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# City of Miami Fire Fighters' and Police Officers' Retirement Trust

January 1, 2023 | COLA Fund Report

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At the request of the plan sponsor, this report summarizes the COLA Fund for the City of Miami Fire Fighters and Police Officers as of 1/1/2023. The purpose of this report is to communicate the following results of the valuation:

- 10/1/2022 Asset Information;
- 1/1/2023 COLA Fund Amounts.

This report has been prepared for the above purposes. Consequently, it may not be appropriate for other purposes. Please contact Nyhart prior to disclosing this report to any other party or relying on its content for any purpose other than that explained above. Failure to do so may result in misrepresentation or misinterpretation of this report.

The results in this report were prepared using information provided to us by other parties. The census information has been provided to us by the Plan Administrator. Asset information has been provided to us by the Plan Administrator. We have reviewed the provided data for reasonableness when compared to prior information provided, but have not audited the data. Where relevant data may be missing, we have made assumptions we believe to be reasonable. We are not aware of any significant issues with and have relied on the data provided. Any errors in the data provided may result in a different result than those provided in this report.

The funding method, interest rates and mortality used in determining the COLA fund were determined by the Board. Evaluation of the reasonableness of these methods and assumptions was outside the scope of our assignment. In our opinion, all other actuarial assumptions and methods are individually reasonable and in combination represent our best estimate of anticipated experience of the plan.

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;
- 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.

We did not perform an analysis of the potential range of future measurements due to the limited scope of our engagement. This report has been prepared in accordance with generally accepted actuarial principles and practice.

In preparing these results, Nyhart used ProVal valuation software developed by Winklevoss Technologies, LLC. This software is widely used for the purpose of performing pension valuations. We coded the plan provisions, assumptions, methods, and participant data summarized in this report, and reviewed the liability and cost outputs for reasonableness. We are not aware of any weaknesses or limitations in the software, and have determined it is appropriate for performing this valuation.

Neither Nyhart nor any of its employees have any relationship with the plan or its sponsor which could impair or appear to impair the objectivity of this report. To the extent that this report or any attachment concerns tax matters, it is not intended to be used and cannot be used by a taxpayer for the purpose of avoiding penalties that may be imposed by law.

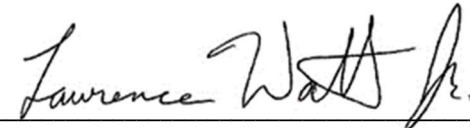
The undersigned are compliant with the continuing education requirements of the Qualification Standards for Actuaries Issuing Statements of Actuarial Opinion in the United States.

Nyhart



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Danielle Winegardner, FSA, EA, MAAA



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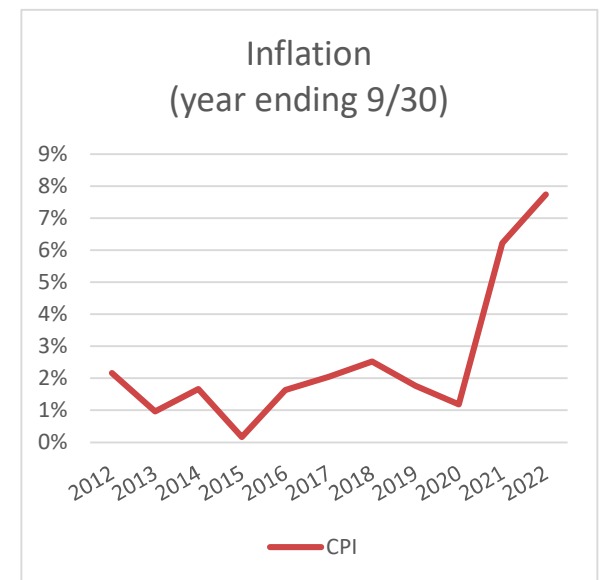
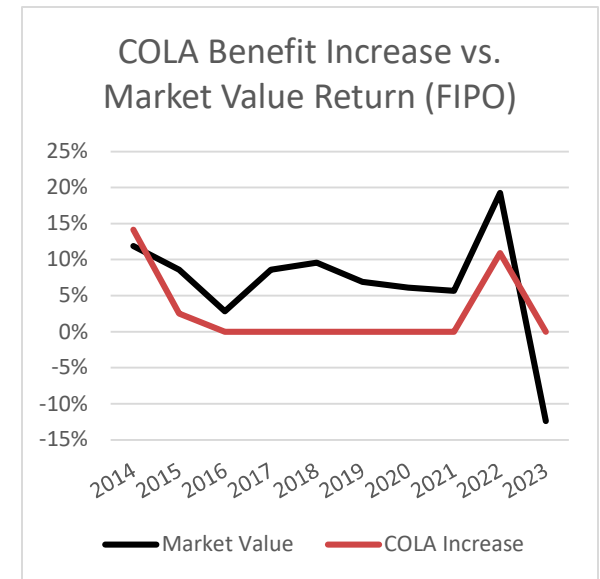
Lawrence Watts, Jr., FSA, EA, FCA, CFA, MAAA

December 9, 2022

Date

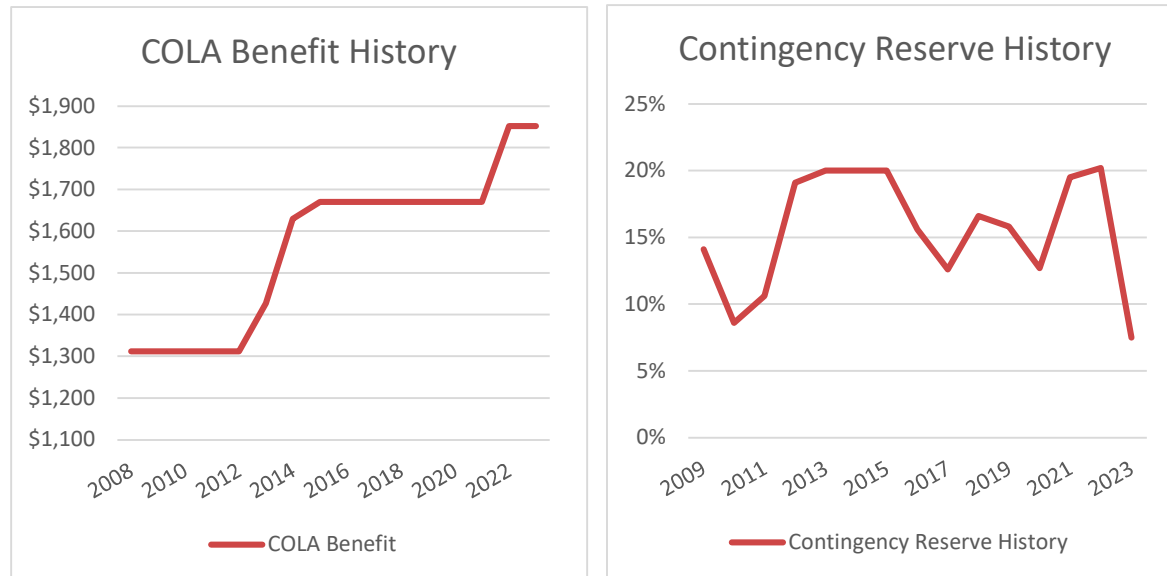
Summary Results

	October 1, 2021	October 1, 2022
<b>COLA Table Amount</b>	\$1,670	\$1,852
Proposed COLA Table Amount	\$1,852	\$1,852
<b>Asset Performance</b>		
Market Value of Assets	\$1,306,437,051	\$1,080,862,803
Actuarial Value of Assets	\$1,213,074,854	\$1,209,691,816
Actuarial Asset Value Return	8.59%	5.15%
COLA Fund Asset Value Return	19.80%	(12.70%)
<b>COLA Information</b>		
Current COLA Assets	\$477,331,528	\$396,278,670
Future Contributions (discounted)	114,013,746	118,574,299
Assets for COLA	\$591,345,274	\$514,852,969
COLA Liability	\$425,699,444	\$476,308,300
Net Reserve	28.0%	7.5%
Target Reserve (20% of Asset Value)	\$118,269,055	\$102,970,594
Actual Reserve	\$165,645,830	\$38,544,669
<b>COLA Information, after Increase in COLA Table Amount</b>		
Net Reserve	20.2%	No Change
Actual Reserve	\$119,459,275	No Change
<b>Participant Information</b>		
Active	1,915	1,935
Retirees and Beneficiaries	2,125	2,127
Disableds	111	109
Terminated Vesteds	28	18
Terminated, Due a Refund	120	108
Total	4,299	4,297



