October 1, 2019, 10% for the 25<sup>th</sup> year of Credited Service so that the total benefit multiplier will be 75% after 25 years of Credited Service.

The maximum benefit is 75% of AFC for all firefighters.

**Normal Form** 

of Benefit: 10 Years Certain and Life thereafter; other options are also available.

COLA:

Cost of living increases are paid only if the rate of return on the Market Value of assets is greater than or equal to 10%. In this case the COLA will be 50% of the CPI from September of the year of the last increase to September of the most recent year, with a maximum annual increase of 2.75%. If a COLA cannot be provided because the rate of return on the Market Value of Assets is less than 10%, then the maximum COLA in subsequent years will be 2.75% times the number of years since the last COLA was given, with a maximum increase of 8.0%. Effective February 10, 2015, a COLA will not be paid if the present value of the impact of the COLA is greater than the net actuarial experience gain accumulated from all sources of gains and losses since July 1, 1994.

For Class Members in Murrhee v. City of Coral Gables, Case No. 13-20731 CA (13) (Fla. 11th Cir. Ct.), and for members who opted out of the Class in Murrhee v. City of Coral Gables but advised the City in writing on or before August 30, 2018 that they wish to be



treated in the same manner as Class Members, or the designated beneficiaries of such members, paragraph 8.3 of the Class Action Settlement Agreement dated September 18, 2017 will govern cost of living increases for the fiscal year ending September 30, 2017 and each year thereafter. The Retirement Board will make a separate determination as to whether Class Members are entitled to a COLA and the amount of the COLA based solely on the factors identified in the 2013 version of Section 50-230(c) without regard to net Actuarial Experience. The City Commission can prevent a future COLA from being granted (or reduce it) by a 4/5 supermajority vote. Under this Settlement Agreement, 50% of the COLAs that would have been granted to Class Members as of January 1, 2013 and January 1, 2014 are granted retroactively (without interest) to January 1, 2013 or January 1, 2014, respectively. These COLA percentages are 2.975% as of January 1, 2013 and 0.25% as of January 1, 2014.

# J. Early Retirement

Eligibility: A member may elect to retire earlier than the Normal Retirement Eligibility after

attainment of age 50 and 10 years of Credited Service, but only if the member had already attained age 50 and 10 years of Credited Service on or before September 30,

2013.

Benefit: The Normal Retirement Benefit is reduced by 3.0% for each year by which the Early

Retirement date precedes the Normal Retirement date.

Normal Form

of Benefit: 10 Years Certain and Life thereafter; other options are also available.

COLA: Same as Normal Retirement.

#### **K.** Delayed Retirement

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

## L. Service Connected Disability

Eligibility: Any member who becomes totally and permanently disabled as a result of an act

occurring in the performance of service for the City is immediately eligible for a disability

benefit.

Benefit: The maximum of 75% of the member's total salary in effect on the date of disability and

the member's accrued benefit (unreduced for immediate commencement).

Normal Form

of Benefit: Payable until death or recovery from disability or until the member reaches Early or

Normal Retirement Age and elects to receive Early or Normal Retirement Benefits in lieu

of disability benefits. Other options are also available.

COLA: Same as Normal Retirement.



### M. Non-Service Connected Disability

Eligibility: Any member with 6 years of Credited Service who becomes totally and permanently

disabled is immediately eligible for a disability benefit.

Benefit: The greater of the accrued Normal Retirement Benefit (unreduced for immediate

commencement) and 25% of AFC.

Normal Form

of Benefit: Payable until death or recovery from disability or until the member reaches Early or

Normal Retirement Age and elects to receive Early or Normal Retirement Benefits in lieu

of disability benefits. Other options are also available.

COLA: Same as Normal Retirement.

## N. Death in the Line of Duty

Eligibility: Any member whose death is determined to be the result of a service incurred injury is

eligible for survivor benefits regardless of Credited Service.

Benefit: 75% of the member's total salary in effect on the date of death.

Normal Form

of Benefit: Payable to children until age 22, then payable for the life of spouse. If there was no

designated beneficiary, payable for 5 years to the member's estate.

COLA: Same as Normal Retirement.

## O. Other Pre-Retirement Death

Eligibility: All members whose death is not service related and which occurs on or prior to Normal

or actual retirement date while in service.

Benefit: Monthly Benefit that is actuarially equivalent to the following:

< 3 years of Credited Service – 50% times Rate of Pay at date of death.

3-6.99 years of Credited Service – 100% times Rate of Pay at date of death. 7-11.99 years of Credited Service – 150% times Rate of Pay at date of death.

