City of Starke General Employees' Retirement System

ACTUARIAL VALUATION AS OF OCTOBER 1, 2022

This Valuation Determines the Annual Contribution for the System Year October 1, 2023 through September 30, 2024 to be paid in System Year October 1, 2023 to September 30, 2024

October 9, 2023





City of Starke General Employees' Retirement System

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October 9, 2023

Mr. James Hughes
Finance Director
City of Starke General Employees' Retirement System
P.O. Box C – 209 N. Thompson Street
Starke, Florida 32091-1278

Dear James:

We are pleased to present our October 1, 2022 Actuarial Valuation Report for the City of Starke General Employees' Retirement System (System). The purpose of this report is to indicate appropriate contribution levels, monitor minimum funding requirements, comment on the actuarial stability of the System and to satisfy State and accounting requirements. Gabriel, Roeder, Smith & Company (GRS), as System actuary, is authorized to prepare an annual Actuarial Valuation under Section 78-262 of the System. This Report is prepared for and at the request of the Board of Trustees.

This Report consists of this cover letter, executive summary and risk assessment followed by detailed Tables I through XVIII, the State Required Exhibit on Table XIX and the Glossary on Table XX. The Tables contain basic System cost figures plus significant details on the benefits, liabilities and experience of the System. We suggest you thoroughly review the report at your convenience and contact us with any questions that may arise.

The findings in this report are based on data or other information through September 30, 2022. The valuation was based upon information furnished by the City concerning System benefits, plan provisions and active members, terminated members, retirees and beneficiaries. We received financial information as of September 30, 2022 concerning fund assets from the City.

We do not audit the Member census data and asset information that is provided to us; however, we perform certain reasonableness checks. The System is responsible for the accuracy of the data.

In our opinion the benefits provided for under the current System will be sufficiently funded through the payment of the amount as indicated in this and future Actuarial Valuation reports. This valuation assumed the continuing ability of the plan sponsor to make the contributions necessary to fund this plan. A determination regarding whether or not the plan sponsor is actually able to do so is outside our scope of expertise and was not performed. We will continue to update you on the future payment requirements for the System through our actuarial valuation reports. These reports will also continue to monitor emerging experience of the System.

Mr. James Hughes October 9, 2023 Page Two

The actuarial assumptions used in this Actuarial Valuation are as adopted by the Board of Trustees. The economic and non-prescribed demographic actuarial assumptions are based on the results of an Actuarial Experience Study for the period October 1, 2014 – September 30, 2019. The mortality assumptions are prescribed by statute. Each assumption represents an estimate of future System experience.

If all actuarial assumptions are met and if all future minimum required contributions are paid, System assets will be sufficient to pay all System benefits, future contributions are expected to remain relatively stable as a percent of payroll and the funded status is expected to improve. System minimum required contributions are determined in compliance with the requirements of the Florida Protection of Public Employee Retirement Benefits Act with normal cost determined as a level percent of covered payroll and a level percent amortization payment using a maximum amortization period of 30 years.

The Unfunded Actuarial Accrued Liability (UAAL) may not be appropriate for assessing the sufficiency of System assets to meet the estimated cost of settling benefit obligations but may be appropriate for assessing the need for or the amount of future contributions. The UAAL would be different if it reflected the market value of assets rather than the actuarial value of assets.

The GASB Net Pension Liability and System Fiduciary Net Position as a Percentage of Total Pension Liability may not be appropriate for assessing the sufficiency of System assets to meet the estimated cost of settling benefit obligations but may be appropriate for assessing the need for or the amount of future contributions.

This report should not be relied upon for any purpose other than the purpose described in the primary communication. Determinations of the financial results associated with the benefits described in this report in a manner other than the intended purpose may produce significantly different results.

This report was prepared using our proprietary valuation model and related software which in our professional judgment has the capability to provide results that are consistent with the purposes of the valuation and has no material limitations or known weaknesses. We performed tests to ensure that the model reasonably represents that which is intended to be modeled.

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

This report was prepared at the request of the Board and is intended for use by the Board and those designated or approved by the Board. This Report may be provided to parties other than the Board



Mr. James Hughes October 9, 2023 Page Three

only in its entirety and only with the permission of the Board. GRS is not responsible for unauthorized use of this report.

The signing actuaries are independent of the System sponsor.

The undersigned are Members of the American Academy of Actuaries and meet the qualification standards of the American Academy of Actuaries to render the actuarial opinions contained in this report. We are available to respond to any questions with regards to matters covered in this report.

Sincerely, Gabriel, Roeder, Smith & Company

Michelle Jones

Shelly L. Jones, A.S.A., E.A. Consultant and Actuary

Jennifer M. Borregard, E.A. Consultant and Actuary

Jennifer Borregard



EXECUTIVE SUMMARY

Retirement System Costs

Our Actuarial Valuation as of October 1, 2022 develops the required minimum Retirement System payment for fiscal year beginning **October 1, 2023** under the Florida Protection of Public Employee Retirement Benefits Act. The minimum payment consists of payment of annual normal costs including expenses and amortization of the components of the unfunded actuarial accrued liability over various periods as prescribed by law. The minimum payment for fiscal year ending September 30, 2024 is **\$406,106 (19.6%)**. The figure in parentheses is the System cost expressed as an estimated dollar amount based on projected covered annual payroll for fiscal year beginning October 1, 2023 (\$2,069,401).

This total cost is to be met by member contribution, member pick-up contributions and City contributions. We anticipate member contributions will be \$20,694 (1.0%) and member pick-up contribution will be \$103,470 (5.0%) for fiscal year ending September 30, 2024. This leaves a Base City requirement of \$281,942 (13.6%) for fiscal year ending September 30, 2024. The Base City contribution includes an interest adjustment.

Changes in Actuarial Assumptions, Methods and System Benefits

The System benefit provisions are unchanged from the Actuarial Impact Statement as of October 1, 2021 and are summarized on Table X.

The actuarial assumptions and methods remain unchanged from the October 1, 2021 Actuarial Valuation and are outlined on Table XI.

Comparison of October 1, 2021 and October 1, 2022 Valuation Results

Table II of our report provides information of a comparative nature. The left columns of the Table indicate the costs as calculated for the October 1, 2021 Actuarial Impact Statement. The right columns indicate the costs as calculated for October 1, 2022.

Comparing the left and right columns of Table II shows the effect of System experience during the year. The number of active participants <u>increased</u> by approximately 5% while covered payroll <u>increased</u> by approximately 26%. Total System membership <u>decreased</u> by approximately 1%. Total normal cost <u>increased</u> as a dollar amount but <u>decreased</u> as a percentage of covered payroll. Both Net Base City minimum funding requirement and the unfunded actuarial accrued liability <u>decreased</u> both as a percentage of covered payroll and as a dollar amount.

The value of vested accrued benefits exceed the System assets, resulting in a Vested Benefit Security Ratio (VBSR) of 84.2% which is a <u>decrease</u> from 95.5% as of the October 1, 2021 Actuarial Impact Statement. The VBSR is measured on a market value of assets basis.



System Experience

Table VII indicates net System experience resulted in an actuarial gain of \$192,318. This suggests actual overall experience was more favorable than expected.

Table XVII provides figures on recent System experience (salary, turnover and investment yield). Salary experience indicates actual salary increases were approximately 12.1%. Salary increases exceeded the assumption for salary increases of 6.3% and was generally an offsetting source of actuarial loss. Three, five and ten-year annual salary increases have averaged 8.8%, 9.8% and 7.7%, respectively.

Employee turnover this year was approximately 170% of assumed turnover and was generally a source of actuarial gain. Three, five and ten-year average annual turnover was approximately 110%, 120% and 120% of the assumed turnover, respectively.

Inactive mortality was an additional source of actuarial gain.

The smoothed actuarial value investment return of 5.02% was less than the 7.00% assumption for investment return. Smoothed actuarial value investment return was an additional offsetting source of actuarial loss during the year. The three, five and ten-year average annual smoothed actuarial value investment returns are 9.39%, 9.42% and 9.00%, respectively. The one, three, five and ten-year average annual returns based upon market value are -13.30%, 5.25%, 6.20% and 7.40%, respectively.

Conclusion and Recommendations

The Market Value of Assets is less than the Actuarial Value of Assets by \$1,021,519 as of the valuation date. This difference will be gradually recognized in the absence of future offsetting gains. In turn, the actuarially determined contribution rate will increase.

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



RISKS ASSOCIATED WITH MEASURING THE ACCRUED LIABILITIES AND ACTUARIALLY DETERMINED CONTRIBUTION

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

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

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

- 1. <u>Investment risk</u> actual investment returns may differ from expected returns;
- 2. <u>Asset / Liability mismatch</u> changes in asset values may not match changes in liabilities, thereby altering the gap between the accrued liability and assets and consequently altering the funded status and the actuarially determined contribution requirements;
- 3. <u>Contribution risk</u> actual contributions may differ from expected future contributions. For example, actual contributions may not be made in accordance with the System's funding policy or material changes may occur in the anticipated number of covered employees, covered payroll or other relevant contribution base;
- 4. <u>Salary and Payroll risk</u> actual salaries and total payroll may differ from expected, resulting in actual future accrued liability and the actuarially determined contributions differing from expected;
- 5. <u>Longevity risk</u> members may live longer or shorter than expected and receive pensions for a period of time other than assumed;
- 6. <u>Other demographic risks</u> members may terminate, retire or become disabled at times or with benefits other than assumed resulting in actual future accrued liability and the actuarially determined contributions differing from expected.

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

The actuarially determined contribution rate shown on page four may be considered as a minimum contribution rate that complies with the Board's funding policy. The timely receipt of the actuarially



determined contributions is critical to support the financial health of the System. Users of this report should be aware that contributions made at the actuarially determined rate do not necessarily guarantee benefit security.

System Maturity Measures

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

	<u>2021</u>	<u>2022</u>
Ratio of the market value of assets to payroll	7.54	5.04
Ratio of actuarial accrued liability to payroll	8.09	6.59
Ratio of actives to retirees and beneficiaries	0.76	0.83
Ratio of net cash flow to market value of assets	-6.9%	-2.9%
Duration of the actuarial accrued liability	9.88	9.70

Ratio of Market Value of Assets to Payroll

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

Ratio of Actuarial Accrued Liability to Payroll

The relationship between actuarial accrued liability and payroll is a useful indicator of the potential volatility of the actuarially determined contributions for a fully funded system. A funding policy that targets a funded ratio of 100% is expected to result in the ratio of assets to payroll and the ratio of liability to payroll converging over time.