**Changes Since Prior Valuation and Key Notes**

Based on a target reserve of 20% and prior Board practice, we recommend keeping the COLA table at \$1,852 as of January 1, 2023. The contingency reserve is 7.5%, a decrease from the prior year's 20.2%. A historical graph of the COLA table level and contingency reserve amount are below.



**Historical Valuation Summary**

	10/1/2016	10/1/2017	10/1/2018	10/1/2019	10/1/2020	10/1/2021	10/1/2022
<b>COLA Table Amount</b>	\$1,670	\$1,670	\$1,670	\$1,670	\$1,670	\$1,670	\$1,852
<b>Proposed COLA</b>	\$1,670	\$1,670	\$1,670	\$1,670	\$1,670	\$1,852	\$1,852
<b>Asset Performance (FIPO)</b>							
Market Value of Assets	\$1,109,146,744	\$1,131,066,046	\$1,140,506,121	\$1,149,117,960	\$1,150,108,084	\$1,306,437,051	\$1,080,862,803
Actuarial Value of Assets	\$1,150,653,520	\$1,161,585,161	\$1,172,416,575	\$1,189,509,806	\$1,176,911,870	\$1,213,074,854	\$1,209,691,816
Actuarial Asset Value Return	6.50%	6.76%	6.66%	6.48%	6.25%	8.44%	5.15%
<b>COLA Information</b>							
Current COLA Assets	\$392,859,018	\$420,284,415	\$426,176,255	\$412,090,602	\$416,022,491	\$477,331,528	\$396,278,670
Future Contributions (discounted)	\$88,371,217	\$91,906,070	\$96,631,033	\$100,496,275	\$104,516,121	\$114,013,746	\$118,574,299
Assets for COLA	\$481,230,235	\$512,190,485	\$522,807,288	\$512,586,877	\$520,538,612	\$591,345,274	\$514,852,969
COLA Liability	\$420,490,548	\$427,229,145	\$440,222,258	\$447,248,968	\$418,988,989	\$425,699,444	\$476,308,300
Net Reserve	12.60%	16.60%	15.80%	12.70%	19.50%	28.00%	7.50%
Target Reserve (20% of Asset Value)	\$96,246,047	\$102,438,097	\$104,561,458	\$102,517,375	\$104,107,722	\$118,269,055	\$102,970,594
Actual Reserve	\$60,739,687	\$84,961,340	\$82,585,030	\$65,337,909	\$101,549,623	\$165,645,830	\$38,544,669
<b>COLA Information, after Increase in COLA Table Amount</b>							
Net Reserve						20.20%	
Actual Reserve						\$119,459,275	
<b>Participant Information</b>							
Active	1,869	1,943	1,998	2,003	1,931	1,915	1,935
Retirees and Beneficiaries	2,062	2,052	2,072	2,072	2,108	2,125	2,127
Disableds	143	136	130	121	115	111	109
Terminated Vesteds	15	16	14	13	26	28	18
Terminated, Due a Refund		97	112	115	117	120	108
<b>Total</b>	<b>4,089</b>	<b>4,244</b>	<b>4,326</b>	<b>4,324</b>	<b>4,297</b>	<b>4,299</b>	<b>4,297</b>

## Plan Maturity Measures – October 1, 2022

Each pension plan has a distinct life-cycle. New plans promise future benefits to active employees and then accumulate assets to pre-fund those benefits. As the plan matures, benefits are paid and the pre-funded assets begin to decumulate until ultimately, the plan pays out all benefits. A plan's maturity has a dramatic influence on how risks should be viewed. The following maturity measures illustrate where the COLA Fund of the City of Miami Fire Fighters' and Police Officers' Retirement Trust falls in its life-cycle.

### **Duration of Liabilities: 11.0**

Duration is the most common measure of plan maturity. It is defined as the sensitivity of the liabilities to a change in the interest rate assumption. The metric also approximates the weighted average length of time, in years, until benefits are expected to be paid. A plan with high duration is, by definition, more sensitive to changes in interest rates. A plan with low duration is more susceptible to risk if asset performance deviates from expectations as there would be less time to make up for market losses in adverse market environments while more favorable environments could result in trapped surplus from gains. Conversely, high duration plans can often take on more risk when investing, and low duration plans are less sensitive to interest rate fluctuations.

### **Demographic Distribution - Ratio of Actively Accruing Participants to All Participants: 45.1%**

A plan with a high ratio is more sensitive to fluctuations in salary (if a salary-based plan) and statutory changes. A plan with a low ratio is at higher risk from demographic experience. Such a plan should pay close attention to valuation assumptions as there will be less opportunity to realize future offsetting gains or losses when current experience deviates from assumptions. Plans with a low ratio also have limited opportunities to make alterations to plan design to affect future funded status.

### **Asset Leverage - Ratio of Payroll for Plan Participants to Market Value of Assets: 17.5%**

Younger plans typically have a large payroll base from which to draw in order to fund the plan while mature plans often have a large pool of assets dedicated to providing benefits to a population primarily consisting of members no longer on payroll. Plans with low asset leverage will find it more difficult to address underfunding, as the contributions needed to make up the deficit will represent a higher percentage of payroll than for a plan with high asset leverage.

### **Benefit Payment Percentage - Ratio of Annual Benefit Payments to Market Value of Assets: 7.4%**

As a plan enters its decumulation phase, a larger percentage of the pre-funded assets are paid out each year to retirees. A high percentage is not cause for alarm as long as the plan is nearly fully funded. However, such a plan is more sensitive to negative asset performance, especially if cash contributions are not an option to make up for losses.



**Identification of Risks**

The results presented in this report are shown as single point values. However, these values are derived using assumptions about future markets and demographic behavior. If actual experience deviates from our assumptions, the actual results for the plan will consequently deviate from those presented in this report. Therefore, it is critical to understand the risks facing this pension plan. The following table shows the risks we believe are most relevant to the COLA fund of the City of Miami Fire Fighters' and Police Officers' Retirement Trust. The risks are generally ordered with those we believe to have the most significance at the top. Also shown are possible methods by which a more detailed assessment of the risk can be performed.

Type of Risk	Method to Assess Risk
Investment Return	Scenario Testing; Asset Liability Study
Interest Rates	Scenario Testing; Asset Liability Study
Participant Longevity	Stress Testing; Scenario Testing
Early Retirement	Stress Testing; Scenario Testing

**Market Value Reconciliation**

The amount of assets backing the pension promise is typically the most significant driver of volatility and future costs within a pension plan. The investment performance of the assets directly offsets the ultimate cost.

