CITY OF OCALA FIREFIGHTERS' RETIREMENT PLAN

Board Summary of the October 1, 2022 Actuarial Valuation Report

March 27, 2023

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10/1/2022 Valuation Highlights

Prior Year Activity	• -14.99% return on market value compared to the expected return of 7.00% • Salary increases greater than expected resulting in liability loss of $1.3M. • Total contributions to the plan of $4.6M ($3.3M City, and $1.3M Employee and State)
Current Year	• Plan funding level increased to 80% on an actuarial (smoothed) asset basis. Plan is now 72.2% funded on market-value basis. • Recommended employer contribution for FY 23/24 of $3.38M, slightly down from last year. • COLA node at 1/1/2023 to decrease from $781 to $703, contingency reserve at 18%.
Looking Ahead	• Continued decline in forward-looking capital market expectations suggests keeping close eye on discount rate • Last experience study completed in 2019, every 3 to 5 years is recommended • Formal BAC-DROP policy, SECURE Act plan amendments, ASOP 4

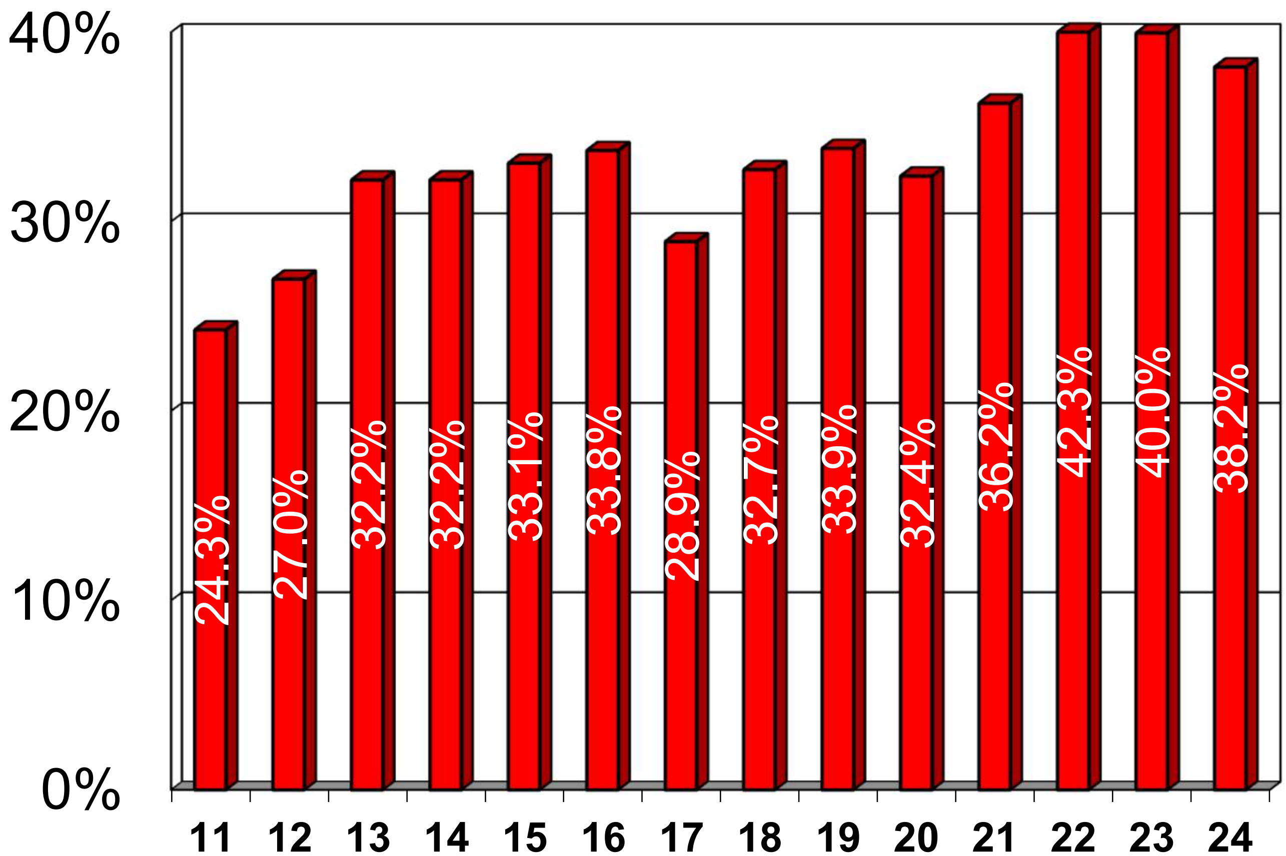
Summary of Results

Valuation Date	10/01/2021 FY 2022/2023	10/01/2022 FY 2023/2024
Funding rate	7.00%	7.00%
Entry Age Accrued Liability	$ 84,703,050	$ 88,822,517
Actuarial Value of Assets	66,720,136	71,075,172
Unfunded Accrued Liability	$ 17,982,914	$ 17,747,345
Funded Ratio (AVA)	78.8%	80.0%
Actuarial / Market Value	87.2%	110.9%
Expected Payroll	$ 8,505,805	$ 8,848,567
City Contribution Requirement		
Normal Cost	$ 1,452,965	$ 1,510,777
Expected Member Contribution	(609,715)	(634,504)
Net Normal Cost	$ 843,250	$ 876,273
Amortization of UAAL	2,391,824	2,319,732
Expenses and Interest	363,035	380,431
Total (City + State)	$ 3,598,109	$ 3,576,436
Exp. State Contribution	(200,000)	(200,000)
Exp. City Contribution - % of payroll	$ 3,398,109 40.0%	$ 3,376,436 38.2%

