### CITY OF NAPLES GENERAL RETIREMENT SYSTEM

ACTUARIAL VALUATION AS OF OCTOBER 1, 2023

CONTRIBUTIONS APPLICABLE TO THE PLAN/FISCAL YEAR ENDING SEPTEMBER 30, 2025





December 13, 2023

Board of Trustees City of Naples General Employees' Pension Board

Re: City of Naples General Retirement System

Dear Board:

We are pleased to present to the Board this report of the annual actuarial valuation of the City of Naples General Retirement System. The valuation was performed to determine whether the assets and contributions are sufficient to provide the prescribed benefits and to develop the appropriate funding requirements for the applicable plan year. Use of the results for other purposes may not be applicable and may produce significantly different results.

The valuation has been conducted in accordance with generally accepted actuarial principles and practices, including the applicable Actuarial Standards of Practice as issued by the Actuarial Standards Board, and reflects laws and regulations issued to date pursuant to the provisions of Chapter 112, Florida Statutes, as well as applicable federal laws and regulations. In our opinion, the assumptions used in the valuation, as adopted by the Board of Trustees, represent reasonable expectations of anticipated plan experience.

The funding percentages and unfunded accrued liability as measured based on the actuarial value of assets will differ from similar measures based on the market value of assets. These measures, as provided, are appropriate for determining the adequacy of future contributions, but may not be appropriate for the purpose of settling a portion or all of its liabilities. Future actuarial measurements may differ significantly from the current measurements presented in this report for a variety of reasons including: changes in applicable laws, changes in plan provisions, changes in assumptions, or plan experience differing from expectations. Due to the limited scope of the valuation, we did not perform an analysis of the potential range of such future measurements.

In conducting the valuation, we have relied on personnel, plan design, and asset information supplied by the City of Naples, financial reports prepared by the custodian bank, and the actuarial assumptions and methods described in the Actuarial Assumptions section of this report. While we cannot verify the accuracy of all this information, the supplied information was reviewed for consistency and reasonableness. As a result of this review, we have no reason to doubt the substantial accuracy of the information and believe that it has produced appropriate results. This information, along with any adjustments or modifications, is summarized in various sections of this report.

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

In our opinion, the Minimum Required Contribution set forth in this report constitutes a reasonable actuarially determined contribution under Actuarial Standard of Practice No. 4.

The undersigned are familiar with the immediate and long-term aspects of pension valuations, and meet the Qualification Standards of the American Academy of Actuaries necessary to render the actuarial opinions contained herein. All of the sections of this report are considered an integral part of the actuarial opinions.

To our knowledge, no associate of Foster & Foster, Inc. working on valuations of the program has any direct financial interest or indirect material interest in the City of Naples, nor does anyone at Foster & Foster, Inc. act as a member of the Board of Trustees of the General Retirement System. Thus, there is no relationship existing that might affect our capacity to prepare and certify this actuarial report.

If there are any questions, concerns, or comments about any of the items contained in this report, please contact us at 239-433-5500.

Respectfully submitted,

Foster & Foster, Inc.

By:

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

in

Paul Baugher, EA, FSA, MAAA Enrolled Actuary #23-6586

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Enclosures

By:

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### SUMMARY OF REPORT

The regular annual actuarial valuation of the City of Naples General Retirement System, performed as of October 1, 2023, has been completed and the results are presented in this Report. The contribution amounts set forth herein are applicable to the plan/fiscal year ending September 30, 2025.

The contribution requirements, compared with those set forth in the June 12, 2023 actuarial impact statement, are as follows:

Valuation Date Applicable to Fiscal Year Ending	10/1/2023 <u>9/30/2025</u>	10/1/2022 <u>9/30/2024</u>
Minimum Required Contribution % of Projected Annual Payroll	15.63%	15.07%
Member Contributions (Est.) % of Projected Annual Payroll	3.64%	3.72%
City Required Contribution % of Projected Annual Payroll	11.99%	11.35%

As you can see, the Minimum Required Contribution shows an increase when compared to the results set forth in the June 12, 2023 actuarial impact statement. The increase is attributable to net unfavorable actuarial experience described in the next paragraph.

Plan experience was unfavorable overall on the basis of the plan's actuarial assumptions. Sources of actuarial loss included an investment return of 4.34% (Actuarial Asset Basis) which fell short of the 7.00% assumption and an average salary increase of 8.41% which exceeded the 5.23% assumption. These losses were offset in part by a gain associated with favorable turnover experience.

### CHANGES SINCE PRIOR VALUATION

#### Plan Changes

Since the prior valuation, Ordinance 2023-15083 was adopted on May 9, 2023 that provided for the following change:

Effective October 1, 2022, there shall be a one-time increase of five percent (5%) to each of the monthly benefit payments for all retirees and beneficiaries in pay status who are not already eligible for or receiving of any cost-of-living adjustment as previously described herein. The subsequent higher monthly benefit amount after such increases are applied shall then remain in effect and continue to be payable in the same amounts to all eligible retirees and beneficiaries accordingly each month. Participants of the DROP shall not be eligible for the automatic one-time increase as described herein.

The impact of this change can be found in our June 12, 2023 actuarial impact statement.

#### Actuarial Assumption/Method Changes

There have been no assumption or method changes since the prior valuation.

### CONTRIBUTION IMPACT OF ANNUAL CHANGES

(1)	Contribution Determined as of October 1, 2022 (As set forth in the June 12, 2023 Actuarial Impact Statement)	11.35%
(2)	Summary of Contribution Impact by component:	
	Change in Normal Cost Rate	0.00%
	Change in Administrative Expense Percentage	-0.04%
	Payroll Change Effect on UAAL Amortization	-0.65%
	Investment Return (Actuarial Asset Basis)	1.09%
	Salary Increases	0.42%
	Active Decrements	-0.42%
	Inactive Mortality	0.16%
	UAAL Amortization Impact from Contribution Policy	-0.31%
	Assumption Change	0.00%
	Other	<u>0.39%</u>
	Total Change in Contribution	0.64%
(3)	Contribution Determined as of October 1, 2023	11.99%