		<b>September 30, 2022</b>	
		Membership and Benefit Accounts	COLA Account
1.	Market value – beginning of prior year	\$1,306,437,051	\$477,331,528
2.	Book value – beginning of prior year	\$1,074,022,569	\$392,413,401
3.	Income		
	(a) City contributions	\$65,889,915	\$7,496,759
	(b) Member contributions	17,385,718	0
	(c) Other contributions	0	0
	(d) Interest and dividends	11,697,736	4,170,435
	(e) Net realized gains (losses)	21,388,000	7,552,711
	(f) Securities lending income	130,133	46,576
	(g) Rental and other income	174,500	62,777
	(h) Income transfer	0	0
	(i) Total	<u>\$116,666,002</u>	<u>\$19,329,258</u>
4.	Disbursements		
	(a) Benefit payments and refunds	\$145,165,029	\$29,232,051
	(b) Custodial and investment expenses	3,220,780	1,152,621
	(c) Administrative expense	2,137,199	0
	(d) Other expense	0	0
	(e) Securities lending fees	31,067	11,632
	(f) Building depreciation	16,367	5,977
	(g) Total	<u>\$150,570,442</u>	<u>\$30,402,281</u>
5.	Book value – beginning of current year [(2)+(3i)-(4g)]	\$1,040,118,129	\$381,340,378
6.	Net change in unrealized gains (losses)	(\$191,669,808)	(\$69,979,835)
7.	Unrealized gains (losses)	\$40,744,674	\$14,938,292
8.	Market value – beginning of current year [(1)+(3i)-(4g)+(6)]	\$1,080,862,803	\$396,278,670
9.	Current year allocation to COLA II (discounted)	\$0	N/A
10.	Net market value – beginning of current year	<u>\$1,080,862,803</u>	<u>\$396,278,670</u>

**Membership and Benefits Cost-Of-Living Adjustment Account Summary**

		<b>September 30, 2022</b>	
		<u>Market</u>	<u>Book</u>
1.	Investments		
	(a) Bill, bonds, notes	\$319,995,418	\$383,805,453
	(b) Domestic stocks	493,859,024	455,167,846
	(c) International stocks	290,974,831	344,669,734
	(d) Private equity	195,829,173	133,748,338
	(e) Money market fund and time deposit	13,228,435	13,228,435
	(f) Mutual fund	162,368,013	89,952,122
	(g) Real estate	2,032,401	2,032,401
	(h) Securities lending adjustment	0	0
	(i) Total investment	<u>\$1,478,287,295</u>	<u>\$1,422,604,329</u>
2.	Cash	\$154,818	\$154,818
3.	Receivables		
	(a) City contributions	\$0	\$0
	(b) Member contributions	0	0
	(c) Accounts receivable	5,952	5,952
	(d) Accrued interest and dividend	1,495,509	1,495,509
	(e) Securities sold	2,236,905	2,236,905
	(f) Total receivables	<u>\$3,738,366</u>	<u>\$3,738,366</u>
4.	Payables:		
	(a) Budget advance	\$0	\$0
	(b) Accrual expense	463	463
	(c) Transfer	0	0
	(d) Tax withheld	0	0
	(e) Accounts payable	325,383	325,383
	(f) Securities purchased	4,713,160	4,713,160
	(g) Total payables	<u>\$5,039,006</u>	<u>\$5,039,006</u>
5.	Total [(1i)+(2)+(3f)-(4g)]	\$1,477,141,473	\$1,421,458,507
6.	COLA account	\$396,278,670	\$381,340,378
7.	Current year COLA transfer	\$0	\$0
8.	Membership & benefits account [(5)-(6)-(7)]	\$1,080,862,803	\$1,040,118,129

Investment Results - Membership and Benefits Accounts

September 30, 2022

	<u>Dollar Return</u>	<u>Market Return</u>	<u>Book Return</u>
<u>Membership and Benefits Accounts</u>			
Interest	\$8,025,125	0.7%	0.8%
Dividends	3,672,611	0.3%	0.4%
Rental and Other Income, less Depreciation	158,133	0.0%	0.0%
Realized Gains	21,388,000	1.6%	2.1%
Securities Lending (Net)	99,066	0.0%	0.0%
Increase in Unrealized Gains	(191,669,808)	(14.7%)	(18.4%)
Custodial and Investment Expenses	(3,220,780)	(0.2%)	(0.4%)
	<u>(\$161,547,653)</u>	<u>(12.3%)</u>	<u>(15.5%)</u>

Investment Results - COLA I and II Accounts

September 30, 2022

COLA Accounts

	<u>Dollar Return</u>	<u>Market Return</u>	<u>Book Return</u>
Interest	\$2,868,643	0.6%	0.8%
Dividends	1,301,792	0.3%	0.3%
Rental and Other Income, less Depreciation	56,800	0.0%	0.0%
Realized Gains	7,552,711	1.6%	2.0%
Securities Lending (Net)	34,944	0.0%	0.0%
Increase in Unrealized Gains	(69,979,835)	(15.00%)	(18.30%)
Custodial and Investment Expenses	(1,152,621)	(0.2%)	(0.3%)
	<u>(\$59,317,566)</u>	<u>(12.7%)</u>	<u>(15.5%)</u>

Actuarial Value of Assets

September 30, 2022

1.	Expected market value of assets	
	(a) Market value of assets – beginning of prior year	\$1,306,437,051
	(b) City Contributions	65,889,915
	(c) Member Contributions	17,385,718
	(d) Benefits payments and administrative expenses	147,302,228
	(e) Expected return	91,592,715
	(f) Expected market value of assets – beginning of current year	\$1,334,003,171
2.	Market value of assets – beginning of current year	\$1,080,862,803
3.	Present value of COLA transfers	
	(a) Current year	\$0
	(b) Next year	0
	(c) Total	\$0
4.	Market value net COLA transfer [(2)-(3)]	\$1,080,862,803
5.	Amount subject to phase in [(4)-(1f)]	(\$253,140,368)
6.	Phase in of asset gain loss	
	(a) Current Year [80% x (\$253,140,368)]	(\$202,512,294)
	(b) First Prior Year [60% x \$141,132,434]	84,679,460
	(c) Second Prior Year [40% x (\$19,371,884)]	(7,748,754)
	(d) Third Prior Year [20% x (\$16,237,126)]	(3,247,425)
	(e) Total Phase-In	(\$128,829,013)
7.	Preliminary actuarial value of assets – beginning of current year [(2)-(6e)]	\$1,209,691,816
8.	80% of Market value of assets	\$864,690,243
9.	120% of Market value of assets	\$1,297,035,363
10.	Adjusted actuarial value of assets	\$1,209,691,816
11.	Return on actuarial value of assets	5.15%

## Asset Information

## Development of Actuarial Asset Value for COLA Transfer

September 30, 2022

	<u>9/30/2020</u>	<u>9/30/2021</u>	<u>9/30/2022</u>
1. Book Value	\$1,051,736,655	\$1,074,022,569	\$1,040,118,129
2. Market Value	\$1,150,108,084	\$1,306,437,051	\$1,080,862,803
3. [(2)/(1)]	1.0935324	1.2163963	1.0391731
4. 3 year average of book to market value			1.1163673
5. Adjusted market value [(1)x(4)]			\$1,161,153,867
6. Contribution surplus			\$0
7. 80% of Adjusted market value, net of contribution surplus			\$864,690,243
8. 120% of Adjusted market value, net of contribution surplus			\$1,297,035,363
9. Adjusted actuarial value of assets			\$1,161,153,867
10. Present value of next year COLA transfer			\$0
11. Final actuarial asset value [(9)+(10)]			\$1,161,153,867