The ratio of liability to payroll may also be used as a measure of sensitivity of the liability itself. For example, if the actuarial accrued liability is 2.5 times payroll, a change in liability 2% other than assumed would equal 5% of payroll. A higher (lower) or increasing (decreasing) level of this maturity measure generally indicates a higher (lower) or increasing (decreasing) volatility in liability (and also the actuarially determined contributions) as a percentage of payroll.

Ratio of Actives to Retirees and Beneficiaries

A young system with many active members and few retirees will have a high ratio of active to retirees. A mature open system may have close to the same number of actives to retirees resulting in a ratio near 1.0. A



super-mature or closed system may have significantly more retirees than actives resulting in a ratio below 1.0.

Ratio of Net Cash Flow to Market Value of Assets

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

Duration of Actuarial Accrued Liability

The duration of the actuarial accrued liability may be used to approximate the sensitivity to a 1% change in the assumed rate of return. For example, a duration of 10 indicates the liability would increase approximately 10% if the assumed rate of return were lowered 1%.

Additional Risk Assessment

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



Summary of Retirement System Costs as of October 1, 2022

		 Cost Data	% of Payroll
A.	Participant Data Summary (Table III)	<u> </u>	
	1. Active employees	44	N/A
	2. Terminated vested	2	N/A
	3. Receiving benefits (including DROPs)	53	N/A
	4. Annual payroll of active employees	\$ 1,989,809	100.0%
В.	Total Normal Costs		
	1. Age retirement benefits	\$ 90,958	4.6%
	2. Termination benefits	51,801	2.6%
	3. Death benefits	1,469	0.1%
	4. Disability benefits	6,235	0.3%
	5. Estimated expenses	 35,000	1.8%
	6. Total annual normal costs	\$ 185,463	9.3%
C.	Total Actuarial Accrued Liability		
	1. Age retirement benefits active employees	\$ 2,749,736	138.2%
	2. Termination benefits active employees	113,078	5.7%
	3. Death benefits active employees	31,716	1.6%
	4. Disability benefits active employees	49,457	2.5%
	5. Retired or terminated vested participants		
	receiving benefits including DROP participants 6. Terminated vested participants entitled to	8,953,871	450.0%
	future benefits	241,732	12.1%
	7. Deceased participants whose beneficiaries	211,732	12.170
	are receiving benefits	730,224	36.7%
	8. Disabled participants receiving benefits	165,486	8.3%
	9. Miscellaneous liability	82,319	4.1%
	10. Total actuarial accrued liability	\$ 13,117,619	659.2%
D.	Smoothed Actuarial Value of Assets (Table VI)	\$ 11,050,941	555.4%
E.	Unfunded Actuarial Accrued Liability (C-D)	\$ 2,066,678	103.9%



Summary of Retirement System Costs as of October 1, 2022

		 Cost Data	% of Payroll
F.	Minimum Required Contribution		
	1. Total normal cost	\$ 185,463	9.3%
	2. Amortization of unfunded liability	192,251	9.7%
	3. Interest adjustment	12,773	0.6%
	4. Total required contribution	\$ 390,487	19.6%
G.	Expected payroll of active employees for 2023-2024 year		
	(\$1,989,809 x 1.040)	\$ 2,069,401	104.0%
Н.	Contribution Sources (percent of expected 2023-2024 payroll)		
	1. Expected City		
	a. Base	\$ 281,942	13.6%
	b. Member <i>Pick-Up</i>	103,470	5.0%
	c. Total expected City	\$ 385,412	18.6%
	2. Expected Member	\$ 20,694	1.0%
I.	Actuarial Gain / (Loss) (Table VII)	\$ 192,318	9.7%
J.	Actuarial Present Value of Vested Accrued Benefits		
	1. Retired, terminated vested, beneficiaries and		
	disabled receiving benefits including DROP		
	participants	\$ 9,849,581	495.0%
	2. Terminated vested participants entitled to		
	future benefits and miscellaneous	324,051	16.3%
	3. Active participants entitled to future benefits	1,731,424	87.0%
	4. Total actuarial present value of vested		
	accrued benefits	\$ 11,905,056	598.3%
K.	Market Value of Assets (Table V)	\$ 10,029,422	504.0%
L.	Unfunded Actuarial Present Value of Vested		
	Accrued Benefits (J K., not less than zero)	\$ 1,875,634	94.3%
M.	Vested Benefit Security Ratio (K. ÷ J.)	84.2%	N/A



Comparison of Cost Data of October 1, 2021 and October 1, 2022 Valuations

Actuarial Impact Statement October 1 2021

		October 1, 2021		October 1, 2022		
		Cost	% of Annual		Cost	% of Annual
		 Data	Compensation		Data	Compensation
A.	Participants					
	1. Active employees	42	N/A		44	N/A
	2. Terminated vested	3	N/A		2	N/A
	Receiving benefits (including DROPs)	55	N/A		53	N/A
	4. Annual payroll of active employees	\$ 1,583,356	100.0%	\$	1,989,809	100.0%
	5. Projected annual payroll of active employees	\$ 1,646,690	104.0%	\$	2,069,401	104.0%
В.	Total Normal Costs	\$ 160,448	10.1%	\$	185,463	9.3%
C.	Total Actuarial Accrued Liability	\$ 13,425,904	847.9%	\$	13,117,619	659.2%
D.	Smoothed Actuarial Value of Assets	\$ 10,865,806	686.3%	\$	11,050,941	555.4%
E.	Unfunded Actuarial Accrued Liability	\$ 2,560,098	161.7%	\$	2,066,678	103.9%
F.	Net Base City Cost	\$ 313,327	19.0% 1	\$	281,942	13.6% 2
G.	Actuarial Gain / (Loss)	\$ 629,575	39.8%	\$	192,318	9.7%
Н.	Unfunded Actuarial Present Value of					
	Vested Accrued Benefits	\$ 558,685	35.3%	\$	1,875,634	94.3%
I.	Vested Benefit Security Ratio	95.5%	N/A		84.2%	N/A

¹ Percent of expected 2022-2023 covered payroll (\$1,646,690)



² Percent of expected 2023-2024 covered payroll (\$2,069,401)

Characteristics of Participants in Actuarial Valuation as of October 1, 2022

A. <u>Active System Participants Summary</u>

	1. Active participants fully vested	9
	2. Active participants partially vested	0
	3. Active participants non-vested	35
	4. Total active participants	 44
	5. Annual rate of pay of active participants	\$ 1,989,809
В.	Retired and Terminated Vested Participant Summary	
	1. Retired or terminated vested participants receiving	
	benefits including DROP participants	42
	2. Terminated vested participants entitled to	
	future benefits	2
	3. Deceased participants whose beneficiaries are	
	receiving benefits	9
	4. Disabled participants receiving benefits	2
C.	Projected Annual Retirement Benefits	
	1. Retired or terminated vested receiving benefits including	
	DROP participants	\$ 903,902
	2. Terminated vested entitled to future benefits	21,956
	3. Beneficiaries of deceased participants	107,464
	4. Disabled participants	16,934



Statement of System Assets as of October 1, 2022

		<u>M</u>	arket Value
A.	<u>Cash</u>	\$	343,896
В.	General Investments		
	1. Cash Equivalents	\$	227,561
	2. U.S. Government Securities	\$	99,960
	3. Corporate Bonds	\$	1,951,097
	4. Common Stocks	\$	7,279,389
	5. Treasuries	\$	140,009
C.	<u>Receivables</u>		
	1. Accrued Interest	\$	14,278
	2. City Contribution Receivable	\$	(173)
	3. Other Receivables	\$	0
D.	<u>Payable</u>		
	1. Account Payable	\$	3,625
	2. Due to Other Funds	\$	22,970
E.	<u>Total System Assets</u> (A + B + C - D)	\$	10,029,422



Reconciliation of System Assets

A.	Total Market Value of Assets as of October 1, 2021		\$ 11,946,116
В.	Receipts During Period		
	1. Contributions		
	a. Member	\$ 20,941	
	b. Member (picked up by City)	104,670	
	c. City	531,720	
	d. Total	\$ 657,331	
	2. Investment Income		
	a. Interest, dividends and other	\$ 157,010	
	b. Investment expenses	(63,520)	
	c. Net investment income	\$ 93,490	
	3. Net realized gains / (losses)	(993,354)	
	4. Net unrealized gains / (losses)	 (665,578)	
	5. Total receipts during period		\$ (908,111)
C.	Disbursements During Period		
	1. Pension payments	\$ 958,794	
	2. DROP distributions	0	
	3. Contribution refunds	11,907	
	4. Administrative expenses	 37,882	
	5. Total disbursements during period		\$ 1,008,583
D.	Total Market Value of Assets as of September 30, 2022		\$ 10,029,422
E.	Reconciliation of DROP Account Balances		
	1. DROP account balances as of October 1, 2021	\$ 44,548	
	2. Benefit payments into DROP accounts during year	11,947	
	3. Investment gains / (losses) during year	2,086	
	4. Distributions from DROP accounts during year	0	
	5. DROP account balances as of September 30, 2022		\$ 58,581



Development of Smoothed Actuarial Value of Assets as of September 30

		<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>2025</u>
A.	Preliminary total smoothed actuarial value from prior year	\$ 10,433,922	\$ 10,865,806	\$ 11,050,941		
В.	Market value beginning of year	10,952,168	11,946,116	10,029,422		
C.	Market value end of year	11,946,116	10,029,422			
D.	Non-investment net cash flow	(752,130)	(351,252)			
E.	Investment return					
	1. Total market value return: C B D.	1,746,078	(1,565,442)			
	2. Amount for immediate recognition (7.0%)	704,050	748,313			
	3. Amount for phased-in recognition: E.1 E.2.	1,042,028	(2,313,755)			
F.	Phased-in recognition of investment return					
	1. Current year: 25% of E.3.	260,507	(578,439)			
	2. First prior year	192,785	260,507	(578,439)		
	3. Second prior year	(86,778)	192,785	260,507	(578,439)	
	4. Third prior year	113,450	(86,779)	192,783	260,507	(578,438)
	5. Total phased-in recognition of investment return	479,964	(211,926)	(125,149)	(317,932)	(578,438)
G.	Total smoothed actuarial value end of year					
	 Preliminary total smoothed actuarial value end of year: 					
	A. + D. + E.2. + F.5.	10,865,806	11,050,941			
	2. Upper corridor limit: 120% of C.	14,335,339	12,035,306			
	3. Lower corridor limit: 80% of C.	9,556,893	8,023,538			
	4. Total smoothed actuarial value end of year:					
	G.1., not more than G.2., nor less than G.3.	10,865,806	11,050,941			
Н.	Difference between total market value and total smoothed actuarial value	1,080,310	(1,021,519)			
I.	Smoothed actuarial value rate of return	11.77%	5.02%			
J.	Market value rate of return	16.51%	(13.30%)			