### COMPARATIVE SUMMARY OF PRINCIPAL VALUATION RESULTS

	<u>10/1/2023</u>	10/1/2022
A. Participant Data		
Actives	336	325
Service Retirees	233	232
DROP Retirees	1	1
Beneficiaries	23	23
Disability Retirees	1	1
Terminated Vested	<u>219</u>	<u>188</u>
Total	813	770
Projected Annual Payroll	21,795,443	19,416,642
Annual Rate of Payments to:		
Service Retirees	4,617,512	4,487,415
DROP Retirees	58,927	58,927
Beneficiaries	273,705	264,474
Disability Retirees	10,680	10,680
Terminated Vested	368,191	386,300
B. Assets		
Actuarial Value (AVA) <sup>1</sup>	69,124,734	68,438,716
Market Value (MVA) <sup>1</sup>	65,979,408	61,479,101
C. Liabilities		
Present Value of Benefits		
Actives		
Retirement Benefits	35,860,142	34,043,984
Disability Benefits	626,013	667,480
Death Benefits	307,394	289,343
Vested Benefits	2,387,420	2,295,649
Refund of Contributions	3,405,998	2,903,100
Service Retirees	45,435,562	44,376,987
DROP Retirees <sup>1</sup>	918,783	867,268
Beneficiaries	2,541,480	2,436,626
Disability Retirees	64,005	71,136
Terminated Vested	2,638,028	2,798,257
Total	94,184,825	90,749,830

C. Liabilities - (Continued)	10/1/2023	10/1/2022
Present Value of Future Salaries	158,315,319	143,464,629
Present Value of Future		
Member Contributions	5,762,678	5,336,884
Normal Cost (Retirement)	1,240,865	1,096,411
Normal Cost (Disability)	28,013	28,390
Normal Cost (Death)	18,304	16,786
Normal Cost (Vesting)	147,205	143,906
Normal Cost (Refunds)	304,383	263,579
Total Normal Cost	1,738,770	1,549,072
Present Value of Future		
Normal Costs	11,808,539	10,577,154
Accrued Liability (Retirement)	27,527,139	26,567,230
Accrued Liability (Disability)	440,288	475,170
Accrued Liability (Death)	184,285	175,853
Accrued Liability (Vesting)	1,288,612	1,270,182
Accrued Liability (Refunds)	1,338,104	1,133,967
Accrued Liability (Inactives) <sup>1</sup>	51,597,858	50,550,274
Total Actuarial Accrued Liability (EAN AL)	82,376,286	80,172,676
Unfunded Actuarial Accrued		
Liability (UAAL)	13,251,552	11,733,960
Funded Ratio (AVA / EAN AL)	83.9%	85.4%

D. Actuarial Present Value of		
Accrued Benefits	<u>10/1/2023</u>	10/1/2022
Vested Accrued Benefits		
	51 507 959	50 550 074
Inactives <sup>1</sup>	51,597,858	50,550,274
Actives	13,161,076	12,685,748
Member Contributions	9,375,629	9,148,948
Total	74,134,563	72,384,970
Non-vested Accrued Benefits	842,296	1,141,716
Total Present Value		
Accrued Benefits (PVAB)	74,976,859	73,526,686
Funded Ratio (MVA / PVAB)	88.0%	83.6%
Increase (Decrease) in Present Value of		
Accrued Benefits Attributable to:		
Plan Amendments	0	
Assumption Changes	0	
Plan Experience	2,048,052	
Benefits Paid	(5,550,480)	
Interest	4,952,601	
Other	-,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
Total	1,450,173	

Valuation Date Applicable to Fiscal Year Ending	10/1/2023 <u>9/30/2025</u>	10/1/2022 <u>9/30/2024</u>
E. Pension Cost		
Normal Cost (with interest) % of Projected Annual Payroll <sup>2</sup>	7.98	7.98
Administrative Expenses (with interest) % of Projected Annual Payroll <sup>2</sup>	0.80	0.84
Payment Required to Amortize Unfunded Actuarial Accrued Liability over 29 years (as of 10/1/2023, with interest)		
% of Projected Annual Payroll <sup>2</sup>	6.85	6.25
Minimum Required Contribution % of Projected Annual Payroll <sup>2</sup>	15.63	15.07
Expected Member Contributions % of Projected Annual Payroll <sup>2</sup>	3.64	3.72
Expected City Contribution % of Projected Annual Payroll <sup>2</sup>	11.99	11.35
F. Past Contributions		
Plan Years Ending:	9/30/2023	
City Requirement	2,408,802	
Actual Contributions Made:		
Members (excluding buyback) City Total	772,441 2,720,813 3,493,254	
G. Net Actuarial (Gain)/Loss	2,554,632	

<sup>1</sup> The asset values and liabilities include accumulated DROP Plan Balances as of 9/30/2023 and 9/30/2022.

<sup>2</sup> Contributions developed as of 10/1/2023 are expressed as a percentage of Projected Annual Payroll at 10/1/2023 of \$21,795,443.

H. Schedule Illustrating the Amortization of the Total Unfunded Actuarial Accrued Liability as of:

Year	Projected Unfunded Actuarial Accrued Liability
2023	13,251,552
2024	12,581,540
2025	11,864,628
2032	4,378,693
2039	1,606,802
2045	919,354
2052	0

I. (i) 5 Year Comparison of Actual and Assumed Salary Increases

		Actual	Assumed
Year Ended	9/30/2023	8.41%	5.23%
Year Ended	9/30/2022	8.99%	5.16%
Year Ended	9/30/2021	3.32%	5.18%
Year Ended	9/30/2020	3.95%	5.20%
Year Ended	9/30/2019	3.89%	5.24%

### (ii) 5 Year Comparison of Investment Return on Market Value and Actuarial Value

		Market Value	Actuarial Value	Assumed
Year Ended	9/30/2023	10.99%	4.34%	7.00%
Year Ended	9/30/2022	-12.37%	5.36%	7.00%
Year Ended	9/30/2021	21.69%	9.74%	7.00%
Year Ended	9/30/2020	4.00%	7.43%	7.30%
Year Ended	9/30/2019	3.66%	7.27%	7.40%
(iii) Average Annual Payroll Growth (a) Payroll as of:		10/1/2023 10/1/2013	\$21,795,443 15,986,671	
(b) Total Increase			36.34%	
(c) Number of Years			10.00	
(d) Average Annual Rate			3.15%	

#### STATEMENT BY ENROLLED ACTUARY

This actuarial valuation was prepared and completed by me or under my direct supervision, and I acknowledge responsibility for the results. To the best of my knowledge, the results are complete and accurate, and in my opinion, the techniques and assumptions used are reasonable and meet the requirements and intent of Part VII, Chapter 112, Florida Statutes. There is no benefit or expense to be provided by the plan and/or paid from the plan's assets for which liabilities or current costs have not been established or otherwise 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.