**Rate of return on COLA Transfer Actuarial Asset Value**

	<b>September 30, 2022</b>
1. Actuarial asset value – beginning of prior year	\$1,253,102,729
2. Contributions	
(a) City contributions	\$65,889,915
(b) Member contributions	17,385,718
(c) Total	\$83,275,633
3. Benefits and refunds	\$145,165,029
4. Present value of COLA transfer	\$0
5. Contribution surplus	\$0
6. Actuarial asset value – beginning of current year	\$1,161,153,867
7. Net return on investment [(6)+(5)-(4)+(3)-(2)-(1)]	(\$30,059,466)
8. Rate of return	(2.39%)



**Excess Investment Return**

**September 30, 2022**

1.	Expected return on actuarial asset value		
	(a) Actuarial asset value as of beginning of prior year		\$1,253,102,729
	(b) City Contributions		\$65,889,915
	(c) Member Contributions		\$17,385,718
	(d) Benefits paid and refunds		\$145,165,029
	(e) Expected return at 7.00% <sup>1</sup>		\$87,932,849
	(f) Base amount for expected return [(e)/7.00%]		\$1,256,183,557
2.	Actual return on actuarial asset value		(\$30,059,466)
3.	Excess return on assets [(2)-(1e)]		(\$117,992,315)
4.	Amount to be transferred to COLA fund (limited to cumulative experience position)		
	(a) Excess return		
	(i) First 2.5%		\$0
	(ii) Next 2.5%		0
	(iii) Next 2.5%		0
	(iv) Total		\$0
	(b) Potential COLA Transfer		
	(i) 75% of (4a)(i)		\$0
	(ii) 50% of (4a)(ii)		0
	(iii) 25% of (4a)(iii)		0
	(iv) Total		\$0
	(c) Cumulative Experience Gain (Loss):		(\$417,543,419)
	(d) Transfer of Excess Investment Income <sup>2</sup> :		\$0

<sup>1</sup>Assumes mid-year member contributions and benefits and beginning of year City contributions.

<sup>2</sup>Excess returns can only be transferred if the Plan is in a Net Positive Experience Position. Due to the Cumulative Experience Loss, the amount of assets transferred to the COLA fund is limited to \$0.

**Summary of Assets Available for Benefits**

**October 1, 2022**

1.	COLA Accounts	\$396,278,670
2.	Transfers of Excess Investment Income	
	(a) Current year	\$0
	(b) Next year	0
	(c) Total	\$0
3.	Minimum City Contributions	
	(a) Expected contributions	\$8,432,834
	(b) Permanent, discounted annuity [1/1.0700 <sup>2.25ä∞</sup> ]	12.2684151
	(c) Expected future contributions [(a)x(b)]	\$103,457,508
4.	Discounted City Contribution	
	(a) \$7,796,629 due on January 1, 2023	\$7,665,861
	(b) \$8,108,494 due on January 1, 2024	7,450,930
	(c) Total	\$15,116,791
5.	Assets available [(1)+(2)+(3)+(4)]	\$514,852,969

**Summary of Liabilities**

**October 1, 2022**

1.	Present value of existing COLA benefits	
	(a) COLA for inactives	397,511,217
	(b) Reserve for current actives	68,519,203
	(c) Reserve for future actives [(15% of (b))]	10,277,880
	(d) Total	\$476,308,300
2.	Contingency reserve [20% of assets available]	\$102,970,594
3.	Unallocated reserve (not greater than \$0)	(\$64,425,925)
4.	Total Liability [(1d)+(2)+(3)]	\$514,852,969

**COLA Fund Table Amount**

	<b>October 1, 2022</b>
1. Assets available for COLA benefits	\$514,852,969
2. Liability based on current table	
(a) COLA II for inactives	\$397,225,728
(b) Reserve for current actives	68,519,203
(c) Reserve for future actives	10,277,880
(d) Sub-Total	\$476,022,811
(e) COLA I for inactives	\$285,489
(f) Total	\$476,308,300
3. 20% Contingency reserve	\$102,970,594
4. Unallocated reserve (not greater than \$0)	(\$64,425,925)
5. Available assets [(1)-(2)-(3)-(4)]	\$0
6. Excess investment income transfer, discounted	\$0
7. Net available assets [(5)-(6)]	\$0
8. Increase ratio [(7)/(2d)]	0.000000
9. Prior year COLA	\$1,852
10. Potential table increase [(8)x(9)]	\$0
11. Potential new table amount [(8)+(9)]	\$1,852

**Determination of Net Cumulative Experience Position (Preliminary)**

**October 1, 2022**

1. Expected unfunded actuarial liability	
(a) Expected unfunded actuarial liability – beginning of prior year	\$512,271,669
(b) Entry age normal cost – payable by employer	29,107,301
(c) Assumption changes	0
(d) Plan Provisions	0
(e) Contributions	(65,889,915)
(f) Interest on prior year unfunded actuarial liability	64,112,562
(g) Expected unfunded actuarial liability – beginning of current year	\$539,601,617
2. Entry age reserve <sup>1</sup>	
(a) Active	\$657,690,188
(b) Inactive	1,509,146,664
(c) Total	\$2,166,836,852
3. Actuarial asset value	\$1,209,691,816
4. Actual unfunded actuarial liability [(2)-(3)]	\$957,145,036
5. Cumulative experience gain (loss) [(1g)-(4)]	(\$417,543,419)
Future Transfers of Excess Investment Income	
Contribution for current year, discounted	\$0
Contribution for next year, discounted	\$0
Preliminary transfer	\$0
Final transfer – if cumulative loss, then 0	\$0

<sup>1</sup>The assumptions and plan provisions used can be found in the October 1, 2021 Valuation Report.

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**Plan Status**

January 1, 1994 amended January 1, 1995

**Eligibility for Participation**

All inactive members in Miami Firefighters' and Police Officers' Retirement Trust

**Available Assets:**

Existing COLA assets as of January 1, 1995; beginning with the 1991/92 fiscal year, a percentage of excess investment return on FIPO assets (75% of first 2.5%, 50% of next 2.5%, 25% of next 2.5%), subject to a minimum City contribution of \$2.5 million, increasing 4% annually.

**Allocated Assets:**

Current COLA assets as of September 30, 2020, plus present value of \$2.5 million minimum guarantee. The 4% future annual increases is not pre-allocated. A contingency reserve of 20% has been established for adverse experience.

**COLA Benefits:**

In addition to prior COLA, benefits are based on attached table, with \$1,852 monthly benefit for 25 years of creditable service and 22 completed years of retirement (after age 46). The \$1,852 amount is reduced by 5% for each year of retirement less than 22 and each year of creditable service less than 25 and increased similarly for years of retirement greater than 22 and years of creditable service greater than 25.

Benefits are based on the FIPO option elected. Tabular amounts are adjusted, based on the FIPO adjustments at the time of FIPO benefit commencement, for options other than Option 8 (Joint & 40%). Surviving spouses receive the percentage of the table amount determined under the FIPO election.

Service-incurred and accidental disabilities and deaths receive benefits based on the greater of 25 years or actual creditable service.

## Creditable Service

For Vesting and Benefit Accrual

Service credited under Retirement System; military service (maximum of four years) during wartime for which Member makes contributions; maternity leave (maximum of 180 days for each leave) for which Member makes contributions; up to 5 years, without member contributions, if member was an employee before period of military service.

Accumulated leave balances may be transferred into system immediately prior to retirement to purchase up to 3 whole years of additional Creditable Service, on an actuarially equivalent basis.