Plan Experience on Unfunded Accrued Liability

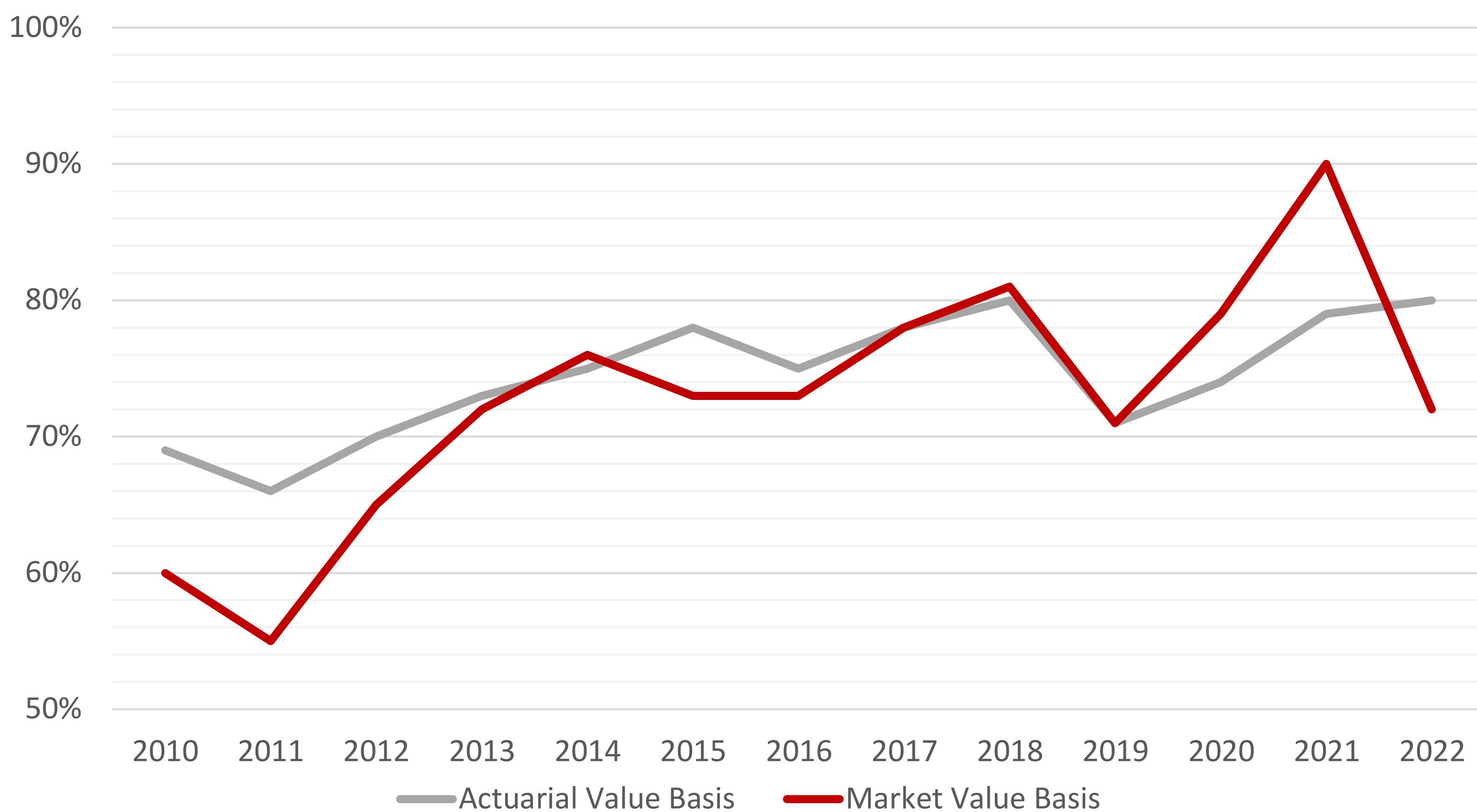
Source	Effect ($ millions)	Reason/Note (may not sum due to rounding)
10/1/2021	$18.0	
Expected change	(1.3)	Interest Growth and Amortization of Unfunded
10/1/2022 Expected	$16.7	
Retirement	0.1	Expected 4, Actual 4
Mortality	0.2	Expected 3, Actual 5
Disability	0.0	Expected 1, Actual 0
Turnover	0.3	Expected 5, Actual 3
Salaries	0.7	Expected increase 4.7%, Actual 9.5%
New Members	0.0	7 new entrants
Lag	(0.4)	Adjustment for timing difference
Assets	0.1	6.6% on actuarial value vs. 7.0% expected
Total Experience	$1.0	
Assumption Change	0	
Plan Change	0	
10/1/2022	$17.7	

Funding Requirement for Fiscal Year Ending (% of payroll)