Douglas H. Lozen, EA, MAAA

Enrolled Actuary #23-7778

Please let us know when the report is approved by the Board and unless otherwise directed we will provide a copy of the report to the following office to comply with Chapter 112 Florida Statutes:

> Mr. Keith Brinkman Bureau of Local **Retirement Systems** Post Office Box 9000 Tallahassee, FL 32315-9000

City of Naples General Retirement System

### RECONCILIATION OF UNFUNDED ACTUARIAL ACCRUED LIABILITIES

(1)	Unfunded Actuarial Accrued Liability as of October 1, 2022	\$11,733,960
(2)	Sponsor Normal Cost developed as of October 1, 2022	826,773
(3)	Expected administrative expenses for the year ended September 30, 2023	162,518
(4)	Expected interest on (1), (2) and (3)	884,939
(5)	Sponsor contributions to the System during the year ended September 30, 2023	2,720,813
(6)	Expected interest on (5)	190,457
(7)	Expected Unfunded Actuarial Accrued Liability as of September 30, 2023 (1)+(2)+(3)+(4)-(5)-(6)	10,696,920
(8)	Change to UAAL due to Assumption Change	0
(9)	Change to UAAL due to Actuarial (Gain)/Loss	2,554,632
(10)	Unfunded Actuarial Accrued Liability as of October 1, 2023	13,251,552

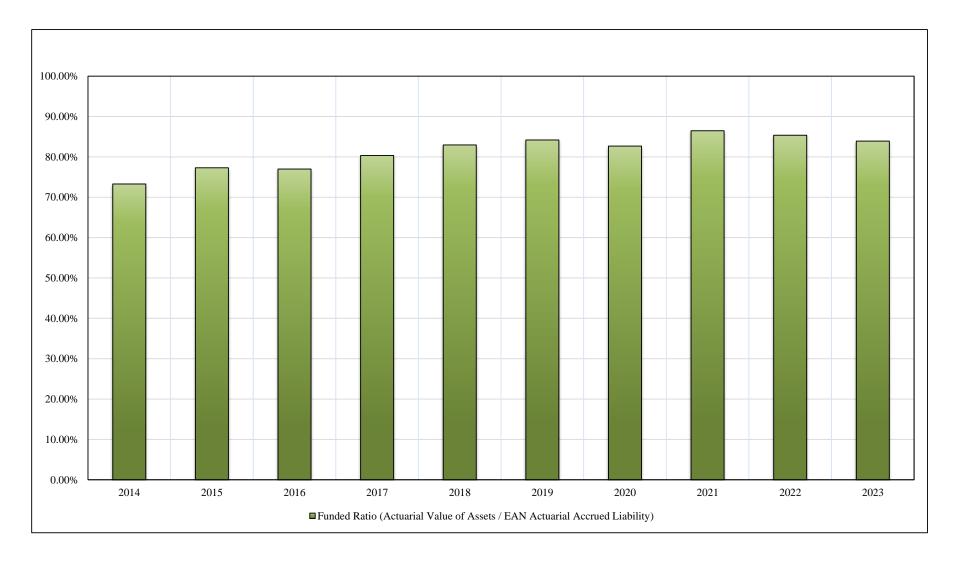
Type of	Date	Years	10/1/2023	Amortization
Base	<b>Established</b>	<u>Remaining</u>	Amount	Amount
Experience Loss	10/1/2002	9	1,129,697	162,050
Experience Loss	10/1/2003	10	435,794	57,988
Experience Loss	10/1/2004	10	1,997,639	265,812
Amendment	10/1/2004	10	16,919	2,251
Experience Gain	10/1/2005	10	(1,318,261)	(175,412)
Experience Gain	10/1/2006	10	(129,076)	(17,175)
Amendment	10/1/2006	10	43,680	5,812
Experience Loss	10/1/2007	10	516,935	68,785
Method/Assump Change	10/1/2007	10	3,055,573	406,584
Experience Loss	10/1/2008	10	3,805,167	506,327
Assump Changes	10/1/2009	10	(21,601)	(2,874)
Experience Loss	10/1/2009	10	4,768,554	634,519
Experience Loss	10/1/2010	10	425,249	56,585
Benefit Change	10/1/2010	10	(6,063,086)	(806,773)
Experience Loss	10/1/2011	10	1,860,494	247,563
Benefit Change	10/1/2011	10	239,590	31,881
Experience Loss	10/1/2012	10	706,908	94,063
Experience Gain	10/1/2013	10	(224,559)	(29,881)
Experience Gain	10/1/2014	10	(721,636)	(96,023)

Type of	Date	Years	10/1/2023	Amortization
Base	<b>Established</b>	<u>Remaining</u>	Amount	Amount
Assump Change	10/1/2014	10	101,692	13,531
Experience Gain	10/1/2015	10	(1,646,418)	(219,077)
Experience Gain	10/1/2016	10	(688,514)	(91,616)
Assump Change	10/1/2016	10	1,603,796	213,406
Experience Gain	10/1/2017	10	(1,472,834)	(195,980)
Experience Gain	10/1/2018	5	(430,156)	(98,048)
Assump Change	10/1/2018	15	(352,721)	(36,193)
Experience Gain	10/1/2019	6	(460,093)	(90,211)
Assump Change	10/1/2019	16	506,630	50,122
Experience Loss	10/1/2020	7	406,170	70,436
Assump Change	10/1/2020	17	1,891,327	181,046
Experience Gain	10/1/2021	8	(1,357,744)	(212,503)
Actuarial Gain	10/1/2022	9	(22,678)	(3,253)
Benefits Change	10/1/2022	29	2,094,483	159,433
Actuarial Loss	10/1/2023	10	2,554,632	339,927
			13,251,552	1,493,102

### DETAILED ACTUARIAL (GAIN)/LOSS ANALYSIS

(1) Unfunded Actuarial Accrued Liability (UAAL) as of October 1, 2022	\$11,733,960
(2) Expected UAAL as of October 1, 2023	10,696,920
(3) Summary of Actuarial (Gain)/Loss, by component:	
Investment Return (Actuarial Asset Basis)	1,787,691
Salary Increases	691,798
Active Decrements	(693,783)
Inactive Mortality	265,442
Other	503,484
Increase in UAAL due to (Gain)/Loss	2,554,632
Assumption Changes	0
(4) Actual UAAL as of October 1, 2023	\$13,251,552

# HISTORY OF FUNDING PROGRESS



### ACTUARIAL ASSUMPTIONS AND METHODS

#### Mortality Rate

Healthy Active Lives:

**Female:** PubG.H-2010 for Employees. **Male:** PubG.H-2010 for Employees, set back one year.

#### Healthy Retiree Lives:

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

#### Beneficiary Lives:

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

#### Disabled Lives:

PubG.H-2010 for Disabled Retirees, set forward three years.