457 balances of Firefighters may be transferred into System at retirement to purchase up to 3 whole years of additional Creditable Service for multiplier purposes.

## Payment Forms

Normal Form

Joint and 40% Contingent Survivor

Optional Forms

Option 1 – Cash refund annuity based on Present Value at retirement

Option 2 – Joint and 100% Contingent Annuity

Option 3 – Joint and 50% Contingent Annuity

Option 4 – Joint and Contingent Annuity approved by the Board

Option 5 – Determined by Board due to incapacity of member

Option 6 – Withdrawal of member contributions with interest and benefit that is ½ of normal level.

**Changes since prior valuation**

Effective January 1, 2022, the COLA Table has been increased from \$1,670 to \$1,852.



<b>Cost Method</b>	Accrued Benefit Cost Method, based on benefits granted to date																								
<b>Asset Valuation Method</b>	Market Value, plus present value of future minimum City contributions																								
<b>Interest Rates</b>	7.00% net of investment expenses																								
	Support for the discount rate assumption has been provided in the experience study report dated January 2021.																								
<b>Annual Pay Increases</b>	3.25% inflation and 1.5% for promotions and other increases plus salary merit scale below																								
	<table border="0"> <thead> <tr> <th><u>Service</u></th> <th><u>Police</u></th> <th><u>Fire</u></th> </tr> </thead> <tbody> <tr> <td>0-6</td> <td>5.0%</td> <td>5.0%</td> </tr> <tr> <td>7</td> <td>2.5%</td> <td>5.0%</td> </tr> <tr> <td>8-9</td> <td>5.0%</td> <td>5.0%</td> </tr> <tr> <td>10-14</td> <td>1.0%</td> <td>0.0%</td> </tr> <tr> <td>15-16</td> <td>1.25%</td> <td>2.5%</td> </tr> <tr> <td>17-21</td> <td>1.0%</td> <td>1.0%</td> </tr> <tr> <td>22+</td> <td>0.0%</td> <td>0.0%</td> </tr> </tbody> </table>	<u>Service</u>	<u>Police</u>	<u>Fire</u>	0-6	5.0%	5.0%	7	2.5%	5.0%	8-9	5.0%	5.0%	10-14	1.0%	0.0%	15-16	1.25%	2.5%	17-21	1.0%	1.0%	22+	0.0%	0.0%
<u>Service</u>	<u>Police</u>	<u>Fire</u>																							
0-6	5.0%	5.0%																							
7	2.5%	5.0%																							
8-9	5.0%	5.0%																							
10-14	1.0%	0.0%																							
15-16	1.25%	2.5%																							
17-21	1.0%	1.0%																							
22+	0.0%	0.0%																							
	There is no additional increase at retirement.																								
	The annual pay increases are based on a study of actual experience for the plan during 2017-2020. See the experience study report dated January 2021.																								
<b>Expense</b>	None assumed																								
<b>Compensated Absence Balance Transfers</b>	No liabilities or costs are included for the provision to transfer compensated absence balances into FIPO to purchase additional creditable service, based on our understanding that assets will be transferred immediately prior to retirement to cover 100% of the liability for the additional service.																								
<b>Marital Status and Ages</b>	100% of Members are assumed to be married. Female spouses assumed to be 3 years younger than male spouses.																								

**Mortality Rates**

Pre-Retirement:	Pub-2010 Generational using scale MP-2018; Females, Headcount Weighted Safety Employee Female Table, set forward 1 year; Males, Headcount Weighted Safety Below Median Employee Male Table, set forward 1 year.
Post-Retirement:	Pub-2010 Generational using scale MP-2018; Females, Headcount Weighted Safety Healthy Retiree Female Table, set forward 1 year; Males, Headcount Weighted Safety Below Median Healthy Retiree Male Table, set forward 1 year
Disabled:	Pub-2010; Females, 80% Headcount Weighted General Disabled Retiree Female Table / 20% Headcount Weighted Safety Disabled Retiree Female Table; Males, 80% Headcount Weighted General Disabled Retiree Male Table / 20% Headcount Weighted Safety Disabled Retiree Male Table.

The mortality rate assumptions were set in accordance with the Florida Retirement System Valuation report dated December 2019. The board adopted the new mortality tables for the October 1, 2019 valuation.

**Retirement Rates**

The following decrements apply, based on service.

<u>Years of Service</u>	<u>Police %</u>	<u>Fire %</u>
<20	0	0
20	15	10
21-24	20	7.5
25	50	20
26-29	40	20
30-34	100	40
35		100

The assumed retirement rates are based on a study of actual experience for the plan during 2017-2020. See the experience study report dated January 2021.

**Withdrawal of Employee Contributions**

It is assumed that employees do not withdraw their contribution balances upon employment termination or retirement.

**Disability Rates**

100% of the disabilities are expected to be accidental with the following probabilities. No recovery is assumed.

<u>Age</u>	<u>Rates</u>
35	0.07125%
40	0.09750%
45	0.20000%
50	0.30250%

The disability rates are based on a study of actual experience for the plan during 2017-2020. See the experience study report dated January 2021.

**Withdrawal Rates**

Based on Years of Creditable Service using the rates below

<u>Years of Service</u>	<u>Police %</u>	<u>Fire %</u>
0	12.00	7.50
1	4.00	4.00
2-6	1.50	1.75
7-19	0.75	1.00
20+	0.00	0.00

The withdrawal rates are based on a study of actual experience for the plan during 2017-2020. See the experience study report dated January 2021.

**Changes since prior valuation**

None

The actuarial report also shows the necessary items required for plan reporting and the any state requirements.

- ✓ Florida State Requirements
  - Comparative Summary of Principal Valuation Results
  - Separation for Police & Fire
  - Comparison of payroll growth, salary increases and investment returns
  - Requirements under Florida Statute 112.664 and F.A.C. 60T-1.0035
- ✓ Historical COLA GASB 5 Disclosures

Information to Comply with Florida 60T-1.003(4)(i)

Comparative Summary Of Principal Valuation Results

	10/1/2022 7.00% (Plan & Assumption Changes)	10/1/2022 7.00% (prior methods & assumptions)	10/1/2021 7.00%
<b>Participant Data</b>			
Active members	1,935	1,935	1,915
Total annual payroll	\$189,755,997	\$189,755,997	\$178,831,741
Members in DROP	203	203	194
Total annualized benefit	\$406,947	\$406,947	\$355,800
Retired members and beneficiaries	1,924	1,924	1,931
Total annualized benefit	\$29,160,408	\$29,160,408	\$25,861,492
Disabled members receiving benefits	109	108	111
Total annualized benefit	\$2,891,592	\$2,891,592	\$2,645,266
Terminated vested members	18	18	28
Total annualized benefit	\$17,003	\$17,002	\$18,455
<b>Assets</b>			
Actuarial value of assets	\$514,852,969	\$514,852,969	\$591,345,274
Market value of assets	\$396,278,670	\$396,278,670	\$477,331,528

Information to Comply with Florida 60T-1.003(4)(i)

Comparative Summary Of Principal Valuation Results  
(continued)

