City of Jacksonville General Employees Defined Contribution Plan Disability and Survivorship Benefits

Actuarial Valuation and Review as of October 1, 2023

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Segal



July 31, 2024

Defined Contribution Plan Advisory Committee
Defined Contribution Disability and Survivorship Panel
City of Jacksonville General Employees Defined Contribution Plan Disability and Survivorship Benefits
117 West Duval Street, Suite 330
Jacksonville, FL 32202

Dear Committee and Panel Members:

We are pleased to submit this Actuarial Valuation and Review as of October 1, 2023. It summarizes the actuarial data used in the valuation, analyzes the preceding year's experience, and establishes the funding requirements for fiscal 2025.

Statement by Enrolled Actuary: This actuarial valuation and cost determination 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.

The actuarial calculations were directed under the supervision of Jeffrey S. Williams. I am a member of the American Academy of Actuaries and I meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion herein.

We look forward to reviewing this report at your next meeting and to answering any questions.

Sincerely,

Segal

Abo S Will-

Jeffrey S. Williams, FCA, ASA, MAAA Vice President and Consulting Actuary Enrolled Actuary No. 23-07009

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Purpose and basis

This report has been prepared by Segal to present a valuation of the City of Jacksonville General Employees Defined Contribution Plan Disability and Survivorship Benefits as of October 1, 2023. The valuation was performed to determine whether the assets and contributions are sufficient to provide the prescribed benefits and to provide information for required disclosures under Governmental Accounting Standards Board (GASB) Statements No. 67 and 68.

The contribution requirements presented in this report are based on:

- The benefit provisions of the Plan, as administered by the Committee and Panel;
- The characteristics of covered active participants and retired participants and beneficiaries as of September 30, 2023, provided by the Retirement Administrative Office;
- The assets of the Plan as of September 30, 2023, provided by the City's Finance Department;
- Economic assumptions regarding future salary increases and investment earnings;
- · Other actuarial assumptions regarding employee terminations, retirement, death, etc. and
- Subject to the requirements of Part VII, Chapter 112, Florida Statutes.

Valuation highlights

- 1. The City established Disability and Survivor Benefits under the City of Jacksonville General Employees Defined Contribution Plan effective October 1, 2017. It is our understanding that the inclusion of disability and survivor benefits subjects the Plan to the State of Florida's minimum funding requirements for retirement defined benefit plan subject to the applicable laws of the State of Florida. This October 1, 2023 valuation is the fourth actuarial valuation for the updated plan.
- 2. The actuarial determined contribution (ADC) calculated as of October 1, 2023 is adjusted for timing and projected to the next fiscal year; the ADC for the fiscal year beginning October 1, 2023 is \$2,997,873 or 1.54% of projected payroll.
- 3. Unless stated otherwise, actuarial assumptions used are those from the experience study for the period October 1, 2017 September 30, 2022 for the City of Jacksonville General Employees Retirement Plan (GERP).
- 4. The following actuarial assumption were approved by the Committee and Panel and changed with this valuation:
 - COJ withdrawal rates were increased for participants with between four and seven years of service and 12 or more years of service.
 - JEA withdrawal rates were updated to reflect more of a stair-step rate rather than a smooth reduction in rates.
 - COJ and JEA retirement rates were updated across all ages and service buckets, and the 90% BACKDROP election assumption was removed (now inherent in the rate table).
 - The COJ salary scale was modified to reflect higher merit and promotional increases.
 - The JEA salary scale was also updated with higher rates across all service levels.
 - These changes increased the actuarial accrued liability by 1.59% and increased the total normal cost by 2.64%. The actuarial determined contribution increased by \$93,749, or 0.05% of projected payroll, as a result of this change.
- 5. The amortization period used for the amortization of unfunded actuarial accrued liability is 24 years; this is the period for new bases established in the GERP valuation as of October 1, 2023. Amortization was calculated on a level percent of pay basis assuming an average payroll growth of 1.50%, the same assumption as used for GERP.
- 6. Segal strongly recommends an actuarial funding method that targets 100% funding of the actuarial accrued liability. Generally, this implies payments that are ultimately at least enough to cover normal cost, interest on the unfunded actuarial accrued liability and the principal balance.