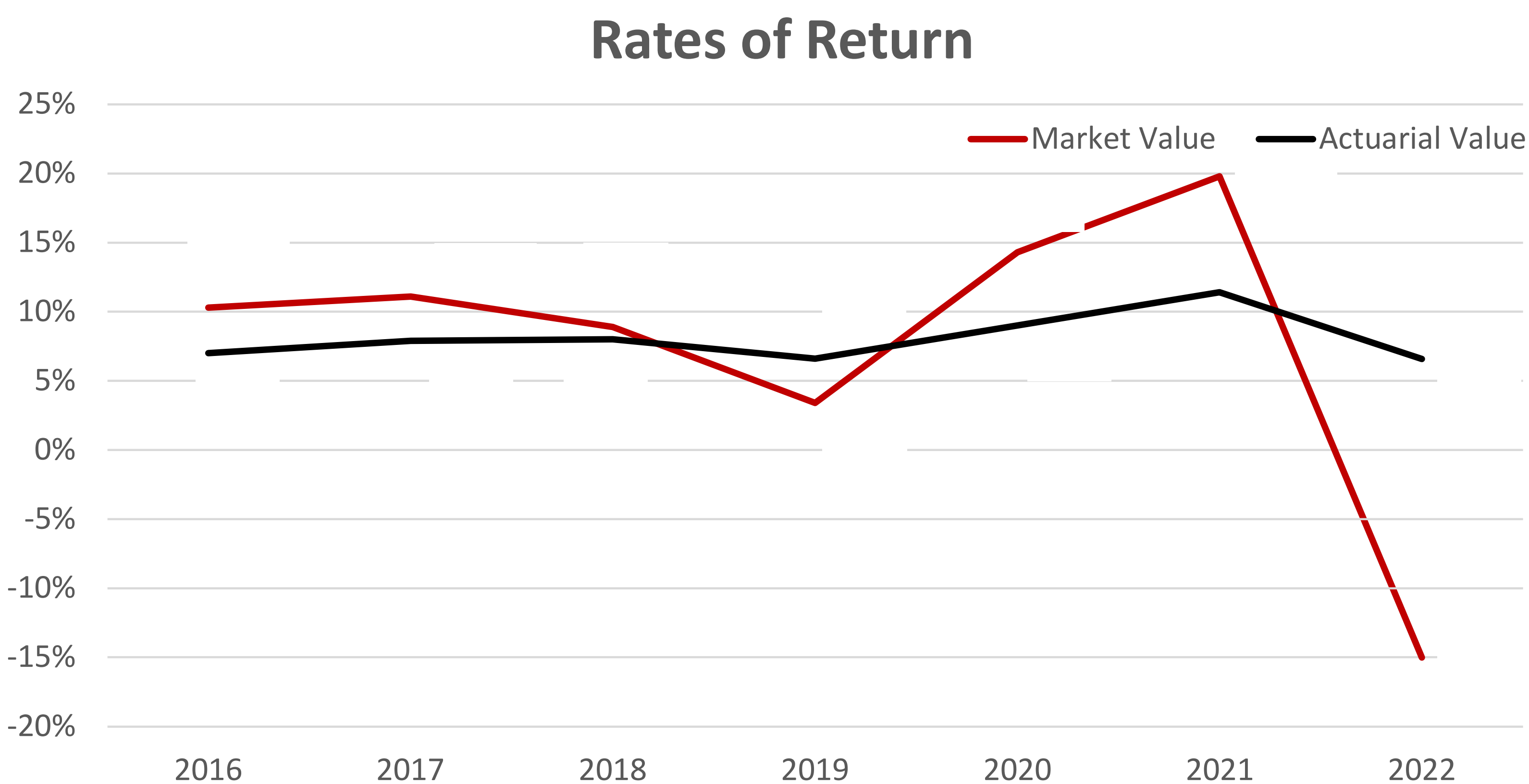
- 2013: Discount rate change (to 7.75% from 8.00%) and mortality table update changed contribution requirement to 32.2% from 28.9%.
- 2018: Discount rate change (to 7.50% from 7.75%) and mortality table update changed contribution requirement to 32.4% from 29.2%.
- 2021: Discount rate change (to 7.00% from 7.50%), mortality table update and experience study results changed contribution requirement to 42.5% from 32.3%. Direct-rate smoothed impact over three years.

Funded Ratio



The Funded Ratio is the value of assets divided by the accrued liability. The Accrued Liability is the present value of benefits to be paid in the future allocated to service earned to date. The future benefits are discounted from expected time of payment back to the valuation date at a rate of 7.0%. The graph above shows the funded ratio based on the actuarial value of assets (AVA) and market value of assets (MVA) to demonstrate the impact of the asset smoothing method.