Actuarial Gain / (Loss) for System Year Ended September 30, 2022

A. <u>Derivation of Actuarial Gain / (Loss)</u>

 City base normal cost previous actuarial impact statement Unfunded actuarial accrued liability previous actuarial impact 	•	65,446 2,560,098
3. City base contributions previous year		531,720
4. Interest on:		
(a) City base normal cost	\$	4,581
(b) Unfunded actuarial accrued liability	·	179,207
(c) City base contributions		18,616
(d) Net total: (a) + (b) - (c)	\$	165,172
5. Expected unfunded actuarial accrued liability current year:		
(1. + 2 3. + 4.)	\$	2,258,996
6. Actual unfunded actuarial accrued liability current year		2,066,678
7. Actuarial gain / (loss): (5 6.)	\$	192,318
B. Approximate Portion of Gain (Loss)		
due to Investments		
1. Smoothed actuarial value of assets previous year	\$	10,865,806
2. Net contributions during period		657,331
3. Benefits and admin expenses during period		1,008,583
4. Expected net appreciation for period		748,313
5. Expected smoothed actuarial value of assets current year:		
(1. + 2 3. + 4.)	\$	11,262,867
6. Actual smoothed actuarial value of assets current year	\$ \$	11,050,941
7. Approximate gain / (loss) due to investments: (6 5.)	\$	(211,926)
C. Approximate Portion of Gain / (Loss)		
due to Liabilities: A B.	\$	404,244



Amortization of Unfunded Actuarial Accrued Liability

A. Actuarial Accrued Liability Remaining Unfunded

	Unfunded		Am	ortization
<u>Date</u>	<u>Liability</u>		<u>Pa</u>	<u>ayment</u>
October 1, 2022	\$	2,066,678	\$	192,251
October 1, 2023	\$	2,005,637	\$	199,950
October 1, 2024	\$	1,932,085	\$	202,714
October 1, 2025	\$	1,850,427	\$	208,943
October 1, 2026	\$	1,756,388	\$	208,932
October 1, 2052	\$	0	\$	0

B. <u>Covered Payroll History</u>

	Covered	Annual
<u>Date</u>	Payroll *	<u>Increase</u>
	•	
October 1, 2022	\$ 1,989,809	25.7%
October 1, 2021	\$ 1,583,356	7.2%
October 1, 2020	\$ 1,477,410	1.2%
October 1, 2019	\$ 1,460,496	40.1%
October 1, 2018	\$ 1,042,789	4.7%
October 1, 2017	\$ 995,886	5.2%
October 1, 2016	\$ 947,085	(0.1%)
October 1, 2015	\$ 948,129	13.6%
October 1, 2014	\$ 834,933	3.1%
October 1, 2013	\$ 809,764	(5.0%)
October 1, 2012	\$ 852,072	N/A
Ten-Year Average Annual Increase		8.9%

^{*} Excludes DROP payroll



I.	Number of System Members a. Receiving benefits including DROPs b. Terminated due deferred benefits c. Active System members d. Total		Actuarial Valuation 0/01/2021 55 3 42 100		Actuarial Impact Statement .0/01/2021 55 3 42 100		53 2 44 99
II.	Financial Accounting Standards Board Allocation As of October 1, 2022						
	 A. Statement of Accumulated system Benefits 1. Actuarial present value of accumulated vested System. a. Participants currently receiving benefits including DROP participants b. Other participants c. Total 2. Actuarial present value of accumulated non-vested System benefits 3. Total actuarial present value of accumulated System benefits 	\$ \$ \$ \$	9,958,731 1,924,589 11,883,320 171,237	\$ \$	10,580,212 1,924,589 12,504,801 171,237 12,676,038	\$	9,849,581 2,055,475 11,905,056 352,487
	 B. Statement of Change in Accumulated System Benefits Actuarial present value of accumulated System be as of October 1, 2021 Increase (decrease) during year attributable to: a. System amendment b. Change in actuarial assumptions c. Benefits paid including refunds d. Other, including benefits accumulated, increase due to decrease in the discount period e. Net increase 3. Actuarial present value of accumulated System be as of October 1, 2022 	se for i	nterest			\$ \$	12,054,557 621,481 0 (970,701) 552,206 202,986 12,257,543
	 C. Significant Matters Affecting Calculations 1. Assumed rate of return used in determining actual present values 2. Change in System provisions 3. Change in actuarial assumptions 	arial				See Ta	7.00% able X, Item O. None.



III. Net Pension Liability and Related Ratios (GASB No. 67 & No. 68)

		_										Projected
	Measurement date	 9/30/2014	 9/30/2015	9/30/2016	9/30/2017	9/30/2018	 9/30/2019	 9/30/2020	9/30/2021	 9/30/2022	9	9/30/2023 *
Α	Total Pension Liability (TPL)											
	Service Cost	\$ 81,824	\$ 80,417	\$ 80,638	\$ 77,269	\$ 75,346	\$ 77,857	\$ 107,291	\$ 119,388	\$ 126,448	\$	150,463
	Interest	919,179	922,364	968,718	965,027	943,073	903,186	900,994	886,528	871,187		890,920
	Benefit Changes	0	0	134,185	0	0	0	0	0	0		664,985
	Difference Between Actual and Expected Experience	(103,148)	(120,675)	77,226	(11,730)	92,402	(195,751)	144,833	62,607	(130,480)		(377,272)
	Assumption Changes	0	0	694,526	(3,216)	0	0	(192,720)	683,365	0		0
	Benefit Payments, including											
	Refunds of Member Contributions	 (873,327)	(813,053)	(979,794)	(1,187,543)	 (1,669,630)	 (1,000,790)	(986,901)	(1,233,370)	(970,701)		(1,081,310)
	Net Change in Total Pension Liability	\$ 24,528	\$ 69,053	\$ 975,499	\$ (160,193)	\$ (558,809)	\$ (215,498)	\$ (26,503)	\$ 518,518	\$ (103,546)	\$	247,786
	Total Pension Liability (TPL) - (beginning of year)	 12,306,857	12,331,385	12,400,438	13,375,937	 13,215,744	 12,656,935	12,441,437	12,414,934	12,933,452		12,829,906
	Total Pension Liability (TPL) - (end of year)	\$ 12,331,385	\$ 12,400,438	\$ 13,375,937	\$ 13,215,744	\$ 12,656,935	\$ 12,441,437	\$ 12,414,934	\$ 12,933,452	\$ 12,829,906	\$	13,077,692
В	System Fiduciary Net Position											
	Contributions - City	\$ 725,572	\$ 511,983	\$ 434,152	\$ 533,934	\$ 601,642	\$ 676,062	\$ 668,747	\$ 416,242	\$ 531,720	\$	313,327
	Contributions - Member	8,767	9,377	9,969	10,906	17,475	14,173	15,776	18,156	20,941		19,898
	Contributions - Member (picked up by City)	43,710	46,885	49,844	54,532	58,698	70,864	78,876	78,045	104,670		99,490
	Net Investment Income	1,040,361	(485,656)	1,007,125	1,303,328	1,109,427	313,459	1,481,683	1,746,078	(1,565,442)		678,134
	Benefit Payments, including											
	Refunds of Member Contributions	(873,327)	(813,053)	(979,794)	(1,187,543)	(1,669,630)	(1,000,790)	(986,901)	(1,233,370)	(970,701)		(1,081,310)
	Administrative Expenses	(32,236)	(46,487)	(52,968)	(28,272)	(60,758)	(35,352)	(36,489)	(31,203)	(37,882)		(35,000)
	Other	0	0	0	0	0	0	0	0	0		0
	Net Change in System Fiduciary Net Position	\$ 912,847	\$ (776,951)	\$ 468,328	\$ 686,885	\$ 56,854	\$ 38,416	\$ 1,221,692	\$ 993,948	\$ (1,916,694)	\$	(5,461)
	System Fiduciary Net Position - (beginning of year)	8,344,097	9,256,944	8,479,993	8,948,321	9,635,206	9,692,060	9,730,476	10,952,168	11,946,116		10,029,422
	System Fiduciary Net Position - (end of year)	\$ 9,256,944	\$ 8,479,993	\$ 8,948,321	\$ 9,635,206	\$ 9,692,060	\$ 9,730,476	\$ 10,952,168	\$ 11,946,116	\$ 10,029,422	\$	10,023,961
C	Net Pension Liability (NPL) - (end of year): (A) - (B)	\$ 3,074,441	\$ 3,920,445	\$ 4,427,616	\$ 3,580,538	\$ 2,964,875	\$ 2,710,961	\$ 1,462,766	\$ 987,336	\$ 2,800,484	\$	3,053,731
D	System Fiduciary Net Position as a Percentage of											
	TPL: (B) / (A)	75.07 %	68.38 %	66.90 %	72.91 %	76.58 %	78.21 %	88.22 %	92.37 %	78.17 %		76.65 %
Ε.	Covered Employee Payroll **	\$ 874,183	\$ 936,706	\$ 996,866	\$ 1,090,634	\$ 1,173,969	\$ 1,417,282	\$ 1,577,549	\$ 1,602,219	\$ 2,170,227	\$	1,989,809
F.	NPL as a Percentage of Covered Employee Payroll (C) / (E)	351.69 %	418.54 %	444.15 %	328.30 %	252.55 %	191.28 %	92.72 %	61.62 %	129.04 %		153.47 %
G	. <u>Notes to Schedule:</u> Valuation Date	10/1/2013	10/1/2014	10/1/2015	10/1/2016	10/1/2017	10/1/2018	10/1/2019	10/1/2020	10/1/2021		10/1/2022
	Reporting Date (GASB No. 68)	9/30/2015	9/30/2016	9/30/2017	9/30/2018	9/30/2019	9/30/2020	9/30/2021	9/30/2022	9/30/2023		9/30/2024

Update procedures used to roll forward TPL excluding DROP account balances to the measurement dates - actual DROP account balances as of measurement dates included in TPL.