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

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

7.00% per year compounded annually, net of investment related expenses. This is supported by the target asset allocation of the trust and the expected long-term return by asset class.

Interest Rate

Salary Increases	Salary	Scale
	Service	Rate
	1-2	6.00%
	3-9	5.50%
	10-19	5.00%
	20+	4.00%
		rates were incorporated with the October 1, tion as the result of an experience study.
Payroll Growth	None for p Accrued Li	urposes of amortizing the Unfunded Actuarial ability.
Administrative Expenses		nnually, based on the average of actual neurred in the prior two fiscal years.
Amortization Method		L amortization bases are amortized over the amortization periods:
	·	e: 10 Years. n/Method Changes: 20 Years. anges: 30 Years.
	proportiona Actuarial A order to ali	blished prior to the valuation date are adjusted ally to match the Expected Unfunded Accrued Liability as of the valuation date, in gn prior year bases with the portion of the r UAAL associated with prior year sources.
Funding Method	Entry Age	Normal Actuarial Cost Method.
Low-Default-Risk Obligation Measure	and an inter annually, n is consister Municipal September Default-Ris	he Entry Age Normal Actuarial Cost Method rest rate of 4.87% per year compounded et of investment related expenses. This rate ht with the Yield to Maturity of the S&P Bond 20-Year High Grade Rate Index as of 30, 2023. All other assumptions for the Low- sk Obligation Measure are consistent with the as shown in this section unless otherwise

#### Normal Retirement Rates

For Members hired prior to October 1, 2011:

% Retiring During the Year			
Age	Rate		
50-54	0%		
55-58	17%		
59-60	25%		
61-62	17%		
63-64	25%		
65+	100%		
50-54 55-58 59-60 61-62 63-64	0% 17% 25% 17% 25%		

This assumption was covered and changed as a result of our August 4, 2017 Actuarial Experience Study. For Members hired after September 30, 2011, 100% retirement is assumed at the earlier of 1) Age 65 with 8 years of Credited Service, and 2) the completion of 33 years of Credited Service, regardless of Age. This assumption is reasonable, based on Plan provisions and historical experience.

#### Early Retirement Rates

For Members hired prior to October 1, 2011:

%	Retiring	During the	he	Year

Age	Rate
55	4.5%
56-58	9.0%
59	13.0%

This assumption was covered and changed as a result of our August 4, 2017 Actuarial Experience Study.

For Members hired after September 3, 2011, they are assumed to retire with an immediate subsidized benefit at the rate of 5% per year. This assumption was incorporated with the October 1, 2007 valuation as the result of a prior Experience Study.

% Terminating			
During the Year			
Service	Rate		
0-2	14.0%		
3-4	9.0%		
5-9	7.5%		
10-19	6.0%		
20+	2.5%		

This assumption was covered and changed as a result of our August 4, 2017 Actuarial Experience Study.

#### Termination Rates

### **Disability Rates**

Sample rates below:

% Becoming Disabled				
During t	the Year			
Age	Rate			
20	0.05%			
25	0.05%			
30	0.06%			
35	0.09%			
40	0.12%			
45	0.28%			
50	0.43%			

#### Actuarial Asset Method

All assets are valued at market value with an adjustment made to uniformly spread actuarial investment gains and losses (as measured by actual market value investment return against expected market value investment return) over a five-year period.

#### GLOSSARY

<u>Actuarial Value of Assets</u> is the asset value used in the valuation to determine contribution requirements. It represents the plan's Market Value of Assets (see below), with adjustments according to the plan's Actuarial Asset Method. These adjustments produce a "smoothed" value that is likely to be less volatile from year to year than the Market Value of Assets.

<u>Entry Age Normal Cost Method</u> - Under this method, the normal cost is the sum of the individual normal costs for all active participants. For an active participant, the normal cost is the participant's normal cost accrual rate, multiplied by the participant's current compensation.

(a) The normal cost accrual rate equals:

(i) the present value of future benefits for the participant, determined as of the participant's entry age, divided by

(ii) the present value of the compensation expected to be paid to the participant for each year of the participant's anticipated future service, determined as of the participant's entry age.

(b) In calculating the present value of future compensation, the salary scale is applied both retrospectively and prospectively to estimate compensation in years prior to and subsequent to the valuation year based on the compensation used for the valuation.

(c) The accrued liability is the sum of the individual accrued liabilities for all participants and beneficiaries. A participant's accrued liability equals the present value, at the participant's attained age, of future benefits less the present value at the participant's attained age of the individual normal costs payable in the future. A beneficiary's accrued liability equals the present value, at the beneficiary's attained age, of future benefits. The unfunded accrued liability equals the total accrued liability less the actuarial value of assets.

(d) Under this method, the entry age used for each active participant is the participant's age at the time he or she would have commenced participation if the plan had always been in existence under current terms, or the age as of which he or she first earns service credits for purposes of benefit accrual under the current terms of the plan.

<u>Market Value of Assets</u> is the fair market value of plan assets as of the valuation date. This amount may be adjusted to produce an Actuarial Value of Assets for plan funding purposes.

<u>Normal (Current Year's) Cost</u> is the current year's cost for benefits yet to be funded. Under the Entry Age Normal cost method, it is determined for each participant as the present value of future benefits, determined as of the Member's entry age, amortized as a level percentage of compensation over the anticipated number of years of participation, determined as of the entry age.

<u>Payroll Under Assumed Ret. Age</u> is the projected annual rate of pay for the fiscal year beginning on the valuation date of all covered Members, excluding any Members who are assumed to retire with 100% probability on the valuation date.

<u>Projected Annual Payroll</u> is the projected annual rate of pay for the fiscal year following the fiscal year beginning on the valuation date of all covered Members.

<u>Present Value of Benefits</u> is the single sum value on the valuation date of all future benefits to be paid to current plan participants.

<u>Total Annual Payroll</u> is the projected annual rate of pay for the fiscal year beginning on the valuation date of all covered Members.

<u>Total Required Contribution</u> is equal to the Normal Cost plus an amount sufficient to amortize the Unfunded Accrued Liability over no more than 30 years. The required amount is adjusted for interest according to the timing of contributions during the year.