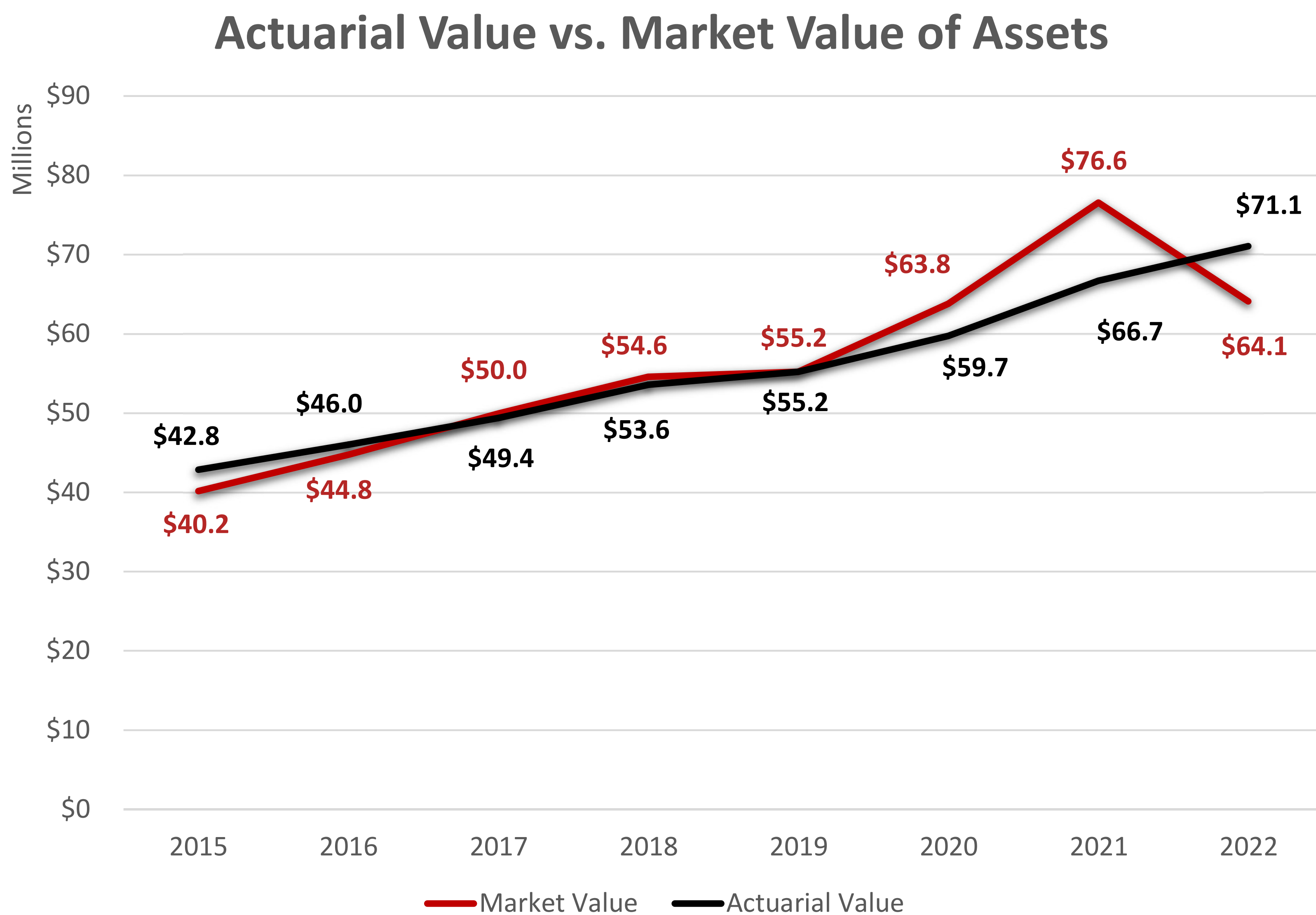
Asset Information



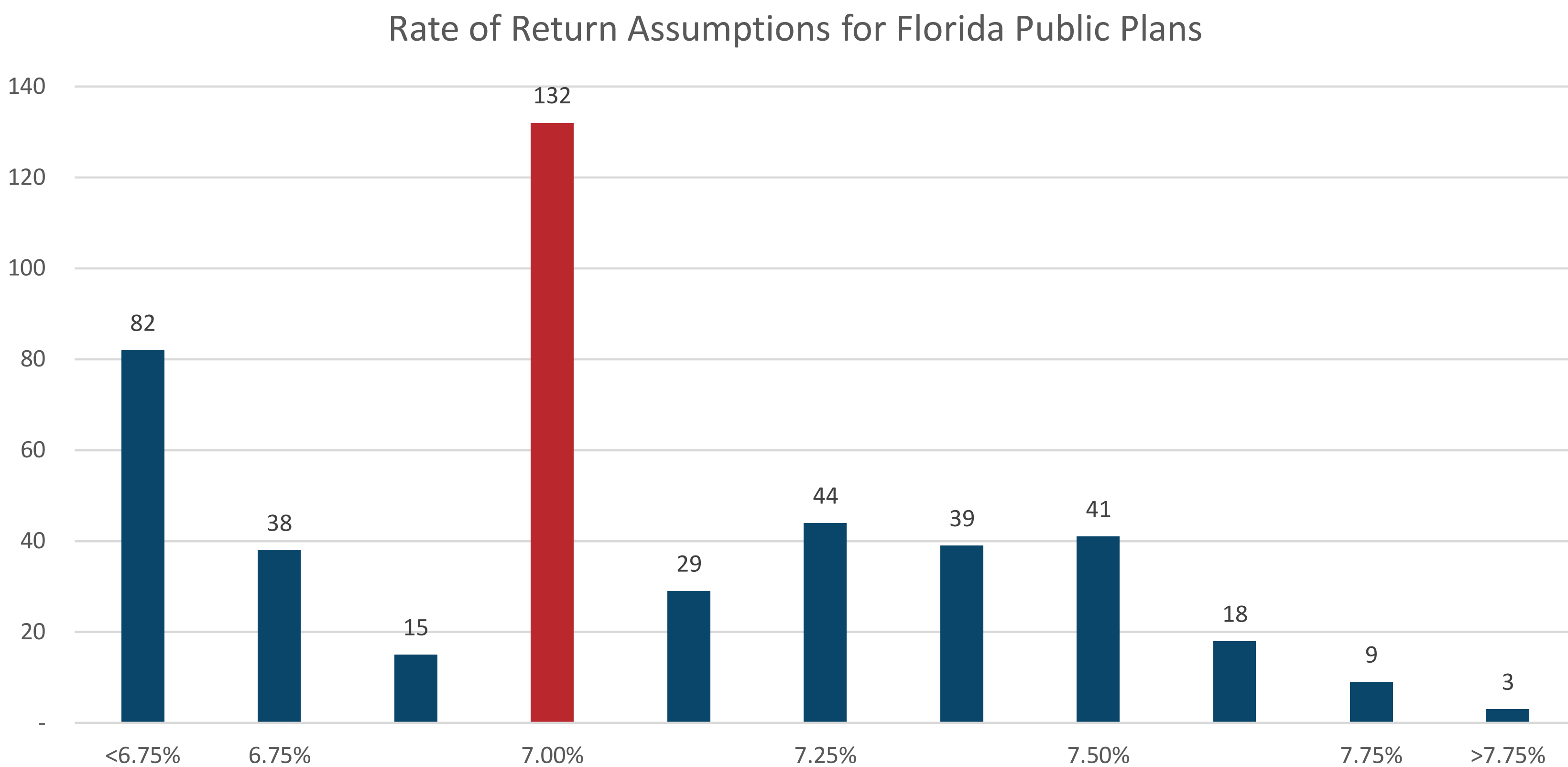
Average Rates of Return

	5 - Years	10 – Years	20 – Years
Market Value	5.57%	7.14%	6.24%
Actuarial Value	8.31%	7.78%	5.91%

Asset Information (Excluding Reserve/DROP, $ millions)