	10/1/2022 7.00% (Plan & Assumption Changes)	10/1/2022 7.00% (prior methods & assumptions)	10/1/2021 7.00%
<b>Liabilities, present value of all future expected benefit payments</b>			
Active members			
Retirement benefits	\$64,733,488	\$58,371,990	\$55,803,438
Vesting benefits	\$1,846,951	\$1,665,447	\$1,643,488
Disability benefits	\$1,532,792	\$1,382,161	\$1,371,861
Death benefits	\$405,972	\$366,076	\$360,664
Return of contribution	\$0	\$0	\$0
Reserve for future actives	\$10,277,880	\$9,267,851	\$8,876,918
Total	\$78,797,083	\$71,053,525	\$68,056,369
Terminated vested members	\$618,468	\$557,690	\$794,329
Retired members and beneficiaries	\$372,345,583	\$335,754,386	\$334,049,332
Disabled members	\$24,547,166	\$22,134,864	\$22,799,414
Total	\$476,308,300	\$429,500,465	\$425,699,444
Liabilities due and unpaid	\$0	\$0	\$0
Actuarial accrued liability	N/A	N/A	N/A
Unfunded actuarial accrued liability	N/A	N/A	N/A

Information to Comply with Florida 60T-1.003(4)(i)

Comparative Summary Of Principal Valuation Results  
(continued)

	10/1/2022 7.00% (Plan & Assumption Changes)	10/1/2022 7.00% (prior methods & assumptions)	10/1/2021 7.00%
<b>Actuarial present value of accrued benefits</b>			
Statement of actuarial present value of all accrued benefits			
Vested accrued benefits			
Inactive members and beneficiaries	\$397,511,217	\$358,446,940	\$357,643,075
Active members	32,252,819	29,083,266	27,944,630
Total value of all vested accrued benefits	\$429,764,036	\$387,530,206	\$385,587,705
Non-vested accrued benefits	459,131	414,011	(793,921)
Total actuarial present value of all accrued benefits	\$430,223,167	\$387,944,217	\$384,793,784
Statement of changes in total actuarial present value of all accrued benefits (ASC 960)			
Actuarial present value of accrued benefits, beginning of year	\$384,793,784	\$384,793,784	\$376,436,112
Increase (decrease) during year			
Benefits accumulated	\$6,452,737	\$6,452,737	\$1,059,563
Plan amendment	42,278,950	0	(2,459,985)
Changes in actuarial assumptions	0	0	9,544,947
Interest	25,929,747	25,929,747	26,676,405
Benefits paid	(29,232,051)	(29,232,051)	(26,463,258)
Other changes	0	0	0
Net increase (decrease)	\$45,429,383	\$3,150,433	\$8,357,672
Actuarial present value of accrued benefits, end of year	\$430,223,167	\$387,944,217	\$384,793,784

Information to Comply with Florida 60T-1.003(4)(i)

Comparative Summary Of Principal Valuation Results  
(continued)

	10/1/2022 7.00% (Plan & Assumption Changes)	10/1/2022 7.00% (prior methods & assumptions)	10/1/2021 7.00%
<b>Pension cost</b>			
Normal Cost	N/A	N/A	N/A
Member contributions	\$0	\$0	\$0
Expected plan sponsor contribution	\$7,796,629	\$7,796,629	\$7,496,759
As % of payroll	4.11%	4.11%	4.19%
Member Contributions as % of payroll	0.00%	0.00%	0.00%
<b>Past contributions</b>	10/1/2022	10/1/2022	10/1/2021
Required plan sponsor contribution	\$7,496,759	\$7,496,759	\$7,208,422
Required member contribution	\$0	\$0	\$0
Actual contributions made by:			
Plan's sponsor	\$7,496,759	\$7,496,759	\$7,208,422
Members	\$0	\$0	\$0
Other	\$0	\$0	\$0
<b>Net actuarial gain (loss) (if applicable)</b>	N/A	N/A	N/A
<b>Other disclosures (where applicable)</b>			
Present value of active member			
Future salaries at entry age	\$2,309,837,472	\$2,309,837,472	\$2,282,526,057
Future contributions at entry age	\$0	\$0	\$0



**Information to Comply with Florida 60T-1.003(4)(i)**

**Hypothetical City Contribution Requirement for 2021/2022 Fiscal Year**

	Police	Fire	Total
Unfunded actuarial accrued liability	N/A	N/A	N/A
Liabilities, present value of all future expected benefit payments			
Active members			
Retirement benefits	\$37,866,411	\$26,867,077	\$64,733,488
Vesting benefits	1,212,849	634,102	1,846,951
Disability benefits	929,703	603,089	1,532,792
Death benefits	192,813	213,159	405,972
Return of contribution	0	0	0
Reserve for future actives	6,030,266	4,247,614	10,277,880
Total	\$46,232,042	\$32,565,041	\$78,797,083
Terminated vested members	\$545,640	72,828	\$618,468
Retired members and beneficiaries	\$224,866,407	147,479,176	\$372,345,583
Disabled members	\$21,339,577	3,207,589	\$24,547,166
Total	\$292,983,666	\$183,324,634	\$476,308,300
Entry age reserve			
Active	\$20,601,035	\$16,369,692	\$36,970,727
Inactive	246,751,624	150,759,593	397,511,217
Total	\$267,352,659	\$167,129,285	\$434,481,944
Actuarial asset value <sup>1</sup>	\$316,807,895	\$198,045,074	\$514,852,969

<sup>1</sup>Allocated based on Entry Age Reserve

**Information to Comply with Florida 60T-1.003(4)(i)**

**Hypothetical City Contribution Requirement for 2021/2022 Fiscal Year (continued)**

	Police	Fire	Total
Normal cost			
Total present value of future benefits	\$292,983,666	\$183,324,634	\$476,308,300
Present value of future member contributions	\$0	\$0	\$0
Actuarial asset value	(\$316,807,895)	(\$198,045,074)	(\$514,852,969)
Unfunded actuarial accrued liability	\$0	\$0	\$0
Present value of future normal costs	\$0	\$0	\$0
Present value of future payrolls	\$1,366,917,456	\$942,920,016	\$2,309,837,472
Administrative expense <sup>1</sup>	\$0	\$0	\$0
Current payroll	\$111,805,216	\$77,950,781	\$189,755,997
Interest rate	7.00%	7.00%	7.00%
Current normal cost at end of year	\$0	\$0	\$0
As a percentage of payroll	0.00%	0.00%	0.00%
Hypothetical Total			0

<sup>1</sup>Allocated based on Entry Age Reserve

Information to Comply with Florida 60T-1.003(4)(i)

September 30, 2022

Historical Salary Increases and Asset Performance

Year Ending	Payroll Growth	Salary Growth	Expected Salary Growth	Asset Return (Market)	Asset Return (Actuarial)	Asset Return (Expected)
9/30/2022	6.29%	8.84%	7.71%	(12.20%)	5.15%	7.00%
9/30/2021	1.20%	5.00%	7.72%	19.27%	8.59%	7.00%
9/30/2020	5.15%	11.24%	8.05%	5.65%	6.25%	7.34%
9/30/2019	0.83%	8.21%	7.74%	6.11%	6.48%	7.34%
9/30/2018	5.27%	7.39%	7.85%	6.90%	6.66%	7.34%
9/30/2017	6.32%	7.02%	7.85%	8.24%	6.76%	7.42%
9/30/2016	25.22%	10.46%	7.85%	8.42%	6.51%	7.42%
9/30/2015	13.42%	12.60%	7.79%	2.80%	6.18%	7.42%
9/30/2014	10.00%	1.38%	7.72%	8.60%	7.18%	7.50%
9/30/2013	3.70%	3.64%	7.77%	11.20%	6.95%	7.50%
Averages						
3-year				3.43%	6.65%	
5-year				4.65%	6.62%	
10-year	7.74%			6.22%	6.67%	