<u>Unfunded Actuarial Accrued Liability (UAAL)</u> is the difference between the actuarial accrued liability (described above) and the Actuarial Value of Assets. Under the Entry Age Normal Actuarial Cost Method, an actuarial gain or loss, based on actual versus expected UAAL, is determined in conjunction with each valuation of the plan.

#### DISCUSSION OF RISK

ASOP No. 51, Assessment and Disclosure of Risk Associated with Measuring Pension Obligations and Determining Pension Plan Contributions, states that the actuary should identify risks that, in the actuary's professional judgment, may reasonably be anticipated to significantly affect the plan's future financial condition.

Throughout this report, actuarial results are determined using various actuarial assumptions. These results are based on the premise that all future plan experience will align with the plan's actuarial assumptions; however, there is no guarantee that actual plan experience will align with the plan's assumptions. It is possible that actual plan experience will differ from anticipated experience in an unfavorable manner that will negatively impact the plan's funded position.

Below are examples of ways in which plan experience can deviate from assumptions and the potential impact of that deviation. Typically, this results in an actuarial gain or loss representing the current-year financial impact on the plan's unfunded liability of the experience differing from assumptions; this gain or loss is amortized over a period of time determined by the plan's amortization method. When assumptions are selected that adequately reflect plan experience, gains and losses typically offset one another in the long term, resulting in a relatively low impact on the plan's contribution requirements associated with plan experience. When assumptions are too optimistic, losses can accumulate over time and the plan's amortization payment could potentially grow to an unmanageable level.

- <u>Investment Return</u>: When the rate of return on the Actuarial Value of Assets falls short of the assumption, this produces a loss representing assumed investment earnings that were not realized. Further, it is unlikely that the plan will experience a scenario that matches the assumed return in each year as capital markets can be volatile from year to year. Therefore, contribution amounts can vary in the future.
- <u>Salary Increases</u>: When a plan participant experiences a salary increase that was greater than assumed, this produces a loss representing the cost of an increase in anticipated plan benefits for the participant as compared to the previous year. The total gain or loss associated with salary increases for the plan is the sum of salary gains and losses for all active participants.
- <u>Demographic Assumptions</u>: Actuarial results take into account various potential events that could happen to a plan participant, such as retirement, termination, disability, and death. Each of these potential events is assigned a liability based on the likelihood of the event and the financial consequence of the event for the plan. Accordingly, actuarial liabilities reflect a blend of financial consequences associated with various possible outcomes (such as retirement at one of various possible ages). Once the outcome is known (e.g. the participant retires) the liability is adjusted to reflect the known outcome. This adjustment produces a gain or loss depending on whether the outcome was more or less favorable than other outcomes that could have occurred.

#### Impact of Plan Maturity on Risk

For newer pension plans, most of the participants and associated liabilities are related to active members who have not yet reached retirement age. As pension plans continue in operation and active members reach retirement ages, liabilities begin to shift from being primarily related to active members to being shared amongst active and retired members. Plan maturity is a measure of the extent to which this shift has occurred. It is important to understand that plan maturity can have an impact on risk tolerance and the overall risk characteristics of the plan. For example, closed plans with a large amount of retired liability do not have as long of a time horizon to recover from losses (such as losses on investments due to lower than expected investment returns) as plans where the majority of the liability is attributable to active members. For this reason, less tolerance for investment risk may be warranted for highly mature closed plans with a substantial inactive liability. Similarly, mature closed plans paying substantial retirement benefits resulting in a small positive or net negative cash flow can be more sensitive to near term investment volatility, particularly if the size of the fund is shrinking, which can result in less assets being available for investment in the market.

To assist with determining the maturity of the plan, we have provided some relevant metrics in the table following titled "Plan Maturity Measures and Other Risk Metrics". Highlights of this information are discussed below:

- The Support Ratio, determined as the ratio of active to inactive members, has decreased from 123.5% on October 1, 2013 to 118.3% on October 1, 2023, indicating that the plan has been maturing during the period.
- The Accrued Liability Ratio, determined as the ratio of the Inactive Accrued Liability, which is the liability associated with members who are no longer employed but are due a benefit from the plan, to the Total Accrued Liability, is 62.6%. With a plan of this maturity, losses due to lower than expected investment returns or demographic factors may result in larger increases in contribution requirements than would be needed for a less mature plan. Please note Chapter 112, Florida Statutes, requires that the plan sponsor contributes the minimum required contribution; thus, there is minimal solvency risk to the plan.
- The Funded Ratio, determined as the ratio of the Actuarial Value of Assets to the Total Accrued Liability, has increased from 70.9% on October 1, 2013 to 83.9% on October 1, 2023.
- The Net Cash Flow Ratio, determined as the ratio of the Net Cash Flow (contributions minus benefit payments and administrative expenses) to the Market Value of Assets, decreased from -2.2% on October 1, 2013 to -3.4% on October 1, 2023. The current Net Cash Flow Ratio of -3.4% indicates that contributions are not currently covering the plan's benefit payments and administrative expenses.

#### Low Default-Risk Obligation Measure

ASOP No. 4, Measuring Pension Obligations and Determining Pension Plan Costs or Contributions, was revised as of December 2021 to include a "low-default-risk obligation measure" (LDROM). This liability measure is consistent with the determination of the actuarial accrued liability shown on page 8 in terms of member data, plan provisions, and assumptions/methods, under the Entry Age Normal Cost Method, except that the interest rate is tied to low-default-risk fixed income securities. The S&P Municipal Bond 20 Year High Grade Rate Index (daily rate closest to, but not later than, the measurement date) was selected to represent a current market rate of low risk but longer-term investments that could be included in a low-risk asset portfolio. The interest rate used in this valuation was 4.87%, resulting in an LDROM of \$102,902,974. The LDROM should not be considered the "correct" liability measurement; it simply shows a possible outcome if the Board elected to hold a very low risk asset portfolio. The Board actually invests the pension plan's contributions in a diversified portfolio of stocks and bonds and other investments with the objective of maximizing investment returns at a reasonable level of risk. Consequently, the difference between the plan's Actuarial Accrued Liability disclosed earlier in this section and the LDROM can be thought of as representing the expected taxpayer savings from investing in the plan's diversified portfolio compared to investing only in high quality bonds.

The actuarial valuation reports the funded status and develops contributions based on the expected return of the plan's investment portfolio. If instead, the plan switched to investing exclusively in high quality bonds, the LDROM illustrates that reported funded status would be lower (which also implies that the Actuarially Determined Contributions would be higher), perhaps significantly. Unnecessarily high contribution requirements in the near term may not be affordable and could imperil plan sustainability and benefit security.