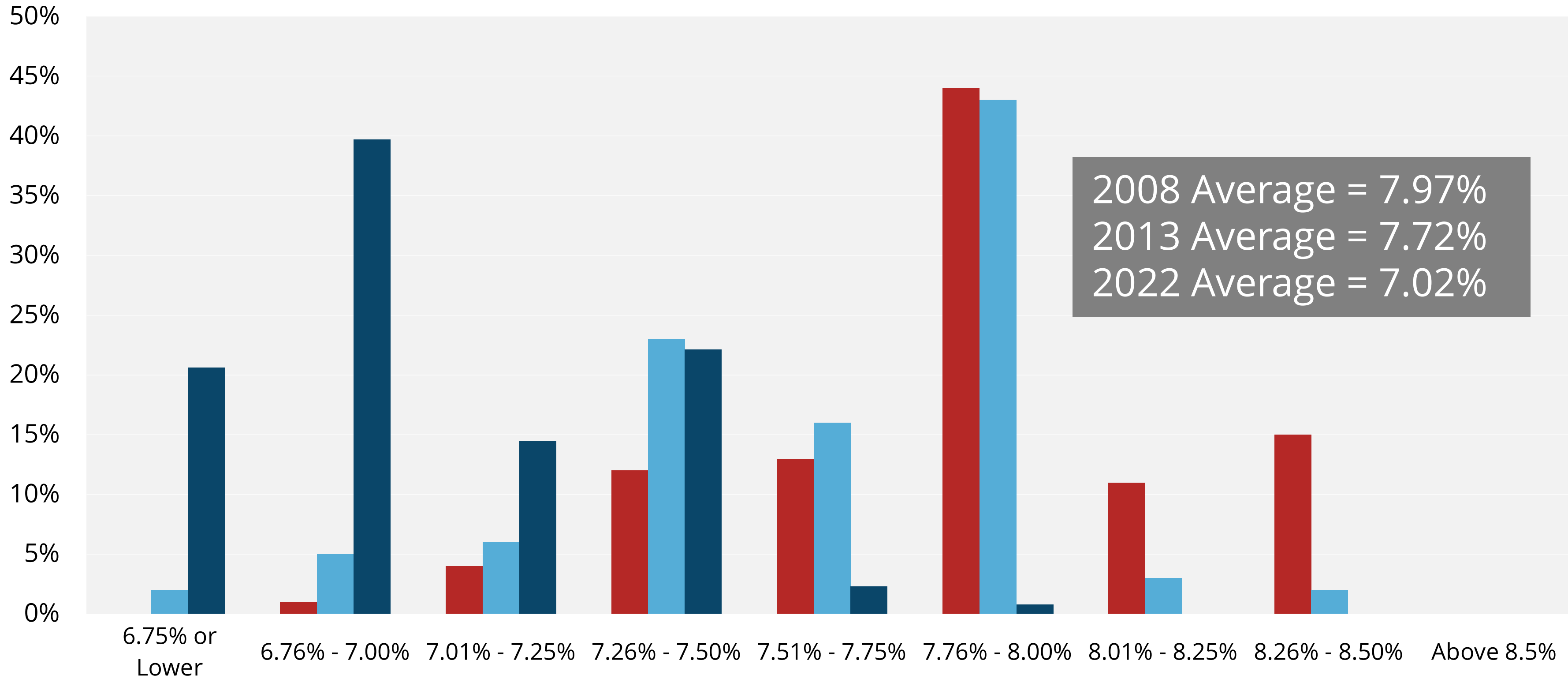
Benchmarking: Rates of Return in Florida



Source: Florida Department of Management Services, rates for Florida plans with valuation dates of 10/1/2021.

The average return assumption was 7.02%, a decline from the average assumption of 7.13% seen in the previous year.

NASRA Survey Results: Large Public Plans



	6.75% or Lower	6.76% - 7.00%	7.01% - 7.25%	7.26% - 7.50%	7.51% - 7.75%	7.76% - 8.00%	8.01% - 8.25%	8.26% - 8.50%	Above 8.5%
2008	0%	1%	4%	12%	13%	44%	11%	15%	0%
2013	2%	5%	6%	23%	16%	43%	3%	2%	0%
2022	21%	40%	15%	22%	2%	1%	0%	0%	0%

Ocala: 7.00%

Source: Public Fund Survey Summary of Findings for FY 2008, FY2013, and FY2022

Benchmarking: 2023 NCPERS Public Retirement Systems Study

- Study conducted by National Conference on Public Employee Retirement Systems and Cobalt Community Research
  - ✓ 195 state and local government pension funds responded
  - ✓ 52% of respondents were local government funds
  - ✓ 48% of respondents were statewide funds

- Key findings from the study
  - ✓ Average funded ratio increased from 74.7% to 77.8%
  - ✓ Average interest assumption decreased from 7.07% to 6.86%
  - ✓ Amortization periods have tightened from 21.8 years to 20.8 years
  - ✓ The average COLA offered to members increased from 1.7% to 2.0%. Many respondents did not offer a COLA in the most recent year.
  - ✓ New this year, 54% of respondents said ESG (environmental, social, and governance) factors are somewhat or very important in investment decisions.

Investment Return Assumption

- The State Recommendation Letter to Fire and Police recommended an investment return assumption in the range of 5.50% to 6.50%.
- We would be open to a “step-down” approach to lower the current 7.0% interest rate to 6.5%.

	Approved			**Proposed**
	General	Police	Fire	Fire
10/1/2021	6.90%	7.50%	7.00%	7.00%
10/1/2022	6.80%	7.50%	7.00%	7.00%
10/1/2023	6.70%	TBA	TBA	6.90%
10/1/2024	6.60%	TBA	TBA	6.80%
10/1/2025	6.50%	TBA	TBA	6.70%
10/1/2026	TBA	TBA	TBA	6.60%
10/1/2027	TBA	TBA	TBA	6.50%

Investment Return Assumption

- For each 10-basis point decrease in interest rate, the estimated contribution increases by $100,000-$150,000 and unfunded liability increases by approximately $1.5m.