See Table IX, Item V. for a history of benefit and assumption changes through measurement date September 30, 2021. No System provision and assumptions changes for measurement date September 30, 2022. A monthly benefit increase of \$100 for retirees and no assumption changes for measurement date September 30, 2023.



^{*} Projected - actual amounts will be available after fiscal year end.

^{**} Reported payroll on which contributions to the System are based as provided under GASB No. 82.

IV. Schedule of Employer Contributions (GASB No. 67 & No. 68)

Fiscal Year End 9/30	De	tuarially termined ntribution	Co	Actual ontribution		ontribution Deficiency (Excess)	Covered Payroll ^{1,2}	Actual Contribution as a % of Covered Payroll		
2013 2014 2015 2016 2017	\$	\$ 439,741 525,384 494,285 434,152 481,994		\$ 600,186 725,572 511,983 434,152 533,934		(160,445) (200,188) (17,698) 0 (51,940)	\$ 852,072 874,183 936,706 996,866 1,090,634	70.44% 83.00% 54.66% 43.55% 48.96%		
2018 2019 2020 2021 2022		485,783 474,388 439,798 372,610 370,196		601,642 676,062 668,747 416,242 531,720		(115,859) (201,674) (228,949) (43,632) (161,524)	1,173,969 1,417,282 1,577,549 1,602,219 2,170,227	51.25% 47.70% 42.39% 25.98% 24.50%		
2023 ³		313,327		313,327		0	1,989,809	15.75%		

¹ Projected prior to fiscal year ended September 30, 2014



² Reported payroll on which contributions to the System are based as provided under GASB No. 82

³ Projected - actual amounts will be available after fiscal year end

V. Notes to Schedule of Contributions (GASB No. 67 & No. 68)

Valuation Date: Actuarially determined contributions are calculated as of October 1st - two

year(s) prior the fiscal year end in which contributions are reported.

Methods and Assumptions Used to Determine Contribution Rates for Fiscal Year Ended September 30, 2022:

Actuarial Cost Method Entry Age

Amortization Method Level Percentage of Pay, Closed

Amortization Period 30 years

Asset Valuation Method 4-year smoothed market

Inflation 2.50%

Salary Increases 7.00% - 6.00%

Investment Rate of Return 7.00%

Payroll Growth Assumption 4.0% per annum - not greater than historical 10-year average (0.4%) -

minimum 0.0%

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

condition

Mortality For healthy participants during employment, PUB-2010 Headcount Weighted

General Below Median Employee Mortality Table, separate rates for males and females, set back 1 year for males, with fully generational mortality improvements projected to each future decrement date with Scale MP-2018.

For healthy participants post employment, PUB-2010 Headcount Weighted General Below Median Healthy Retiree Mortality Table, separate rates for males and females, set back 1 year for males, with fully generational mortality improvements projected to each future decrement date with Scale

MP-2018.

For disabled participants, PUB-2010 Headcount Weighted General Disabled Retiree Mortality Table, separate rates for males and females, both set

forward 3 years, without projected mortality improvements.

Other Information:

Benefit Changes

2015: Ad hoc COLA adjustment for retirees, disableds, beneficiaries and DROPs who had been receiving benefits for at least ten (10) years effective January 1, 2016. 2012: For General Employees hired on or after October 1, 2012 - Normal Retirement eligibility updated to the earlier of (a) attainment of age 65 with completion of 10 years of Credited Service or (b) completion of 35 years of Credited Service, Early Retirement eligibility updated to completion of 30 years of Credited Service, Early Retirement reduction factor updated to 6.0% for each year that Early Retirement precedes Normal Retirement date, Final Average Salary updated to the highest 5 consecutive years out of last 10, benefit multiplier updated to 1.60% and deferred benefits commence upon attainment of age 65.



V. Notes to Schedule of Contributions (GASB No. 67 & No. 68) (cont'd)

Other Information (cont'd):

Benefit Changes (cont'd)

For General Employees hired prior to October 1, 2012 and not eligible for Normal Retirement as of January 31, 2013 - Early Retirement benefits accrued after January 31, 2013 reduced by 6.00% for each year that Early Retirement precedes Normal Retirement date and Final Average Salary updated to the highest 5 consecutive years out of last 10 (not less than the highest 3 consecutive years of last 10 as of January 31, 2013).

Effective February 1, 2013, General Employees and Elected Officials not eligible for Normal Retirement as of January 31, 2013 will contribute 1.00% of pay. Members who enter the DROP on or after February 1, 2013, benefits will be accumulated with interest in an amount equal to 50% of the net investment return for the System for the preceding fiscal year up to a maximum of 4.00% and Members will be assessed administrative fees.

Assumption Changes

2021: Investment return, withdrawal rates, salary increase factors, payroll growth and retirement rates assumptions were updated. 2019: Mortality assumption were updated. 2016: Per statute, pre-retirement mortality assumption updated. 2015: Mortality rates, investment return, withdrawal rates, salary increase factors and retirement rates were updated. 2012: Administrative expenses updated to average of the preceding three fiscal years.



VI. Discount Rate (GASB No. 67 & No. 68)

A discount rate of 7.0% was used to measure the TPL effective for measurement date September 30, 2021. This discount rate was based on the expected rate of return on System investments of 7.0%. The projection of cash flows used to determine this discount rate assumed member contributions will be made at the current member contribution rate and employer contributions will be made at rates equal to the difference between actuarially determined contribution rates and the member contribution rate. Based on these assumptions, the System's fiduciary net position was projected to be available to make all projected future expected benefit payments of current System members. Therefore, the long-term expected rate of return on System investments was applied to all periods of projected benefit payments to determine the TPL.

VII. Sensitivity of the NPL to the Discount Rate Assumption (GASB No. 67 & No. 68)

Measurement date: September 30, 2022

			Current					
	19	6 Decrease	Dis	scount Rate	1% Increase			
Discount Rate		6.0%		7.0%		8.0%		
NPL	\$	4,039,269	\$	2,800,484	\$	1,746,851		

Measurement date: September 30, 2023 *

	1%	Decrease	Disc	count Rate	1% Increase			
Discount Rate		6.0%		7.0%		8.0%		
NPL	\$	4,301,940	\$	3,053,731	\$	1,991,331		

^{*} Projected - actual amounts will be available after fiscal year end.



VIII. <u>Pension Expense and Deferred Outflows of Resources and Deferred Inflows of Resources Related to Pensions - Reporting Date (GASB No. 68)</u>

Pension Expense for Fiscal Year Ending September 30, 2023

\$ 451,625

Summary of Outstanding Deferred Inflows and Outflows of Resources as of September 30, 2023

			ed Inflows sources
	44,362		73,750
	32,541		55,062
	1,084,017		0
\$	1,160,920	\$	128,812
Recognize	d after the	\$	313,327
	of Re	,	of Resources of Resources 44,362 32,541 1,084,017 \$ 1,160,920 \$

Summary of Deferred Outflows and Inflows of Resources that will be Recognized in Pension Expense in Future Years.

Year Ending 30-Sep	Amount
2024	\$ 172,413
2025	105,095
2026	276,724
2027	477,876
2028	0
Thereafter	0



The following information is not required to be disclosed but is provided for informational purposes.

IX. Components of Pension Expense (GASB No. 68)

Measurement Date	9	/30/2014	9	/30/2015	9,	/30/2016	9,	/30/2017	9	/30/2018	9,	/30/2019	9	/30/2020	9,	/30/2021	9,	/30/2022	rojected 30/2023 *
Service Cost	\$	81,824	\$	80,417	\$	80,638	\$	77,269	\$	75,346	\$	77,857	\$	107,291	\$	119,388	\$	126,448	\$ 150,463
Interest on Total Pension Liability		919,179		922,364		968,718		965,027		943,073		903,186		900,994		886,528		871,187	890,920
Current-Period Benefit Changes		0		0		134,185		0		0		0		0		0		0	664,985
Contributions - Member		(52,477)		(56,262)		(59,813)		(65,438)		(76,173)		(85,037)		(94,652)		(96,201)		(125,611)	(119,388)
Projected Earnings on System Investments		(641,726)		(706,125)		(615,795)		(648,007)		(683,169)		(716,590)		(720,036)		(740,327)		(823,934)	(678,134)
Administrative Expenses		32,236		46,487		52,968		28,272		60,758		35,352		36,489		31,203		37,882	35,000
Other Changes in System Fiduciary Net Position	ı	0		0		0		0		0		0		0		0		0	0
Recognition of Beginning Deferred Outflows / (Inflows) due to Liabilities		(27,144)		(58,901)		182,271		183,028		236,764		17,719		(38,181)		307,711		245,881	(196,641)
Recognition of Beginning Deferred Outflows / (Inflows) due to Assets		(79,727)		158,629		80,363		(50,701)		(135,953)		24,401		(366,285)		(489,170)		119,772	 205,023
Total Pension Expense	\$	232,165	\$	386,609	\$	823,535	\$	489,450	\$	420,646	\$	256,888	\$	(174,380)	\$	19,132	\$	451,625	\$ 952,228

^{*} Projected - actual amounts will be available after measurement date



The following information is not required to be disclosed but is provided for informational purposes.