It is important to note that the actuary has identified the risks above as the most significant risks based on the characteristics of the plan and the nature of the project, however, it is not an exhaustive list of potential risks that could be considered. Additional advanced modeling, as well as the identification of additional risks, can be provided at the request of the audience addressed on page 2 of this report.

## PLAN MATURITY MEASURES AND OTHER RISK METRICS

	<u>10/1/2023</u>	10/1/2022	<u>10/1/2018</u>	10/1/2013
Support Ratio				
Total Actives Total Inactives <sup>1</sup> Actives / Inactives <sup>1</sup>	336 284 118.3%	325 284 114.4%	310 277 111.9%	305 247 123.5%
Asset Volatility Ratio				
Market Value of Assets (MVA) Total Annual Payroll MVA / Total Annual Payroll	65,979,408 22,787,941 289.5%	61,479,101 20,515,520 299.7%	59,892,801 17,343,516 345.3%	46,745,386 16,424,104 284.6%
Accrued Liability (AL) Ratio				
Inactive Accrued Liability Total Accrued Liability (EAN) Inactive AL / Total AL	51,597,858 82,376,286 62.6%	50,550,274 80,172,676 63.1%	43,460,333 69,529,874 62.5%	32,775,918 60,614,022 54.1%
Funded Ratio				
Actuarial Value of Assets (AVA) Total Accrued Liability (EAN) AVA / Total Accrued Liability (EAN)	69,124,734 82,376,286 83.9%	68,438,716 80,172,676 85.4%	57,679,493 69,529,874 83.0%	42,970,744 60,614,022 70.9%
Net Cash Flow Ratio				
Net Cash Flow <sup>2</sup> Market Value of Assets (MVA) Ratio	(2,238,651) 65,979,408 -3.4%	(2,075,123) 61,479,101 -3.4%	(2,143,138) 59,892,801 -3.6%	(1,019,535) 46,745,386 -2.2%

<sup>1</sup> Excludes terminated participants awaiting a refund of member contributions.

<sup>2</sup> Determined as total contributions minus benefit payments and administrative expenses.

### STATEMENT OF FIDUCIARY NET POSITION SEPTEMBER 30, 2023

ASSETS Cost and Cost Emission	COST VALUE	MARKET VALUE
Cash and Cash Equivalents: Money Market	904,218.00	904,218.00
Cash	96.45	96.45
Total Cash and Equivalents	904,314.45	904,314.45
Receivables:		
Member Contributions in Transit	31,904.02	31,904.02
City Contributions in Transit	558,635.27	558,635.27
Member Contribution prior year	1,065.53	1,065.53
Total Receivable	591,604.82	591,604.82
Investments:		
Fixed Income	11,129,133.73	10,706,265.08
Equities	33,917,536.22	41,538,944.25
Mutual Funds:		
Equity	6,722,771.71	6,808,332.65
Pooled/Common/Commingled Funds:		
Real Estate	4,795,701.24	5,429,947.01
Total Investments	56,565,142.90	64,483,488.99
Total Assets	58,061,062.17	65,979,408.26
<u>LIABILITIES</u>		
Total Liabilities	0.00	0.00
NET POSITION RESTRICTED FOR PENSIONS	58,061,062.17	65,979,408.26

### STATEMENT OF CHANGES IN FIDUCIARY NET POSITION FOR THE YEAR ENDED SEPTEMBER 30, 2023 Market Value Basis

### **ADDITIONS**

Contributions: Member		772,440.99	
City		2,720,813.04	
Total Contributions			3,493,254.03
Investment Income: Net Realized Gain (Loss) Unrealized Gain (Loss) Net Increase in Fair Value of Investments Interest & Dividends Less Investment Expense <sup>1</sup>	1,520,503.57 3,852,266.12	5,372,769.69 1,657,561.56 (291,373.10)	
Net Investment Income			6,738,958.15
Total Additions			10,232,212.18
<u>DEDUCTIONS</u> Distributions to Members: Benefit Payments Lump Sum DROP Distributions Refunds of Member Contributions		4,812,104.87 0.00 738,375.42	
Total Distributions			5,550,480.29
Administrative Expense			181,425.02
Total Deductions			5,731,905.31
Net Increase in Net Position			4,500,306.87
NET POSITION RESTRICTED FOR PENSION Beginning of the Year	IS		61,479,101.39
End of the Year			65,979,408.26

<sup>1</sup>Investment related expenses include investment advisory, custodial and performance monitoring fees.

# ACTUARIAL ASSET VALUATION

September 30, 2023

Actuarial Assets for funding purposes are developed by recognizing the total actuarial investment gain or loss for each Plan Year over a five year period. In the first year, 20% of the gain or loss is recognized. In the second year 40%, in the third year 60%, in the fourth year 80%, and in the fifth year 100% of the gain or loss is recognized. The actuarial investment gain or loss is defined as the actual return on investments minus the actuarial assumed investment return. Actuarial Assets shall not be less than 80% nor greater than 120% of Market Value of Assets.

Plan Year <u>Gains/Losses Not Yet Recognized</u> Amounts Not Yet Recognized by Valuation Year						
Ending	Gain/(Loss)	2023	2024	2025	2026	2027
09/30/2019	(2,164,113)	0	0	0	0	0
09/30/2020	(1,916,366)	(383,274)	0	0	0	0
09/30/2021	9,057,659	3,623,063	1,811,531	0	0	0
09/30/2022	(13,993,552)	(8,396,132)	(5,597,422)	(2,798,712)	0	0
09/30/2023	2,513,771	2,011,017	1,508,263	1,005,509	502,755	0
Total		(3,145,326)	(2,277,628)	(1,793,203)	502,755	0

Development of Investment Gain/Los	<u>S</u>
Market Value of Assets, including Prepaid Contributions, 09/30/2022	61,479,180
Contributions Less Benefit Payments & Admin Expenses	(2,238,730)
Expected Investment Earnings*	4,225,187
Actual Net Investment Earnings	6,738,958
2023 Actuarial Investment Gain/(Loss)	2,513,771

\*Expected Investment Earnings = 0.07 \* (61,479,180 - 0.5 \* 2,238,730)