- For those entering DROP after 10/1/2021, the DROP interest rate lowers along with the valuation interest rate
  - DROP interest rate = valuation interest rate – 1%

- Another option is to lower to 6.5% for the 10/1/2023 valuation and use a direct-rate smoothing method for calculating the contribution
  - The assumption change is recognized immediately in the liability, but the impact to contribution is phased-in over three years
  - This method was used to lower the rate from 7.5% to 7.0% beginning 10/1/2019

Administrative Updates

New Actuarial Standards of Practice update ("ASOP 4")

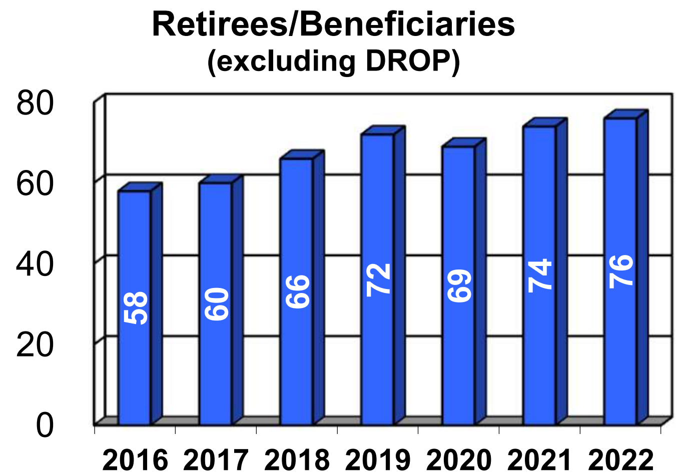
- ASOP 4 sets the standards for measuring pension obligations
- A new requirement has been added to calculate a Low-Default-Risk Obligation Measure (LDROM)
    - The value of liabilities using an interest rate derived from low-default risk fixed income securities
- Less relevant for Florida plans relative to many other jurisdictions: already must disclose +2%/-2% under the 112/60T requirements.

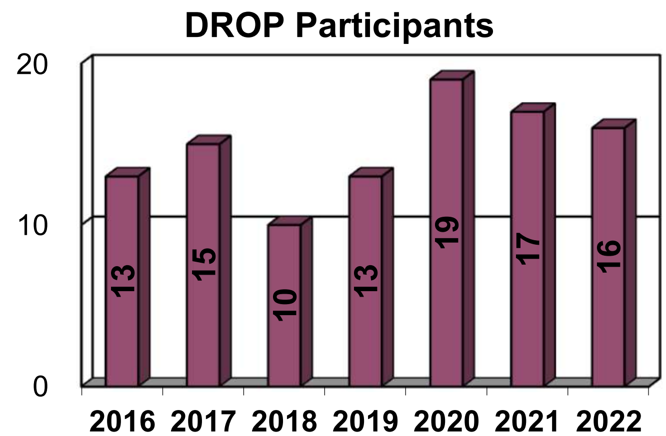
Administrative Updates

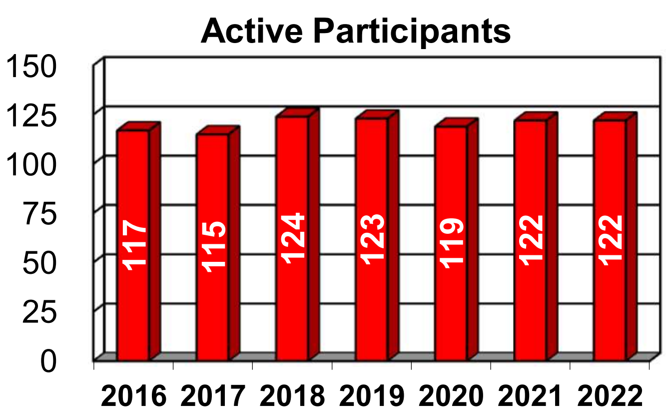
- A formal BAC-DROP policy statement has been drafted for the Board's consideration
  - The BAC-DROP period can be no more than 5 years
  - The benefit accrued at the chosen retroactive retirement date is calculated based on service and pay as of that retroactive date (the BAC-DROP begin date)
  - At the end of the BAC-DROP period, the participant may receive a lump sum for the hypothetical payments made during the DROP period
  - Employee contributions made during the DROP period will be refunded without interest
  - Years of BAC-DROP will count towards COLA service. Number of years since BAC-DROP begin date will be the "Years since Retirement/DROP Exit" parameter

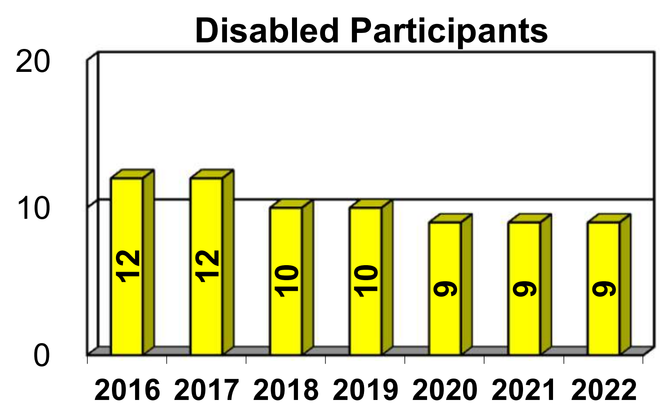
- DROP interest rate changes (prospective only)
  - Component A: 6% going forward (until valuation interest rate is next updated)
  - Component B: between 1% and 3% based on 10-year average return