X. Recognition of Deferred Outflows and (Inflows) due to Liabilities - Measurement Date (GASB No. 68)

Recognition of Deferred Outflows due to Differences Between Actual and Expected Experience on Liabilities

				Remaining				
			Initial	Recognition	Re	cognition		
			Recognition	Period as of	An	nount for		Balance as of
Established	Init	tial Balance	Period	9/30/2022	202	21 / 2022	-	9/30/2022
2018 / 2019	\$	0	3.8	0.0	\$	0	\$	0
2019 / 2020	\$	144,833	4.2	1.2	\$	34,484	\$	41,381
2020 / 2021	\$	62,607	2.1	0.1	\$	29,813	\$	2,981
2021 / 2022	\$	0	2.3	1.3	\$	0	\$	0
				TOTAL	\$	64,297	\$	44,362

Recognition of Deferred (Inflows) due to Differences Between Actual and Expected Experience on Liabilities

					Remaining			
				Initial	Recognition	Re	ecognition	
				Recognition	Period as of	Ar	nount for	Balance as of
_	Established	Init	tial Balance	Period	9/30/2022	20	21 / 2022	9/30/2022
	2018 / 2019	\$	(195,751)	3.8	0.0	\$	(41,212)	\$ 0
	2019 / 2020	\$	0	4.2	1.2	\$	0	\$ 0
	2020 / 2021	\$	0	2.1	0.1	\$	0	\$ 0
	2021 / 2022	\$	(130,480)	2.3	1.3	\$	(56,730)	\$ (73,750)
					TOTAL	\$	(97,942)	\$ (73,750)

Recognition of Deferred Outflows due to Changes of Assumptions or Other Inputs on Liabilities

				Remaining			
			Initial	Recognition	Re	ecognition	
			Recognition	Period as of	Ar	mount for	Balance as of
Established	Init	tial Balance	Period	9/30/2022	20	21 / 2022	9/30/2022
2018 / 2019	\$	0	3.8	0.0	\$	0	\$ 0
2019 / 2020	\$	0	4.2	1.2	\$	0	\$ 0
2020 / 2021	\$	683,365	2.1	0.1	\$	325,412	\$ 32,541
2021 / 2022	\$	0	2.3	1.3	\$	0	\$ 0
				TOTAL	\$	325,412	\$ 32,541



The following information is not required to be disclosed but is provided for informational purposes.

X. Recognition of Deferred Outflows and (Inflows) due to Liabilities - Measurement Date (GASB No. 68) (cont'd)

Recognition of Deferred (Inflows) due to Changes of Assumptions or Other Inputs on Liabilities

					Remaining			
				Initial	Recognition	Re	cognition	
				Recognition	Period as of	An	nount for	Balance as of
_	Established	Init	tial Balance	Period	9/30/2022	20	21 / 2022	 9/30/2022
	2018 / 2019	\$	0	3.8	0.0	\$	0	\$ 0
	2019 / 2020	\$	(192,720)	4.2	1.2	\$	(45,886)	\$ (55,062)
	2020 / 2021	\$	0	2.1	0.1	\$	0	\$ 0
	2021 / 2022	\$	0	2.3	1.3	\$	0	\$ 0
					TOTAL	\$	(45,886)	\$ (55,062)

XI. Recognition of Deferred Outflows and (Inflows) due to Assets - Measurement Date (GASB No. 68)

Recognition of Deferred Outflows / (Inflows) due to Difference Between Projected and Actual Earnings on Pension Plan Investments

					Remaining			
				Initial	Recognition	Re	ecognition	
				Recognition	Period as of	Ar	mount for	Balance as of
	Established	In	itial Balance	Period	9/30/2022	20	21 / 2022	9/30/2022
_			-					
	2017 / 2018	\$	(426,258)	5	0	\$	(85,250)	\$ 0
	2018 / 2019	\$	403,131	5	1	\$	80,626	\$ 80,627
	2019 / 2020	\$	(761,647)	5	2	\$	(152,329)	\$ (304,660)
	2020 / 2021	\$	(1,005,751)	5	3	\$	(201,150)	\$ (603,451)
	2021 / 2022	\$	2,389,376	5	4	\$	477,875	\$ 1,911,501
					TOTAL	\$	119,772	\$ 1,084,017



A. Normal Retirement:

1. Eligibility:

For General Employees hired prior to October 1, 2012 and all Elected Officials the earlier of:

- (a) Attainment of age 60 with completion of 10 years of Credited Service (8 years of Credited Service for Elected Officials).
- (b) Completion of 30 years of Credited Service.

For General Employees hired on or after October 1, 2012 the earlier of:

- (a) Attainment of age 65 with completion of 10 years of Credited Service.
- (b) Completion of 35 years of Credited Service.

2. Mandatory Retirement Age:

Age 65. Extensions granted with employer consent.

3. Amount of Pension:

Elected Officials: Total Credited Service times 3.00% of Final Average Salary. Maximum 100% of Final Average Salary.

General Employees hired prior to October 1, 2012: Total Credited Service times 2.50% of Final Average Salary. Maximum 100% of Final Average Salary.

General Employees hired on or after October 1, 2012: Total Credited Service times 1.60% of Final Average Salary. Maximum 100% of Final Average Salary.

4. Normal Form:

The Normal Form of pension is a Life Annuity. Optional forms are available on an actuarial equivalent basis.

5. Final Average Salary:

For General Employees eligible for Normal Retirement as of January 31, 2013 and all Elected Officials the highest 3 consecutive years out of last 10. Salary includes base pay plus longevity pay. Lump sum payments paid at the time of retirement are not included in the determination of Final Average Salary.



5. Final Average Salary (cont'd):

For General Employees hired prior to October 1, 2012 and not eligible for Normal Retirement as of January 31, 2013 or General Employees hired on or after October 1, 2012 the highest 5 consecutive years out of last 10, provided it is not less than the defintion above as of January 31, 2013 for General Employees hired prior to October 1, 2012. Salary includes base pay plus longevity pay. Lump sum payments paid at the time of retirement are not included in the determination of Final Average Salary.

B. <u>Early Retirement:</u>

1. Eligibility:

25 years of Credited Service for General Employees hired prior to October 1, 2012 and all Elected Officials.

30 years of Credited Service for General Employees hired on or after October 1, 2012.

2. Amount of Pension:

Computed as for Normal Retirement but reduced 2.5% for each year (0.2083% for each month) that Early Retirement precedes the date the Member would have been eligible for Normal Retirement.

For General Employees hired prior to October 1, 2012, benefits accrued after January 31, 2013 are reduced 6.0% for each year (0.5000% for each month) that Early Retirement precedes the date the Member would have been eligible for Normal Retirement.

For General Employees hired on or after October 1, 2012, benefits are reduced 6.0% for each year (0.5000% for each month) that Early Retirement precedes the date the Member would have been eligible for Normal Retirement.

C. Deferred Retirement:

1. Eligibility:

8 or more years of Credited Service for Elected Officials and 10 or more years of Credited Service for others. Pension begins at age 60 for Elected Officials and General Employees hired prior to October 1, 2012 and at age 65 for General Employees hired on or after October 1, 2012.



C. <u>Deferred Retirement (cont'd):</u>

2. Benefit:

Computed as a Normal Retirement pension but based upon Credited Service and Final Average Salary at time of termination.

D. Duty Disability Retirement:

1. Eligibility:

No age or service requirement. Must be in receipt of worker's compensation.

2. Benefit:

Computed as a Normal Retirement pension. Worker's compensation payments are offset, to the extent permitted by law.

E. Non-Duty Disability Retirement:

1. Eligibility:

10 or more years of Credited Service.

2. Benefit:

Computed as a Normal Retirement pension. Worker's compensation payments are offset, to the extent permitted by law.

F. Death Before Retirement:

1. Eligibility:

15 or more years of Credited Service.

2. Benefit:

Computed as a Normal Retirement pension but actuarially reduced in accordance with a 100% joint and survivor election.

G. Post-Retirement Cost-of-Living Adjustments:

Effective January 1, 2023 all current retired Members and beneficiaries, including DROPs, received an increase in their pension of \$100/month. Effective January 1, 2016, current retirees, disableds, beneficiaries and DROPs who had been receiving benefits for at least ten (10) years received an increase in their pension of \$50/month. Effective October 1, 1994 all current retired Members and beneficiaries received an increase in their pension of \$75/month.



H. Annual Holiday Bonus:

\$100

I. Member Contributions:

The City currently picks-up the former 5.00% member contribution. For all employees hired prior to December 31, 1999, this amount is refunded upon termination of membership with 3 or more years of Credited Service in the absence of a pension. For all employees hired after December 31, 1999, this amount is refunded upon termination of membership with 10 or more years of Credited Service in the absence of a pension. Should a Member die and no pension becomes or will become available, picked-up Member contributions will be refunded even if the required years of service have not been attained.

If you terminate employment and receive a refund of contributions, you forfeit any rights to future benefits from the Retirement System. The taxable portion of any refund you receive is subject to an automatic 20% withholding for Federal income tax purposes, and a possible 10% excise tax. These taxes can be avoided, however, if you roll the taxable portion over to an Individual Retirement Account (IRA) or another qualified employer plan. This rollover will result in no tax being due until you begin withdrawing funds from the IRA or other qualified employer plan. The rollover of the distribution, however, MUST be made directly by the System to your chosen IRA or other qualified employer plan.

General Employees and Elected Officials not eligible for Normal Retirement as of January 31, 2013 will contribute 1.00% of pay beginning February 1, 2013.

J. <u>City Contributions:</u>

Actuarially determined amounts which together with Member pick-up City contributions are sufficient to at least cover the requirements of the funding objective.

K. Forfeiture of Retirement Benefits:

Retirement benefits granted by the Retirement System are subject to forfeiture if an employee is convicted of an offense specified in Section 112.3173, Florida Statutes, pursuant to the procedures set forth in the cited statute.



L. <u>Deferred Retirement Option Plan (DROP):</u>

Members may elect to freeze their retirement benefit at Normal or Early Retirement eligibility, and continue working for a maximum of 5 years. The retirement benefit will be calculated as of the date the Member elects the DROP including Early Retirement reductions, if any. This retirement benefit will be accumulated with interest at 4% for Members who enter the DROP prior to February 1, 2013 and with interest in an amount equal to 50% of the net investment return for the System for the preceding fiscal year up to a maximum of 4% for Members who enter the DROP on or after February 1, 2013 during the DROP period in a DROP account. At actual termination, the Member can rollover the DROP account balance or receive the balance directly with appropriate tax consequences. The retirement benefit calculated as of the date of the DROP election becomes payable directly to the retiree or beneficiary thereafter. Member pick-up contributions will cease at the date of DROP election. Disability and death before retirement provisions will no longer apply to Members who enter the DROP. Members who enter the DROP on or after February 1, 2013 will be assessed administrative fees.