Development of Actuarial Value of Ass	sets
(1) Market Value of Assets, 09/30/2023	65,979,408
(2) Gains/(Losses) Not Yet Recognized	(3,145,326)
(3) Actuarial Value of Assets, 09/30/2023, (1) - (2)	69,124,734
(4) Limited Actuarial Value of Assets, 09/30/2023	69,124,734
(A) 09/30/2022 Actuarial Assets, including Prepaid Contributions:	68,438,795
(I) Net Investment Income:	
1. Interest and Dividends	1,657,562
2. Realized Gain (Loss)	1,520,504
3. Unrealized Gain (Loss)	3,852,266
4. Change in Actuarial Value	(3,814,289)
5. Investment Expenses	(291,373)
Total	2,924,669
(B) 09/30/2023 Actuarial Assets:	69,124,734
Actuarial Assets Rate of Return = $2I/(A+B-I)$ :	4.34%
Market Value of Assets Rate of Return:	10.99%

Actuarial Gain/(Loss) due to Investment Return (Actuarial Asset Basis)	(1,787,691)
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#### CHANGES IN NET ASSETS AVAILABLE FOR BENEFITS SEPTEMBER 30, 2023 Actuarial Asset Basis

#### REVENUES

	KEVENUES	
Contributions: Member City	772,440.99 2,720,813.04	
Total Contributions		3,493,254.03
Earnings from Investments: Interest & Dividends Net Realized Gain (Loss) Unrealized Gain (Loss) Change in Actuarial Value	1,657,561.56 1,520,503.57 3,852,266.12 (3,814,289.00)	
Total Earnings and Investment Gains		3,216,042.25
Distributions to Members: Benefit Payments Lump Sum DROP Distributions Refunds of Member Contributions Total Distributions	EXPENDITURES 4,812,104.87 0.00 738,375.42	5,550,480.29
Expenses: Investment related <sup>1</sup> Administrative	291,373.10 181,425.02	
Total Expenses		472,798.12
Change in Net Assets for the Year		686,017.87
Net Assets Beginning of the Year		68,438,716.39
Net Assets End of the Year <sup>2</sup>		69,124,734.26

<sup>1</sup>Investment related expenses include investment advisory, custodial and performance monitoring fees. <sup>2</sup>Net Assets may be limited for actuarial consideration.

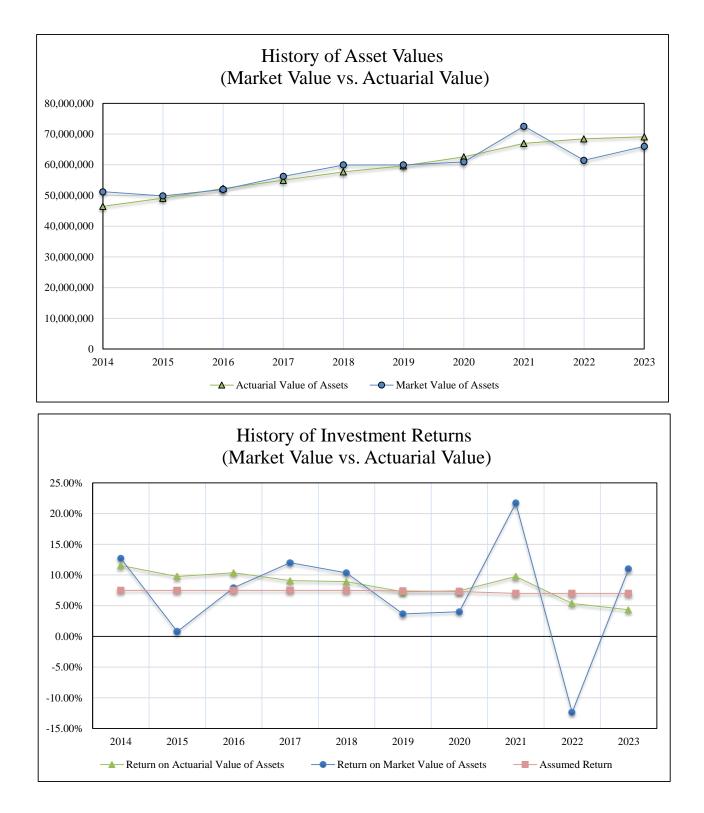
# DEFERRED RETIREMENT OPTION PLAN ACTIVITY October 1, 2022 to September 30, 2023

Beginning of the Year Balance	159,962.15
Plus Additions	58,926.96
Investment Return Earned	2,493.64
Less Distributions	0.00
End of the Year Balance	221,382.75

## CITY CONTRIBUTIONS IN EXCESS OF MINIMUM REQUIREMENT FOR THE FISCAL YEAR ENDED (FYE) SEPTEMBER 30, 2023

(1)	City Required Contribution Rate	11.36%
(2)	Pensionable Payroll Derived from Member Contributions	\$20,943,007.51
(3)	City Required Contribution (1) x (2)	2,379,125.65
(4)	Equals Required City Contribution for Fiscal 2023	2,379,125.65
(5)	Less 2022 Prepaid Contribution	0.00
(6)	Less Actual City Contributions	(2,720,813.04)
(7)	City Contributions in Excess of Minimum Requirement Applied to Reduce Unfunded Actuarial Accrued Liability as of September 30, 2023	(\$341,687.39)

# HISTORY OF ASSET VALUES AND INVESTMENT RETURNS



### STATISTICAL DATA

	10/1/2023	<u>10/1/2022</u>	<u>10/1/2021</u>	10/1/2020	
Actives - Hired before October 1, 2011					
Number	83	93	105	117	
Average Current Age	56.9	55.8	55.2	54.6	
Average Age at Employment	35.8	35.7	36.1	36.4	
Average Past Service	21.1	20.1	19.1	18.2	
Average Annual Salary	\$83,345	\$75,836	\$60,650	\$60,612	
Actives - Hired after September 30	) <u>, 2011</u>				
Number	253	232	215	203	
Average Current Age	45.1	45.2	44.5	43.7	
Average Age at Employment	40.6	41.0	40.0	39.5	
Average Past Service	4.5	4.2	4.5	4.2	
Average Annual Salary	\$62,728	\$58,029	\$52,340	\$51,863	
Service Retirees					
Number	233	232	233	226	
Average Current Age	73.4	73.2	72.8	72.5	
Average Annual Benefit	\$19,818	\$19,342	\$18,343	\$18,179	
DROP Retirees					
Number	1	1	1	1	
Average Current Age	66.9	65.9	64.9	63.9	
Average Annual Benefit	\$58,927	\$58,927	\$58,927	\$58,927	
Beneficiaries					
Number	23	23	20	20	
Average Current Age	71.4	73.7	75.7	75.5	
Average Annual Benefit	\$11,900	\$11,499	\$10,150	\$9,719	
Disability Retirees					
Number	1	1	1	1	
Average Current Age	74.2	73.2	72.2	71.2	
Average Annual Benefit	\$10,680	\$10,680	\$10,171	\$10,171	
Terminated Vested					
Number	219	188	135	113	
Average Current Age <sup>1</sup>	48.8	48.9	51.3	51.4	
Average Annual Benefit <sup>1</sup>	\$14,161	\$14,307	\$12,078	\$11,979	

<sup>1</sup> The Average Current Age and Average Annual Benefit exclude participants awaiting a refund of contributions.