12+ years of Credited Service – 200% times Rate of Pay at date of death.

The Present Value of the member's Accrued Benefit is the minimum benefit if the

member had 10 or more years of Credited Service as of the date of death.

Normal Form

of Benefit: Payable to the beneficiary in the form of a 5-Year Certain and Life Thereafter annuity, or

if no designated beneficiary, payable for 5 years to the member's estate. Other options

are available subject to approval by the Retirement Board of Trustees.

COLA: Same as Normal Retirement.



#### P. Post-Retirement Death

Benefit determined by the form of benefit elected upon retirement.

#### Q. Optional Forms

In lieu of electing the Normal Form of benefit, the optional forms of benefits available to all retirees are a 5 Year Certain and Life Annuity, 50%, 66 2/3%, 75% and 100% Joint and Survivor options, and 50%, 66 2/3%, 75% and 100% Joint and Last Survivor options.

#### R. Vested Termination

Eligibility: A member has earned a non-forfeitable right to Plan benefits after the completion of 10

years of Credited Service.

Benefit: The benefit is the member's accrued Normal Retirement Benefit. The benefit begins on

the date that would have been the member's Normal Retirement date based on years of

Credited Service at the termination date.

Normal Form

of Benefit: 10 Years Certain and Life thereafter; other options are also available.

COLA: None.

#### S. Refunds

Eligibility: All members terminating employment with less than 10 years of Credited Service are

eligible.

Benefit: Refund of the member's contributions without interest.

## T. Member Contributions

10% of Compensation effective September 30, 2014. This was 5% of Compensation prior to September 30, 2013 and 8% of Compensation from September 30, 2013 through September 29, 2014.

### **U. State Contributions**

Chapter 175 Premium Tax Distributions allocated from the Share Plan.

#### V. Employer Contributions

Any additional amount determined by the actuary needed to fund the plan properly according to State laws.

## W. Cost of Living Increases

Cost of living increases are payable on Retirement Benefits only, whether paid directly or through the DROP, and are paid only if the rate of return on the Market Value of Assets is greater than or equal to 10%. In this case the COLA will be 50% of the CPI from September of the year of the last increase to September of the most recent year, with a maximum annual increase of 2.75%. If a COLA cannot be provided because the rate of return is less than 10%, then the maximum COLA in subsequent years will



be 2.75% times the number of years since the last COLA was given, with a maximum increase of 8.0%. Effective February 10, 2015, a COLA will not be paid if the present value of the impact of the COLA is greater than the net actuarial experience gain accumulated from all sources of gains and losses since July 1, 1994.

For Class Members in Murrhee v. City of Coral Gables, Case No. 13-20731 CA (13) (Fla. 11th Cir. Ct.), and for members who opted out of the Class in Murrhee v. City of Coral Gables but advised the City in writing on or before August 30, 2018 that they wish to be treated in the same manner as Class Members, or the designated beneficiaries of such members, paragraph 8.3 of the Class Action Settlement Agreement dated September 18, 2017 will govern cost of living increases for the fiscal year ending September 30, 2017 and each year thereafter. The Retirement Board will make a separate determination as to whether Class Members are entitled to a COLA and the amount of the COLA based solely on the factors identified in the 2013 version of Section 50-230(c) without regard to net Actuarial Experience. The City Commission can prevent a future COLA from being granted (or reduce it) by a 4/5 supermajority vote. Under this Settlement Agreement, 50% of the COLAs that would have been granted to Class Members as of January 1, 2013 and January 1, 2014 are granted retroactively (without interest) to January 1, 2013 or January 1, 2014, respectively. These COLA percentages are 2.975% as of January 1, 2013 and 0.25% as of January 1, 2014.

# X. Deferred Retirement Option Plan

Eligibility: Same as Normal Retirement.

Benefit: The member's Credited Service and AFC are frozen upon entry into the DROP. The

monthly retirement benefit as described under Normal Retirement is calculated based

upon the frozen Credited Service and AFC.

Maximum

DROP Period: 96 months.

Interest

Credited: The actual rate of return on the Market Value of Assets, with a minimum of 3% and a

maximum of the assumed rate of return for actuarial valuation purposes, compounded

annually.

**Normal Form** 

of Benefit: Lump Sum, Direct Rollover, or Partial Lump Sum with a Direct Rollover of the remaining

balance.

COLA: Same as Normal Retirement.

# Y. Other Ancillary Benefits

There are no ancillary retirement type benefits not required by statutes but which might be deemed a City of Coral Gables Retirement System liability if continued beyond the availability of funding by the current funding source.

#### Z. Changes from Previous Valuation

None.