M. Claims Procedure:

Claims for benefits should be filed with the Board of Trustees at the City Clerk's office. If the claim is denied, you will be notified and informed of the procedure to request a hearing before the Board of Trustees. An applicant for benefits must appeal said denial within 60 days of being informed of the denial by filing an appeal with the Board at the City Clerk's office. If no appeal is filed within the time period then the denial shall be final.

N. <u>Disclaimer:</u>

The preceding summary briefly describes the principal benefits of the Retirement System. Detailed benefit conditions and limitations are contained in the Retirement Ordinance which established the System. The Internal Revenue Code, Florida Statutes, and the Ordinance all govern the operation of the System and should be consulted before you take any action concerning your participation or benefits. In the case of any conflict between this summary and the provisions of the Ordinance or other applicable law, the Ordinance or other applicable law will prevail. Copies of the Ordinance are available at the City Clerk's office.

O. <u>Change From Previous Valuation (included in Actuarial Impact Statement):</u>

Effective January 1, 2016, current retirees, disableds, beneficiaries and DROPs who had been receiving benefits for at least ten (10) years received an increase in their pension of \$50/month. Effective October 1, 1994 all current retired Members and beneficiaries received an increase in their pension of \$75/month.



Actuarial Assumptions and Actuarial Cost Methods Used in the Valuation

A. Mortality

For healthy participants during employment, PUB-2010 Headcount Weighted General Below Median Employee Mortality Table, separate rates for males and females, set back 1 year for males, with fully generational mortality improvements projected to each future decrement date with Scale MP-2018.

For healthy participants post employment, PUB-2010 Headcount Weighted General Below Median Healthy Retiree Mortality Table, separate rates for males and females, set back 1 year for males, with fully generational mortality improvements projected to each future decrement date with Scale MP-2018.

For disabled participants, PUB-2010 Headcount Weighted General Disabled Retiree Mortality Table, separate rates for males and females, both set forward 3 years, without projected mortality improvements.

	Pre-ret	irement	Post-retirement Future Life Expectancy (Years)			
Sample	Futu	re Life				
Ages	Expectar	ncy (Years)				
(2022)	Male	Female	Male	Female		
55	32.75	35.17	28.83	32.55		
60	27.89	30.14	24.73	28.00		
62	25.99	28.16	23.10	26.17		
	Pre-ret	irement	Post-retirement Future Life Expectancy (Years)			
Sample	Futu	re Life				
Ages	Expectar	ncy (Years)				
(2042)	Male	Female	Male	Female		
55	34.38	36.65	30.85	34.33		
60	29.45	31.58	26.59	29.67		
62			24.90	27.79		

B. Interest to be Earned by Fund

7.0%, compounded annually, net of investment expense - includes inflation of 2.5%.

C. Allowances for Expenses or Contingencies

Administrative expenses are projected to continue at the same dollar amount as the average of the three (3) preceding fiscal years, rounded to the nearest thousand.

D. Employee Withdrawal Rates

The rates do not apply to Members eligible to retire and do not include separation on account of death or disability. This estimate measures the probabilities of Members remaining in employment.



D. Employee Withdrawal Rates (Cont'd)

	Years of	Withdrawal Rates
Sample Ages	<u>Service</u>	Per 100 Employees
ALL	0	40.0
	1	30.0
	2 - 4	20.0
40 & Under	5 & Over	15.0
41		12.0
42		11.0
43		10.0
44		9.0
45		8.0
46		7.0
47		6.0
48		5.0
49		4.0
50 & Over		3.0

E. <u>Disability Rates</u>

Probabilities of active Members becoming disabled.

	Percent Becoming Disabled			
	Within I	Next Year		
Sample Ages	<u>Male</u>	<u>Female</u>		
20	0.07%	0.03%		
25	0.09%	0.05%		
30	0.10%	0.07%		
35	0.14%	0.13%		
40	0.21%	0.19%		
45	0.32%	0.28%		
50	0.52%	0.45%		
55	0.92%	0.76%		
60	1.53%	1.10%		

F. Salary Increase Factors

Employee salaries are estimated to increase between the date of hire and date of retirement. Salary increases occur in recognition of (i) individual merit and seniority, (ii) inflation-related depreciation of the purchasing power of salaries, and (iii) competition from other employers for personnel.

<u>Age</u>	Salary Increase
Under 40	7.00%
40 & After	6.00%

General increase in wage level due to inflation is 3.0%.



G. Payroll Growth Assumption

4.0% per annum - not greater than historical 10-year average (8.9%) - minimum 0.0%

H. Retirement Rates

Probabilities of an eligible Member retiring during the next year.

General Employed October 1, 2012 and	•	General Employ September		
<u>Under 25 Year</u>	rs of Service	Under 30 Yea	rs of Service	
Retirement	Percent	Retirement	Percent	
<u>Ages</u>	<u>Retiring</u>	<u>Ages</u>	<u>Retiring</u>	
60 - 61	8%	65 - 67	40%	
62 - 64	20%	68 & After	100%	
65 - 67	40%			
68 & After	100%			
25+ Years o	of Service	30+ Years of Service		
Years of	Percent	Years of	Percent	
<u>Service</u>	<u>Retiring</u>	<u>Service</u>	<u>Retiring</u>	
25	20%	30	20%	
26 - 29	15%	31 - 34	15%	
30 or More	100%	35 or More	100%	

A General Employee hired prior to October 1, 2012 is eligible for retirement after 30 years of Credited Service or after attaining age 60 with 10 or more (8 or more if an Elected Official) years of Credited Service. Reduced benefits are available after 25 years of Credited Service. Any subsidy from the reduced benefits is taken into account in the annual funding costs.

A General Employee hired on or after October 1, 2012 is eligible for retirement after 35 years of Credited Service or after attaining age 65 with 10 or more years of Credited Service. Reduced benefits are available after 30 years of Credited Service. Any subsidy from the reduced benefits is taken into account in the annual funding costs.

Benefits accruing after age 65 are offset by actuarial gains from the deferred retirement.

Asset Valuation Method

The method used for determining the smoothed actuarial value of assets phases in the deviation between the expected and actual return on assets at the rate of 25% per year. The smoothed actuarial value of assets will be further adjusted to the extent necessary to remain within the corridor whose lower and upper limits are 80% and 120%, respectively, of the fair market value of System assets.



J. Cost Method

Normal Retirement, Termination, Disability, and Death Benefits: Entry-Age-Normal Cost Method.

Under this method the normal cost for each active employee is the amount which is calculated to be a level percentage of pay that would be required annually from his entry age to his assumed retirement age to fund his estimated benefits, assuming the System had always been in effect. The normal cost for the System is the sum of such amounts for all employees. The actuarial accrued liability as of any valuation date for each active employee or inactive employee who is eligible to receive benefits under the System is the excess of the actuarial present value of estimated future benefits over the actuarial present value of current and future normal costs. The unfunded actuarial accrued liability as of any valuation date is the excess of the actuarial accrued liability over System assets.

<u>Vested Normal Retirement, Termination, Disability, and Death Benefits: Unit Credit Cost Method</u>

Under this method, the actuarial present value of vested accrued benefits is an amount calculated to be the sum of the present values of each individual's vested accrued or earned benefit under the Plan as of the valuation date. Each individual's calculation is based on pay and service as of the valuation date.

K. <u>Disclosure of Assumptions</u>

The investment return, salary increases, payroll growth assumption, withdrawal and retirement rates were updated based on the most recent experience study performed for the five years ending September 30, 2019. The mortality rates are based upon the July 1, 2022 FRS Actuarial Valuation, as required under F.S., Chapter 2015-157.

L. Changes From Previous Valuation / Actuarial Impact Statement

None.



M. Technical Assumptions

1. Pay Increase Timing:

Beginning of (Fiscal) year.

2. Decrement Timing:

Decrements are assumed to occur mid-year.

3. Eligibility Testing:

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

4. Benefit Service:

Exact fractional service is used to determine the amount of benefit payable.

5. Decrement Relativity:

Decrement rates are used directly from tabular rates - no adjustment for multiple decrement table effects.

6. <u>Decrement Operation:</u>

Disability and mortality decrements do not operate during the first 5 years of service. Disability and withdrawal do not operate during years of retirement eligibility.

7. Incidence of Contributions:

Contributions are assumed to be received continuously throughout the year based upon the computed percent of payroll shown in this report, and the actual payroll payable at the time contributions are made. New entrant normal cost contributions are applied to the funding of new entrant benefits.

8. Marriage Assumption:

100% of Members are assumed to be married. Male spouses are assumed to be three years older than female spouses.

9. Actuarial Equivalence Basis for Optional Forms of Payment:

7.5% interest and the RP 2000 Combined Healthy Male Mortality Table projected to the fiscal year that contains the benefit commencement date for participants and the RP 2000 Combined Healthy Female Mortality Table projected to the fiscal year that contains the benefit commencement date for beneficiaries. Disabled lives are set forward 5 years.

10. Duty and Non-Duty Related Assumption:

50% are assumed in-service and 50% are assumed non-service incurred.

11. Vested Members:

Vested Members who terminate with a benefit worth less than 100% of their accumulated Member contribution balance are assumed to withdraw their accumulated Member contributions and forfeit any vested benefit.

12. Salary:

Salary reported for the Actuarial Valuation includes all amounts included in the Final Average Compensation for benefit purposes.