**Information to Comply with Florida 112.664 and Florida Administrative Code 60T-1.0035<sup>1</sup>**

	<b>October 1, 2022</b>			
	Valuation	- 200 bp <sup>1</sup>	Funding Rate <sup>1</sup>	+ 200 bp <sup>1</sup>
	7.00%	5.00%	7.00%	9.00%
Total pension liability				
Service Cost	\$2,418,475	\$2,418,475	\$2,418,475	\$2,418,475
Interest	26,353,467	26,353,467	26,353,467	26,353,467
Benefit changes	0	42,358,664	42,358,664	42,358,664
Difference between expected and actual experience	4,618,197	3,907,740	3,907,740	3,907,740
Changes in assumptions	0	119,598,297	0	(80,760,160)
Benefit payments	(29,232,051)	(29,232,051)	(29,232,051)	(29,232,051)
Contribution refunds	0	0	0	0
Net change in pension liability	\$4,158,089	\$165,404,592	\$45,806,295	(\$34,953,865)
Total pension liability, beginning of year	\$388,675,649	\$388,675,649	\$388,675,649	\$388,675,649
Total pension liability, end of year	\$392,833,737	\$554,080,240	\$434,481,944	\$353,721,784
Plan fiduciary net position				
Contributions - Employer	\$7,496,759	\$7,496,759	\$7,496,759	\$7,496,759
Contributions - State	0	\$0	\$0	\$0
Contributions - Member	0	\$0	\$0	\$0
Net investment income	(59,299,957)	(59,299,957)	(59,299,957)	(59,299,957)
Benefit payments	(29,232,051)	(29,232,051)	(29,232,051)	(29,232,051)
Contribution refunds	0	0	0	0
Administrative expense	0	0	0	0
Other	(17,609)	(17,609)	(17,609)	(17,609)
Net change in plan fiduciary net position	(\$81,052,858)	(\$81,052,858)	(\$81,052,858)	(\$81,052,858)
Plan fiduciary net position, beginning of year	\$477,331,528	\$477,331,528	\$477,331,528	\$477,331,528
Plan fiduciary net position, end of year	\$396,278,670	\$396,278,670	\$396,278,670	\$396,278,670
Net pension liability/(asset)	(\$3,444,933)	\$157,801,570	\$38,203,274	(\$42,556,886)
Funded ratio	100.88%	71.52%	91.21%	112.03%
Years that Assets support expected benefit payments	25	18	25	100
Estimated city contribution				
Annual dollar value	\$7,796,629	\$7,796,629	\$7,796,629	\$7,796,629
Percentage of payroll	4.11%	4.11%	4.11%	4.11%

<sup>1</sup>Based on valuation assumption with the following changes  
-Interest Rate (as noted)

Information to Comply with Florida 112.664 and Florida Administrative Code 60T-1.0035<sup>1</sup>

October 1, 2022

Sustainment of Expected Benefit Payments

Mortality Interest      Valuation Mortality  
7.00%

<u>Year</u>	<u>Market Value of Assets</u>	<u>Investment Return</u>	<u>Benefit Payments</u>	<u>Year</u>	<u>Market Value of Assets</u>	<u>Investment Return</u>	<u>Benefit Payments</u>
1	\$396,278,670	\$26,665,812	\$31,204,767				
2	391,739,715	26,335,373	31,574,229				
3	386,500,859	25,959,065	31,852,868				
4	380,607,056	25,538,829	32,075,781				
5	374,070,104	25,076,034	32,227,142				
6	366,918,996	24,569,736	32,393,413				
7	359,095,319	24,016,858	32,545,129				
8	350,567,048	23,414,737	32,694,577				
9	341,287,208	22,759,949	32,845,692				
10	331,201,465	22,050,580	32,943,530				
11	320,308,515	21,286,240	32,996,814				
12	308,597,941	20,465,251	33,033,114				
13	296,030,078	19,585,152	33,043,247				
14	282,571,983	18,643,451	33,032,629				
15	268,182,805	17,636,924	33,011,828				
16	252,807,901	16,561,412	32,990,579				
17	236,378,734	15,413,009	32,942,953				
18	218,848,790	14,188,588	32,865,214				
19	200,172,164	12,884,551	32,768,505				
20	180,288,210	11,496,250	32,664,606				
21	159,119,854	10,018,491	32,547,597				
22	136,590,748	8,445,145	32,440,304				
23	112,595,589	6,767,977	32,367,850				
24	86,995,716	4,976,986	32,338,771				
25	59,633,931	3,061,108	32,354,850				
26	30,340,189		32,423,345				

Information to Comply with Florida 112.664 and Florida Administrative Code 60T-1.0035<sup>1</sup>

October 1, 2022

Sustainment of Expected Benefit Payments

Mortality Florida Retirement System Generational Mortality  
Interest 5.00%

<u>Year</u>	<u>Market Value of Assets</u>	<u>Investment Return</u>	<u>Benefit Payments</u>
1	\$396,278,670	\$19,043,329	\$31,204,767
2	384,117,232	18,426,134	31,574,229
3	370,969,137	17,761,848	31,852,868
4	356,878,117	17,051,792	32,075,781
5	341,854,128	16,296,855	32,227,142
6	325,923,841	15,496,234	32,393,413
7	309,026,662	14,647,629	32,545,129
8	291,129,162	13,749,063	32,694,577
9	272,183,648	12,798,056	32,845,692
10	252,136,012	11,793,258	32,943,530
11	230,985,740	10,734,428	32,996,814
12	208,723,354	9,620,412	33,033,114
13	185,310,652	8,449,527	33,043,247
14	160,716,932	7,220,103	33,032,629
15	134,904,406	5,929,991	33,011,828
16	107,822,569	4,576,424	32,990,579
17	79,408,414	3,156,892	32,942,953
18	49,622,353	1,669,509	32,865,214
19	18,426,648		32,768,505

Information to Comply with Florida 112.664 and Florida Administrative Code 60T-1.0035<sup>1</sup>

October 1, 2022

Sustainment of Expected Benefit Payments

Mortality Florida Retirement System Generational Mortality  
Interest 7.00%

<u>Year</u>	<u>Market Value of Assets</u>	<u>Investment Return</u>	<u>Benefit Payments</u>
1	\$396,278,670	\$26,665,812	\$31,204,767
2	391,739,715	26,335,373	31,574,229
3	386,500,859	25,959,065	31,852,868
4	380,607,056	25,538,829	32,075,781
5	374,070,104	25,076,034	32,227,142
6	366,918,996	24,569,736	32,393,413
7	359,095,319	24,016,858	32,545,129
8	350,567,048	23,414,737	32,694,577
9	341,287,208	22,759,949	32,845,692
10	331,201,465	22,050,580	32,943,530
11	320,308,515	21,286,240	32,996,814
12	308,597,941	20,465,251	33,033,114
13	296,030,078	19,585,152	33,043,247
14	282,571,983	18,643,451	33,032,629
15	268,182,805	17,636,924	33,011,828
16	252,807,901	16,561,412	32,990,579
17	236,378,734	15,413,009	32,942,953
18	218,848,790	14,188,588	32,865,214
19	200,172,164	12,884,551	32,768,505
20	180,288,210	11,496,250	32,664,606
21	159,119,854	10,018,491	32,547,597
22	136,590,748	8,445,145	32,440,304
23	112,595,589	6,767,977	32,367,850
24	86,995,716	4,976,986	32,338,771
25	59,633,931	3,061,108	32,354,850
26	30,340,189		32,423,345

Information to Comply with Florida 112.664 and Florida Administrative Code 60T-1.0035<sup>1</sup>