Participant Information



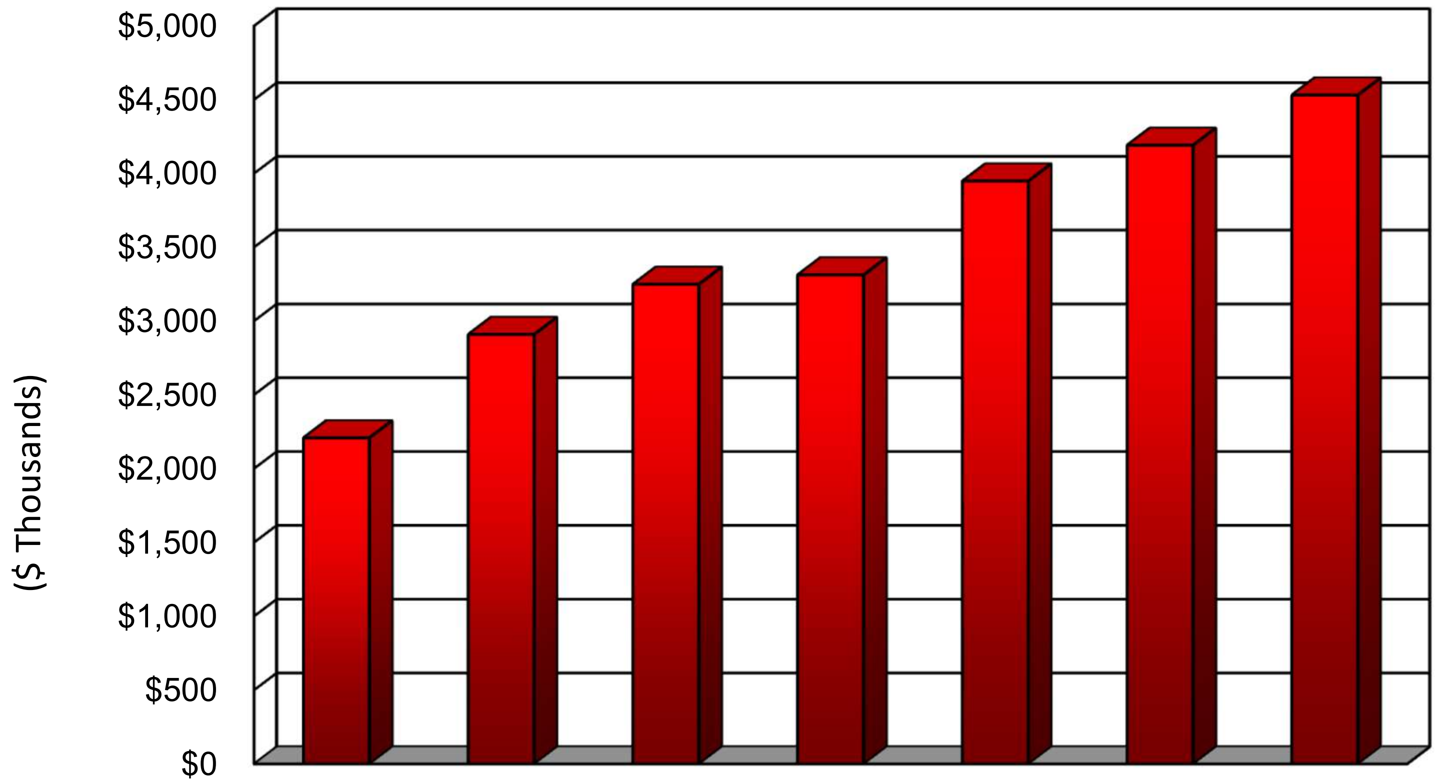






Active Demographics	2017	2018	2019	2020	2021	2022
Average Age	38.3	38.0	36.9	37.0	36.8	36.7
Average Service	12.6	12.4	11.6	11.7	11.5	11.6
Average Plan Compensation	$59,878	$61,754	$59,898	$62,732	$62,847	$65,373

Benefit Payments



	2016	2017	2018	2019	2020	2021	2022
Annual Payments	$2,209	$2,909	$3,249	$3,313	$3,949	$4,192	$4,532

Distributions as a Percentage of Assets							
2015	2016	2017	2018	2019	2020	2021	2022
7.8%	4.8%	5.6%	6.1%	6.0%	6.2%	5.1%	5.9%

COLA Fund

- What are the COLA Fund benefits?
  - ✓ Based on years of service at retirement and years in retirement
  - ✓ Generally the amount increases gradually each year you are further into retirement
  - ✓ Can increase or decrease based on the COLA Fund valuation

- How are COLA benefits funded?
  - ✓ Initial funding from COLA Fund assets as of September 30, 2015 and Chapter 175 Reserve Fund
  - ✓ 0.50% of pay contribution from members
  - ✓ 50% of State Premium Tax Revenues in excess of $200,000 plus any additional amounts not needed to fund the plan to a 90% funded level
  - ✓ Investment return

- How are COLA benefits adjusted?
  - ✓ Board action, designed to be variable
  - ✓ Decision whether to decrease node when reserve is insufficient

COLA Fund

- Historical practice has been to maintain 20% of COLA Fund assets as a Contingency Reserve

- For 2023, this would result in a node decrease from $781 to $685.

- Under the $685 node, participants will see decreased COLA amounts (ranging from $1 to $15).

- To prevent COLA decreases for 2023, the node can be lowered to $703.

- This decreases the Contingency Reserve to 18% of available COLA assets.

COLA Fund

Sample Payments (Node Changed)

2022: Monthly Benefit Payable from COLA Fund									
Credited Service at Retirement	**Years Since Retirement/DROP Exit**								
	0	1	2	...	20	21	22	23	24
...	...	...	...	...	...	...	...	...	...
24	90	120	150	...	690	720	750	780	810
25	**94**	**125**	156	...	719	750	**781**	812	843
26	97	130	162	...	747	780	812	845	877
...			...	...	...	...	...	...	...