Distribution by Attained Age Groups and Service Groups as of October 1, 2022

Attained	edCOMPLETED YEARS OF SERVICE							
Age Group	<u>0 - 4</u>	<u>5 - 9</u>	<u>10 - 14</u>	<u> 15 - 19</u>	<u>20 - 24</u>	<u>25 - 29</u>	<u>30 & Over</u>	<u>Total</u>
Under 25	3	-	-	-	-	-	-	3
25 - 29	6	1	-	-	-	-	-	7
30 - 34	5	1	-	-	-	-	-	6
35 - 39	1	1	-	-	-	-	-	2
40 - 44	2	1	-	1	-	-	-	4
45 - 49	1	-	-	-	-	-	-	1
50 - 54	2	-	-	-	2	1	-	5
55 - 59	3	1	-	-	1	1	-	6
60 - 64	3	1	1	1	-	-	-	6
65 & Over	1	2		1				4
TOTAL	27	8	1	3	3	2	0	44
	Average Atta Average Hire Average Pay Percent Fema	Age		10/01/2021 47.13 years 40.60 years \$ 37,699 31.0%		10/01/2022 45.23 years 39.00 years \$ 45,223 29.5%		



Statistics for Participants Entitled to Deferred Benefits and Participants Receiving Benefits

A. Entitled to Deferred Benefits

Current Age			Total	Average	
<u>Group</u>	<u>Count</u>	<u>Ann</u>	Annual Benefit		ıal Benefit
Less than 40	-	\$	-	\$	-
40 - 44	-		-		-
45 - 49	-		-		-
50 - 54	-		-		-
55 - 59	1		13,450		13,450
60 - 64	1		8,506		8,506
65 & Over	-		-		-
TOTAL	2	\$	21,956		10,978

B. Receiving Benefits (including DROPs)

Current Age			Total	Average		
Group Count		Annual Benefit		Annual Benefit		
	0	A				
Less than 50	0	\$	-	\$	-	
50 - 54	1		29,727		29,727	
55 - 59	2		49,668		24,834	
60 - 64	5		152,273		30,455	
65 - 69	12		218,550		18,213	
70 - 74	11		206,611		18,783	
75 - 79	10		226,937		22,694	
80 - 84	9		94,431		10,492	
85 - 89	2		27,948		13,974	
85 & Over	1		22,155		22,155	
TOTAL	53	\$	1,028,300	\$	19,402	



Reconciliation of Employee Data

Active Participants A. 42 1. Active participants previous year 2. Retired during year (1)3. Entered DROP 0 4. Died during year 0 5. Disabled during year 0 6. Vested terminated during year 0 7. Non-vested terminated during year (13)8. New active participants 14 9. Re-hired during year 2 10. Adjustment 0 11. Active participants current year 44 **Participants Receiving Benefits** 1. Participants receiving benefits previous year 54 2. New retired participants 1 3. Former DROPs now receiving benefits 0 4. New terminated vested receiving benefits 0 5. New disabled receiving benefits 0 6. New beneficiaries receiving benefits 1 7. Died or ceased payment during year (4)8. Retired or terminated vested receiving benefits current year C. <u>DROP Participants</u> 1. DROP participants previous year 1 0 2. Died during year 3. Became disabled during year 0 0 4. Employment terminated and retired during year 5. Entered DROP during year 0 6. DROP participants current year 1 D. Terminated Vested Participants Entitled to Future Benefits 1. Terminated vested entitled previous year 3 (1) 2. Died during year 3. Commenced receiving benefits during year 0 4. New terminated vested 0 5. Terminated vested paid lump sum 0 6. Terminated vested entitled current year



Projected Retirement Benefits

Fiscal Year	•	Projected Total <u>Annual Payout</u>		
2023	\$	1,094,557		
2024	\$	1,095,922		
2025	\$	1,108,680		
2026	\$	1,126,592		
2027	\$	1,122,481		
2028	\$	1,117,320		
2029	\$	1,116,018		
2030	\$	1,126,382		
2031	\$	1,134,609		
2032	\$	1,130,137		

The above projected payout of System benefits during the next ten years is based on assumptions involving all decrements. The actual payouts may differ from the above estimates depending upon the death, salary and retirement experience of the System. However, since the projected payment is recomputed each valuation date, there is an automatic correction to the extent that actual experience varies from expected experience.



Summary of Transaction Information

Valuation Date	Benefits Paid ^{1,2}	Administrative Expenses	Employee Contributions ³	City Contributions	City Contributions (Member <i>Pick-up</i>)	Smoothed Actuarial Value ⁴
10/01/2022	\$ 970,70	1 \$ 37,882	2 \$ 20,941	\$ 531,720	\$ 104,670	\$ 11,050,941
10/01/2021	1,233,37	0 31,203	18,156	416,242	78,045	10,865,806
10/01/2020	986,90	36,489	15,776	668,747	78,876	10,433,922
10/01/2019	1,000,79	0 35,352	14,173	676,062	70,864	9,603,928
10/01/2018	1,669,63	0 60,758	17,475	601,642	58,698	8,945,143
10/01/2017	1,187,54	3 28,272	10,906	533,934	54,532	9,268,023
10/01/2016	979,79	4 52,968	9,969	434,152	49,844	9,153,447
10/01/2015	813,05	3 46,487	9,377	511,983	46,885	9,079,016
10/01/2014	873,32	7 32,236	8,767	725,572	43,710	8,638,877
10/01/2013	809,51	9 57,376	5,845	600,186	51,967	7,964,494
10/01/2012	782,25	•	0	562,739	56,274	7,407,861
10/01/2011	720,65	2 48,889	0	643,009	65,675	7,158,587
10/01/2010	676,64	2 27,579	0	566,685	70,624	7,280,012
10/01/2009	637,47	0 19,131	. 0	524,688	73,837	7,265,598
10/01/2008	568,95	7 25,780	0	538,968	77,204	7,260,400
10/01/2007	638,24	3 32,959	0	474,687	78,433	7,312,117
10/01/2006	555,65	2 40,669	0	485,882	81,964	6,959,772
10/01/2005	433,59	8 29,382	2 0	514,295	86,845	6,486,140
10/01/2004	465,27	2 35,742	2 0	452,237	86,735	6,012,842
10/01/2003	457,37	2 39,106	0	395,017	86,071	5,762,299
10/01/2002	389,38	1 30,814	0	347,197	85,776	5,610,472
10/01/2001	327,80	7 33,339	5,834	303,363	83,708	5,561,151
10/01/2000	311,83	0 42,823	16,509	273,169	80,722	5,402,866

¹ Effective for year ending September 30, 2013, includes DROP distributions (previously included DROP benefit payments)

⁴ Net of the reserve for DROP accounts for October 1, 2008 through October 1, 2012



² Includes contribution refunds and DROP payments for October 1, 2009 through October 1, 2012

³ Includes service purchases

Recent Compensation, Termination and Investment Return Experience

	Comper	nsation	Termination		Investment Return ¹	
Valuation Date	% Increase (Decrease)	Assumed Increase	Ratio of Actual to Expected	Market Value	Actuarial Value	Assumed
10/01/2022	12.1%	6.3%	1.7	(13.30%)	5.02%	7.00%
10/01/2021	6.7%	6.2%	0.8	16.51%	11.77%	7.00%
10/01/2020	7.6%	3.4%	0.9	15.43%	11.51%	7.50%
10/01/2019	9.9%	3.4%	0.9	3.28%	10.60%	7.50%
10/01/2018	12.6%	3.4%	1.7	12.18%	8.35%	7.50%
10/01/2017	12.1%	3.3%	1.9	15.08%	8.26%	7.50%
10/01/2016	5.9%	3.4%	1.0	12.27%	6.96%	7.50%
10/01/2015	7.4%	4.7%	0.9	(5.33%)	8.61%	7.75%
10/01/2014	1.4%	4.7%	1.5	12.56%	10.15%	7.75%
10/01/2013	1.9%	5.0%	1.0	9.79%	8.90%	7.75%
Last 3 Years	8.8%	5.3%	1.1	5.25%	9.39%	7.17%
Last 5 Years	9.8%	4.5%	1.2	6.20%	9.42%	7.30%
Last 10 Years	7.7%	4.4%	1.2	7.40%	9.00%	7.47%

¹ Computed as 2I / (A+B-I), where A is beginning value, B is ending value and I is investment return.



Employer Contribution Information

		N	1inimum		
	Contribution	R	equired		
Valuation	Fiscal	Employer		Actu	al Employer
<u>Date</u>	<u>Year End</u>	<u>Cor</u>	ntributions	Col	ntributions
10/01/2022	09/30/2024	\$	281,942 ¹		N/A
10/01/2021	09/30/2023	\$	313,327 ¹		N/A
10/01/2020	09/30/2022	\$	370,196 ²	\$	531,720
10/01/2019	09/30/2021	\$	372,610 ²	\$	416,242
10/01/2018	09/30/2020	\$	439,798 ²	\$	668,747
10/01/2017	09/30/2019	\$	474,388 ²	\$	676,062
10/01/2016	09/30/2018	\$	485,783 ²	\$	601,642
10/01/2015	09/30/2017	\$	481,994 ²	\$	533,934
10/01/2014	09/30/2016	\$	434,152 2	\$	434,152
10/01/2013	09/30/2015	\$	494,285 ²	\$	511,983
10/01/2012	09/30/2014	\$	525,384 ³	\$	725,572
10/01/2011	09/30/2013	\$	439,741 ³	\$	600,186
10/01/2010	09/30/2012	\$	562,739 ³	\$	562,739
10/01/2009	09/30/2011	\$	641,013 ³	\$	643,009
10/01/2008	09/30/2010	\$	566,685 ³	\$	566,685
10/01/2007	09/30/2009	, \$	524,688 ³	, \$	524,688
10,01,200,	03,30,2003	Ψ	32 1,000	Ψ	32 1,000

¹ Projected



² Based upon dollar amount

³ Based upon percentage of payroll

Actuarial Valuation as of October 1, 2022

A.	A. <u>Participant Data</u>		Actuarial act Statement 10/01/2021	10/01/2022	
	1. Active participants		42		44
	Retired participants and beneficiaries receiving				
	benefits (including DROPs)		52		51
	3. Disabled participants receiving benefits		3		2
	4. Terminated vested participants		3		2
	5. Annual payroll of active participants	\$	1,583,356	\$	1,989,809
	6. Projected payroll of active participants	\$	1,646,690	\$	2,069,401
	7. Annual benefits payable to those currently				
	receiving benefits including DROP participants	\$	1,078,985	\$	1,028,300
В.	Value of Assets				
	1. Smoothed Actuarial Value of Assets	\$	10,865,806	\$	11,050,941
	2. Market Value of Assets	, \$	11,946,116	\$	10,029,422
C.	<u>Liabilities</u>				
	Actuarial present value of future expected benefit payments for active members				
	a. Retirement benefits	\$	2,738,864	\$	3,240,924
	b. Vesting benefits		359,749		416,980
	c. Death benefits		35,490		41,624
	d. Disability benefits		78,332		90,026
	e. Total	\$	3,212,435	\$	3,789,554
	2. Actuarial present value of future expected benefit	¢	242 725	¢	244 722
	payments for terminated vested members	\$	343,735	\$	241,732
	Actuarial present value of future expected benefit payments for members currently receiving benefits				
	a. Service retired including DROP participants	\$	9,390,294	\$	8,953,871
	b. Disability retired		211,781		165,486
	c. Beneficiaries		978,137		730,224
	d. Miscellaneous		49,158		82,319
	e. Total	\$	10,629,370	\$	9,931,900