October 1, 2022

Sustainment of Expected Benefit Payments

Mortality Florida Retirement System Generational Mortality  
Interest 9.00%

<u>Year</u>	<u>Market Value of Assets</u>	<u>Investment Return</u>	<u>Benefit Payments</u>	<u>Year</u>	<u>Market Value of Assets</u>	<u>Investment Return</u>	<u>Benefit Payments</u>
1	\$396,278,670	\$34,291,114	\$31,204,767	30	\$628,155,506	\$55,078,459	\$33,057,352
2	399,365,017	34,552,618	31,574,229	31	650,176,613	57,052,014	33,246,856
3	402,343,406	34,808,404	31,852,868	32	673,981,771	59,186,694	33,423,654
4	405,298,942	35,064,587	32,075,781	33	699,744,811	61,498,245	33,585,424
5	408,287,748	35,326,915	32,227,142	34	727,657,632	64,004,083	33,728,863
6	411,387,521	35,598,574	32,393,413	35	757,932,852	66,723,882	33,841,749
7	414,592,682	35,880,358	32,545,129	36	790,814,985	69,679,629	33,924,540
8	417,927,911	36,173,948	32,694,577	37	826,570,074	72,895,651	33,968,510
9	421,407,282	36,480,438	32,845,692	38	865,497,215	76,398,655	33,978,485
10	425,042,028	36,803,257	32,943,530	39	907,917,385	80,217,624	33,952,274
11	428,901,755	37,148,287	32,996,814	40	954,182,735	84,384,626	33,881,392
12	433,053,228	37,520,321	33,033,114	41	1,004,685,969	88,935,122	33,763,200
13	437,540,435	37,923,723	33,043,247	42	1,059,857,891	93,908,107	33,592,583
14	442,420,911	38,363,434	33,032,629	43	1,120,173,415	99,346,587	33,363,585
15	447,751,716	38,844,122	33,011,828	44	1,186,156,417	105,297,971	33,070,292
16	453,584,010	39,369,964	32,990,579	45	1,258,384,096	111,814,310	32,710,359
17	459,963,395	39,946,206	32,942,953	46	1,337,488,047	118,952,657	32,279,038
18	466,966,648	40,579,922	32,865,214	47	1,424,161,666	126,775,613	31,771,897
19	474,681,356	41,278,503	32,768,505	48	1,519,165,382	135,351,700	31,187,004
20	483,191,354	42,048,978	32,664,606	49	1,623,330,078	144,755,741	30,523,408
21	492,575,726	42,898,723	32,547,597	50	1,737,562,411	155,069,376	29,780,180
22	502,926,852	43,835,049	32,440,304	51	1,862,851,607	166,381,676	28,956,380
23	514,321,597	44,863,766	32,367,850	52	2,000,276,903	178,789,742	28,052,710
24	526,817,513	45,989,679	32,338,771	53	2,151,013,935	192,399,293	27,071,157
25	540,468,421	47,217,553	32,354,850	54	2,316,342,071	207,325,325	26,015,081
26	555,331,124	48,552,180	32,423,345	55	2,497,652,315	223,692,756	24,890,673
27	571,459,959	49,998,453	32,544,213	56	2,696,454,398	241,637,167	23,704,603
28	588,914,199	51,562,461	32,700,321	57	2,914,386,962	261,305,647	22,465,713
29	607,776,339	53,252,439	32,873,272	58	3,153,226,896	282,857,728	21,182,815



**Historical GASB 5 Disclosures – COLA Fund**

<b>Funding Status and Progress as of September 30, 2022 and 2021</b>	2021	2022
1. COLA Fund Table	\$1,852	\$1,852
2. Pension benefit obligation (in millions)		
a. Retirees and beneficiaries receiving benefits and terminated members not yet receiving	\$357.6	\$397.5
b. Current Employees		
Accumulated employee contributions including interest	0	0
Employer-financed vested	0	0
Employer-financed nonvested	\$68.1	\$78.8
c. Total pension benefit obligation (a+b+c)	\$425.7	\$476.3
3. Net assets available for benefits	\$477.3	\$396.3
4. Unfunded pension benefit (obligation)/asset [(3)-(2)]	\$51.6	(\$80.0)

The pension benefit obligations were determined as part of actuarial valuations at January 1, 2023 and January 1, 2022, based on data and asset information at September 30, 2022 and September 30, 2021. Significant actuarial assumptions used include (a) a rate of return on the investment of present and future assets of 7.00% per year compounded annually, (b) post retirement COLA benefits based on the table in effect at January 1, 2023 and January 1, 2022. All plan provisions and other assumptions not listed above can be found in the January 1, 2023 COLA Fund Report.

**Historical GASB 5 Disclosures – COLA Fund**

**Contributions required and contributions made**

The funding policy provides for annual employer contributions from January 1, 1994. The amount of the contribution was \$2.5 million, beginning January 1, 1994, increasing 4% per year each year thereafter, and reduced (but not below zero) by any excess investment income transfer due on the same date.

The excess investment income transfer consists of a portion of gains due to investment return exceeding the assumption in effect for the year.

**Analysis of funding progress**

Fiscal Year	(1) Net Assets Available for Benefits <sup>(1)</sup>	(2) Pension Benefit Obligation <sup>(2)</sup>	(3) Percent Funded	(4) Unfunded PBO (2)-(1)	(5) Annual Covered Payroll	(4)/(5)
	(\$)	(\$)	(%)	(\$)	(\$)	(%)
2013	378.7	320.0	118	(58.7)	85.2	(69)
2014	394.6	371.0	106	(23.6)	93.7	(25)
2015	381.4	393.5	97	12.1	106.3	11
2016	392.9	420.5	93	27.6	133.1	21
2017	420.3	427.2	98	6.9	141.5	5
2018	426.2	440.2	97	14.0	148.9	9
2019	412.1	447.2	92	35.1	168.1	21
2020	416.0	419.0	99	3.0	176.7	2
2021	477.3	425.7	112	(51.6)	178.5	(29)
2022	396.3	476.3	83	80.0	188.4	42

<sup>(1)</sup> Excluding future City minimum contributions

<sup>(2)</sup> Excluding new increment and contingency reserves

Historical GASB 5 Disclosures – COLA Fund

Revenues and Expenses

Fiscal Year	Revenues by Source			Total (\$)
	Employee Contributions (\$)	Employer Contributions (\$)	Investment Income (\$)	
	2013	0	5,267,123	
2014	0	5,477,808	30,812,622	36,290,430
2015	0	5,696,920	26,665,405	32,362,325
2016	0	5,924,797	13,261,430	19,186,227
2017	0	6,161,789	26,980,778	33,142,567
2018	0	6,408,261	19,212,430	25,620,691
2019	0	6,664,591	16,086,759	22,751,350
2020	0	6,931,175	55,298,341	62,229,516
2021	0	7,208,422	32,408,512	39,616,934
2022	0	7,496,759	11,832,499	19,329,258

Expenses by Type

Fiscal Year	Expenses by Type			Total (\$)
	Benefits (\$)	Administrative Expenses (\$)	Refunds (\$)	
2013	19,522,271	1,604,698	0	21,126,969
2014	22,188,409	1,483,762	0	23,672,171
2015	23,563,734	1,190,614	0	24,754,348
2016	24,344,325	1,286,086	0	25,630,411
2017	24,882,453	1,202,695	0	26,085,148
2018	25,279,985	1,758,350	0	27,038,335
2019	25,622,524	1,477,166	0	27,099,690
2020	26,230,313	1,771,916	0	28,002,229
2021	26,463,258	1,179,391	0	27,642,649
2022	29,232,051	1,170,230	0	30,402,281