2023: Monthly Benefit Payable from COLA Fund									
Credited Service at Retirement	**Years Since Retirement/DROP Exit**								
	0	1	2	...	20	21	22	23	24
...	...	...	...	...	...	...	...	...	...
24	81	108	135	...	621	648	675	702	729
25	**84**	**112**	141	...	647	675	**703**	731	759
26	88	117	146	...	673	702	731	760	790
...			...	...	...	...	...	...	...

COLA Fund

Sample Payments (Hypothetical Future)

After 5 Completed Years of Retirement

Years of Service at Retirement	2023 COLA Amount
20	$180
25	$225
30	$270

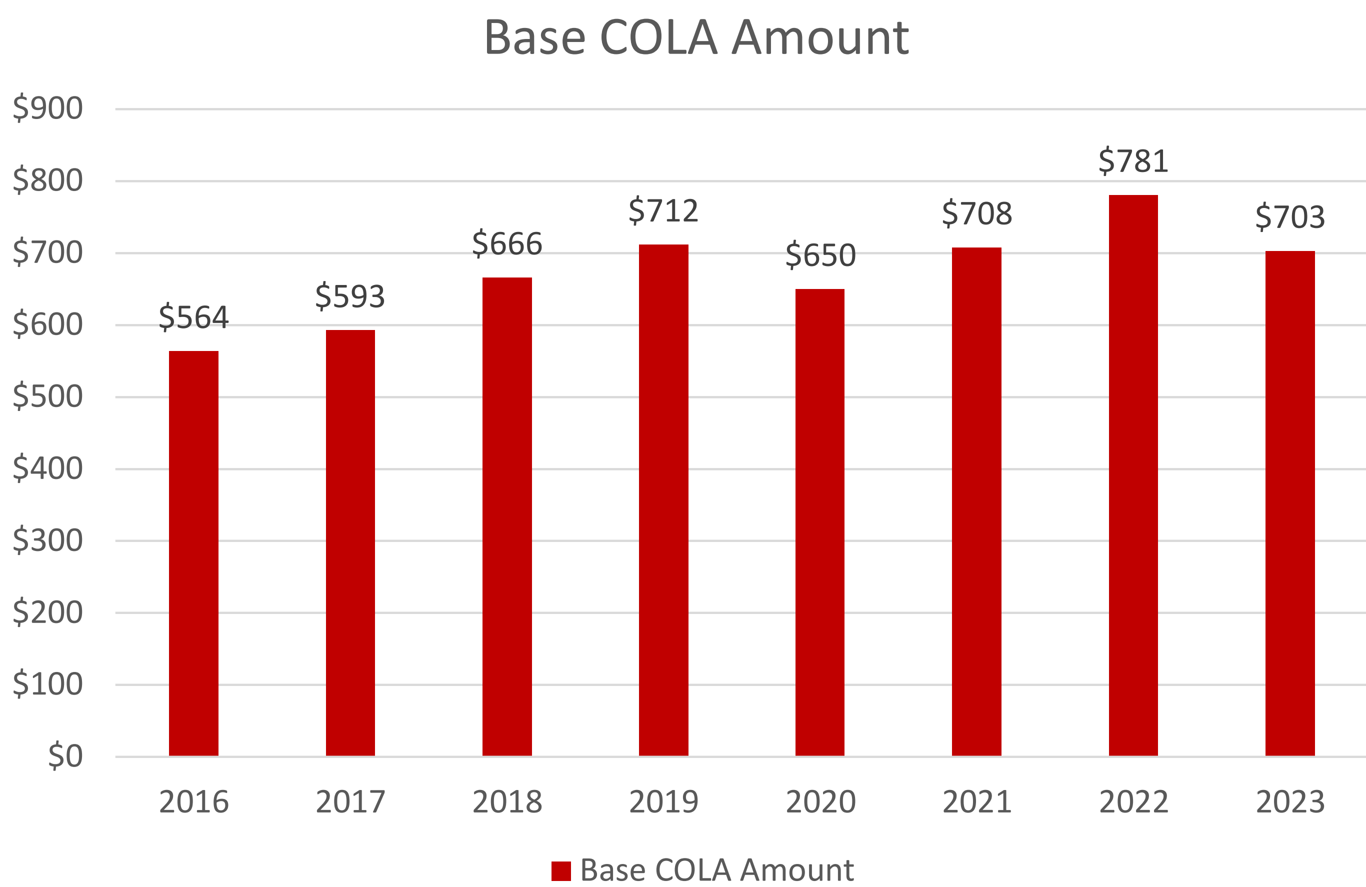
After 25 Completed Years of Retirement

Years of Service at Retirement	2023 COLA Amount
20	$630
25	$787
30	$945

Sample Participants

Participant Description	Benefit under 2022 Table ($781 base)	Benefit under 2023 Table ($703 base)
Retired or exited DROP in 2022 with 30 years of service	$112	$101
Retired or exited DROP in 2021 with 28 years of service	$140	$126

COLA Fund


Base COLA Amount
$900
$800
$700
$600
$500
$400
$300
$200
$100
$0
$564
$593
$666
$712
$650
$708
$781
$703
2016
2017
2018
2019
2020
2021
2022
2023
Base COLA Amount

Certification

This report has been prepared for the primary purpose of summarizing the actuarial valuation for the City of Ocala Firefighter Pension Fund as of October 1, 2022. To the best of our knowledge, the reports summarized herein present fair positions of the funded status of the plan in accordance with the Actuarial Standards of Practice as described by the American Academy of Actuaries, and are based on the plan provisions and assumptions summarized within each report.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such facts 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 other additional cost or contribution requirement based on the plan's funded status); and changes in plan provisions of applicable law. The scope of our assignment did not include an analysis of the potential range of future measurements.

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 weakness 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.

To our knowledge there have been no significant events prior to the current year's measurement date or as of the date of this report which could materially affect the results contained herein.

Nyhart

Lawrence Watts Jr.

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

Kerry Sipe

Kerry Sipe, ASA, EA

March 27, 2023
Date