Actuarial Valuation as of October 1, 2022

		Actuarial			
		Impact Statement 10/01/2021 10/01/2022			
					10/01/2022
	4. Total actuarial present value of future expected				
	benefit payments	\$	14,185,540	\$	13,963,186
	5. Actuarial accrued liabilities	\$	13,425,904	\$	13,117,619
	Infunded actuarial accrued liabilities	\$	2,560,098	\$	2,066,678
	or ornarided actuariar accided habilities	Ψ	2,300,030	Ψ	2,000,070
D.	Statement of Accumulated System Benefits				
	1. Actuarial present value of accumulated vested				
	benefits		Actuarial		
	a. Participants currently receiving benefits		Valuation		
	including DROP participants	\$	9,958,731	\$	9,849,581
	b. Other participants		1,924,589		2,055,475
	c. Total	\$	11,883,320	\$	11,905,056
	2. Actuarial present value of accumulated non-				
	vested System benefits		171,237		352,487
	3. Total actuarial present value of accumulated				
	System benefits	\$	12,054,557	\$	12,257,543
E.	Statement of Change in Accumulated System Benefits				
	1. Actuarial present value of accumulated System				
	benefits as of October 1, 2021			\$	12,054,557
	2. Increase (decrease) during year attributable to:				
	a. System amendment			\$	621,481
	b. Change in actuarial assumptions				0
	c. Benefits paid including refunds and DROP benefits				(970,701)
	d. Other, including benefits accumulated and increase				
	for interest due to decrease in the discount period				552,206
	e. Net increase			\$	202,986
	3. Actuarial present value of accumulated System				
	benefits as of October 1, 2022			\$	12,257,543



Actuarial Valuation as of October 1, 2022

		Actuarial				
		Impact Statement				
_	Dansien Cost	<u>10</u>	0/01/2021	<u>1</u>	10/01/2022	
F.	Pension Cost					
	1. Total normal cost	\$	160,448	\$	185,463	
	2. Payment required to amortize unfunded liability		222,868		192,251	
	3. Interest adjustment		12,962		12,773	
	4. Total required contribution	\$	396,278	\$	390,487	
	5. Item 4 as a percentage of payroll		25.0%		19.6%	
	6. Estimated employee contributions	\$	16,467	\$	20,694	
	7. Item 6 as a percentage of projected payroll		1.0%		1.0%	
	8. Estimated pick-up employee contributions by City	\$	82,335	\$	103,470	
	9. Item 8 as a percentage of projected payroll		5.0%		5.0%	
	10. Net amount payable by City	\$	313,327	\$	281,942	
	11. Item 10 as a percentage of projected payroll		19.0%		13.6%	
G.	Past Contributions					
	1. Total contribution required (prior valuation)	\$	495,807	\$	412,129	
	2. Actual contributions made:					
	a. Employees	\$	20,941		N/A	
	b. City (Member Pick-Up)		104,670		N/A	
	c. City		531,720		N/A	
	d. Total	\$	657,331		N/A	
Н.	Net Actuarial Gain / (Loss)	\$	629,575	\$	192,318	
I.	Disclosure of Following Items:					
	1. Actuarial present value of future salaries - attained age	\$	8,968,391	\$	10,424,036	
	2. Actuarial present value of future employee					
	contributions - attained age	\$	538,104	\$	625,442	
	3. Actuarial present value of future contributions					
	from other sources		N/A		N/A	
	4. Amount of active Members' accumulated contributions	\$	543,384	\$	578,715	
	5. Actuarial present value of future salaries and					
	future benefits at entry age		N/A		N/A	
	6. Actuarial present value of future employee					
	contributions at entry age		N/A		N/A	



		_	6	_		Remaining
	The Control Annual College Control College Control	Cur	Current Unfunded		ortization	Funding
	Unfunded Actuarial Accrued Liabilities	<u>Liabilities</u>		<u>Payment</u>		<u>Period</u>
10/01/1993	Actuarial Loss / (Gain)	\$	24	\$	24	1 year
10/01/1993	System Amendment		(32)		(32)	1 year
10/01/1994	Actuarial Loss / (Gain)		6,015		3,050	2 years
10/01/1994	System Amendment		3,530		1,790	2 years
10/01/1995	Actuarial Loss / (Gain)		(9,945)		(3,410)	3 years
10/01/1995	Assumption Change		14,820		5,081	3 years
10/01/1996	Actuarial Loss / (Gain)		27,421		7,150	4 years
10/01/1997	Actuarial Loss / (Gain)		(26,806)		(5,670)	5 years
10/01/1997	Assumption Change		24,806		5,247	5 years
10/01/1998	Actuarial Loss / (Gain)		13,283		2,374	6 years
10/01/1999	Actuarial Loss / (Gain)		(14,000)		(2,175)	7 years
10/01/2000	Actuarial Loss / (Gain)		92,383		12,729	8 years
10/01/2001	Actuarial Loss / (Gain)		185,963		23,090	9 years
10/01/2002	Actuarial Loss / (Gain)		202,197		22,904	10 years
10/01/2003	Actuarial Loss / (Gain)		111,907		11,681	11 years
10/01/2003	System Amendment		32,017		3,342	11 years
10/01/2004	Actuarial Loss / (Gain)		31,012		3,007	12 years
10/01/2005	Actuarial Loss / (Gain)		1,476		134	13 years
10/01/2006	Actuarial Loss / (Gain)		169,513		14,471	14 years
10/01/2007	Actuarial Loss / (Gain)		23,490		1,897	15 years
10/01/2008	Actuarial Loss / (Gain)		38,376		2,943	16 years
10/01/2009	Actuarial Loss / (Gain)		368,862		26,978	17 years
10/01/2009	Assumption Change		236,116		17,269	17 years
10/01/2010	Actuarial Loss / (Gain)		211,012		14,767	18 years
10/01/2011	Actuarial Loss / (Gain)		234,157		15,727	19 years
10/01/2011	Assumption Changes		7,943		533	19 years
10/01/2012	Actuarial Loss / (Gain)		207,514		13,413	20 years
10/01/2012	System Amendment		(39,227)		(2,535)	20 years
10/01/2013	Actuarial Loss / (Gain)		(94,902)		(5,918)	21 years
10/01/2014	Actuarial Loss / (Gain)		(229,979)		(13,864)	22 years
10/01/2015	Actuarial Loss / (Gain)		1,852		108	23 years
10/01/2015	Assumption Changes		509,707		29,768	23 years
10/01/2015	System Amendment		98,477		5,751	23 years



State Required Exhibit

	Unfunded Actuarial Accrued Liabilities	ent Unfunded <u>Liabilities</u>	mortization <u>Payment</u>	Remaining Funding <u>Period</u>
10/01/2016	Actuarial Loss / (Gain)	33,052	1,873	24 years
10/01/2016	Assumption Changes	(2,387)	(135)	24 years
10/01/2017	Actuarial Loss / (Gain)	2,252	124	25 years
10/01/2018	Actuarial Loss / (Gain)	(231,703)	(12,431)	26 years
10/01/2019	Actuarial Loss / (Gain)	(138,865)	(7,264)	27 years
10/01/2019	Assumption Changes	(165,662)	(8,666)	27 years
10/01/2020	Actuarial Loss / (Gain)	(312,578)	(15,964)	28 years
10/01/2020	Assumption Changes	643,712	32,875	28 years
10/01/2021	Actuarial Loss / (Gain)	(607,242)	(30,314)	29 years
10/01/2021	System Amendment	599,435	29,924	29 years
10/01/2022	Actuarial Loss / (Gain)	(192,318)	 (9,395)	30 years
	TOTAL	\$ 2,066,678	\$ 192,251	

This Actuarial Valuation and / or cost determination was prepared and completed by us or under our direct supervision, and we acknowledge responsibility for the results. To the best of our knowledge, the results are complete and accurate, and in our 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 System and / or paid from the System's assets for which liabilities or current costs have not been established or other wise provided for in the valuation. All known events or trends which may require material increase in System costs or required contribution rates have been taken into account in the valuation.

Jennifer Borregard

Shelly L. Jones, A.S.A., E.A.

Enrollment Number: 23-08646

Jennifer M. Borregard, E.A.

Enrollment Number: 23-07624

Dated: October 9, 2023

Michelle Jones



Glossary

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

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

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

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

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

Actuarial Valuation. The determination, as of a valuation date, of the Normal Cost, Actuarial Accrued Liability, Actuarial Value of Assets, and related Actuarial Present Values for a System. An Actuarial Valuation for a governmental Retirement System typically also includes calculations of items needed for compliance with GASB No. 67.

Actuarial Value of Assets. The value of the assets as of a given date, used by the actuary for valuation purposes. This may be the market or fair value of System assets or a smoothed value in order to reduce the year-to-year volatility of calculated results, such as the funded ratio and the actuarially required contribution.

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



Glossary

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

Amortization Period. The period used in calculating the Amortization Payment.

Annual Required Contribution. The employer's periodic required contributions, expressed as a dollar amount or a percentage of covered plan compensation. The annual required contribution consists of the Employer Normal Cost and Amortization Payment plus interest adjustment.

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

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

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

Experience Gain/Loss. A measure of the difference between actual experience and that expected based upon a set of Actuarial Assumptions, during the period between two actuarial valuations. To the extent that actual experience differs from that assumed, Unfunded Actuarial Accrued Liabilities emerge which may be larger or smaller than projected. Gains are due to favorable experience, e.g., the assets earn more than projected, salaries do not increase as fast as assumed, members retire later than assumed, etc. Favorable experience means actual results produce actuarial liabilities not as large as projected by the actuarial assumptions. Losses are the result of unfavorable experience, i.e., actual results that produce Unfunded Actuarial Accrued Liabilities which are larger than projected.

GASB. Governmental Accounting Standards Board.



Glossary

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

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

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

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

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

Vested Benefit Security Ratio. The ratio of the Market Value of Assets to the Actuarial Present Value of Vested Accrued Benefits.