### AGE AND SERVICE DISTRIBUTION

### PAST SERVICE

AGE	0	1	2	3	4	5-9	10-14	15-19	20-24	25-29	30+	Total
15 - 19	1											1
20 - 24	3	3	3		1							10
25 - 29	7	6	2		1	1						17
30 - 34	8	9	3			6	1					27
35 - 39	9	3	2	5	1	11	5	1				37
40 - 44	6	9	4	2	1	10	7	4	1			44
45 - 49	3		2		3	16	6	1	2	1		34
50 - 54	4	5	2	1	3	7	6	5	2	1		36
55 - 59	7	7	3	1	3	10	11	6	2	6	2	58
60 - 64	3	6	2	1		7	6	12	8	3	4	52
65+	1	2	1		1	5	1	4	3	1	1	20
Total	52	50	24	10	14	73	43	33	18	12	7	336

### VALUATION PARTICIPANT RECONCILIATION

### 1. Active lives

a. Number in prior valuation 10/1/2022	325
b. Terminations	
i. Vested (partial or full) with deferred annuity	(3)
ii. Vested in refund of member contributions only	(24)
iii. Refund of member contributions or full lump sum distribution	(16)
c. Deaths	
i. Beneficiary receiving benefits	(1)
ii. No future benefits payable	0
d. Disabled	0
e. Retired	(6)
f. DROP	<u>0</u>
g. Continuing participants	275
h. New entrants / Rehires	61
i. Total active life participants in valuation	336

## 2. Non-Active lives (including beneficiaries receiving benefits)

	Service Retirees, Vested Receiving <u>Benefits</u>	DROP <u>Benefits</u>	Receiving Death <u>Benefits</u>	Receiving Disability <u>Benefits</u>	Vested (Deferred <u>Annuity)</u>	Vested (Due <u>Refund)</u>	Total
a. Number prior valuation	232	1	23	1	27	161	445
Retired DROP	9				(3)		6 0
Vested (Deferred Annuity)					3		3
Vested (Due Refund)						24	24
Hired/Terminated in Same Year						18	18
Death, With Survivor			1				1
Death, No Survivor	(8)		(2)				(10)
Disabled							0
Refund of Contributions					(2)	(7)	(9)
Rehires						(3)	(3)
Expired Annuities							0
Data Corrections			1		1		2
b. Number current valuation	233	1	23	1	26	193	477

# SUMMARY OF CURRENT PLAN (Through Ordinance 2023-15083)

<u>Eligibility</u>	Full-time General Employees hired prior to 3/1/95 enter the Plan on employment. Those hired after 2/28/95 enter following 6 months of service.
Compensation	Base pay, including holiday, vacation, longevity, and sick pay, but excluding overtime and all other pay.
Final Average Compensation	Average of Compensation paid during the eight (8) highest consecutive years of service. The average cannot be less than the three-year average determined as of September 30, 2011.
Credited Service	Years and completed months of service as a General Employee. Service for which the member received a refund of contributions shall not be counted.
Normal Retirement	
Date	Earlier of 1) the attainment of age 60 and the completion of 5 years of service, or 2) the date when age plus service equals 85 (Rule of 85).
	For Members hired after September 30, 2011, the Normal Retirement Date is the earlier of 1) Age 65 with 8 years of Credited Service, or 2) the completion of 33 years of Credited Service, regardless of Age.
Benefit	The sum of the following:
	<ul> <li>a.) 2.5% of Final Average Compensation (using a three- year average, determined as of September 30, 2011) for each year of Credited Service as of September 30, 2011, plus</li> </ul>
	<ul> <li>b.) 1.6% of Final Average Compensation (using an eight-year average) for Credited Service after September 30, 2011.</li> </ul>
Form of Benefit	Life annuity, ceasing upon death (options available).

Date	The attainment of age 55 and the completion of 5 years of service. For Members hired after September 30, 2011, the Early Retirement Date is age 55 with 8 years of service.
Benefit	Determined as for Normal Retirement, reduced 3% per year for each year that the Early Retirement Date precedes age 60. The reduction is prorated monthly.
	For Members hired after September 30, 2011, the reduction is 5% per year, for each year that the Early Retirement Date precedes age 65. The reduction is prorated monthly.
Termination of Employment	
Members hired before October 1, 2011	
Less Than 5 Years	Return of member contributions with interest.
5 to10 Years,	
But Less Than Age 50	Return of member contributions with interest plus an amount equal to the accumulated contributions that would have existed had the member contributed at the rate contributed by the City.
10 or More Years or Upon Attaining Age 50 and 5 Years	Accrued monthly benefit payable at Normal or Early (reduced basis) Retirement Date, or return of member contributions with interest.
Members hired after September 30, 2011	
Less Than 8 Years	Return of member contributions with interest.
8 or More Years	The accrued benefit, payable at the Normal (unreduced), or Early (reduced) Retirement Date.
Pre-Retirement Death	
Less Than 5 Years and 6 Months	Return of member contributions with interest.
More than 5 Years and 6 Months	Return of member contributions with interest plus an amount equal to the accumulated contributions that would have existed had the member contributed at the rate contributed by the City.

# Deferred Retirement Option Plan

Eligibility	Non-union members who had 30 years of service in June, 2005.
Participation	Not to exceed 84 months.
Rate of Return	Actual net rate of investment return realized by the system from the short term investment fund or money market fund in which the DROP account is invested.
Form of Distribution	Cash lump sum at termination of employment.
<u>Contributions</u>	
Members	5.0% of Compensation. The contribution rate is 3% for Members hired after September 30, 2011.
City	Remaining amount necessary to fund the Normal Cost and amortize the Unfunded Actuarial Accrued Liability over not more than 30 years.
Board of Trustees	Two Council appointees, three City Manager appointees, one retiree of the Plan elected by the membership, and a seventh Member elected by the other 6 who is a City resident.