7. It is important to note that this actuarial valuation is based on plan assets as of September 30, 2023. The Plan's funded status does not reflect short-term fluctuations of the market, but rather is based on the market values on the last day of the plan year. Moreover, this actuarial valuation does not include any possible short-term or long-term impacts on mortality of the covered population that may emerge after September 30, 2023. Segal is available to prepare projections of potential outcomes of market conditions and other demographic experience upon request.

Summary of key valuation results

		2024	2023	2022
Contributions for	Actuarially determined contribution (ADC)	\$2,997,873	\$2,526,110	\$2,205,757
fiscal year beginning	ADC as a percent of payroll	1.54%	1.63%	1.59%
October 1:	Actual employer contributions			4,614,000
Actuarial accrued	Retired participants and beneficiaries		\$8,703,737	\$7,115,889
liability for plan year	Active participants		7,478,858	5,733,494
beginning October 1:	Total actuarial accrued liability		16,182,595	12,849,383
	 Normal cost, including administrative expenses 		2,833,293	2,171,710
Assets for plan year	Market value of assets (MVA)		\$7,481,000	\$2,526,000
beginning October 1:	Actuarial value of assets (AVA)		7,481,000	2,526,000
	 Actuarial value of assets as a percentage of market value of assets 		100.00%	100.00%
Funded status for	Unfunded actuarial accrued liability on actuarial value of assets		\$8,701,595	\$10,323,383
plan year beginning	Funded percentage on AVA basis		46.23%	19.66%
October 1:	Amortization period on an AVA basis		24	25
Key assumptions	Net investment return		6.50%	6.50%
	Payroll growth for amortization purposes		1.50%	1.50%
Demographic data for	Number of retired participants and beneficiaries		25	22
plan year beginning	Number of active participants		3,096	2,691
October 1:	Covered payroll		\$191,666,250	\$152,973,727
	Average payroll		\$61,908	\$56,846
	Projected payroll for next fiscal year		\$194,541,244	\$155,268,333

Important information about actuarial valuations

An actuarial valuation is a budgeting tool with respect to the financing of future projected obligations of a pension plan. It is an estimated forecast – the actual long-term cost of the plan will be determined by the actual benefits and expenses paid and the actual investment experience of the plan.

In order to prepare a valuation, Segal relies on a number of input items. These include:

Input Item	Description
Plan provisions	Plan provisions define the rules that will be used to determine benefit payments, and those rules, or the interpretation of them, may change over time. Even where they appear precise, outside factors may change how they operate. It is important to keep Segal informed with respect to plan provisions and administrative procedures, and to review the plan summary included in our report to confirm that Segal has correctly interpreted the plan of benefits.
Participant information	An actuarial valuation for a plan is based on data provided to the actuary by the City. Segal does not audit such data for completeness or accuracy, other than reviewing it for obvious inconsistencies compared to prior data and other information that appears unreasonable. It is important for Segal to receive the best possible data and to be informed about any known incomplete or inaccurate data.
Financial information	Part of the cost of a plan will be paid from existing assets — the balance will need to come from future contributions and investment income. The valuation is based on the asset values as of the valuation date, typically reported by the City. A snapshot as of a single date may not be an appropriate value for determining a single year's contribution requirement, especially in volatile markets. Plan sponsors often use an "actuarial value of assets" that differs from market value to gradually reflect year-to-year changes in the market value of assets in determining the contribution requirements.
Actuarial assumptions	In preparing an actuarial valuation, Segal starts by developing a forecast of the benefits to be paid to existing plan participants for the rest of their lives and the lives of their beneficiaries. This requires actuarial assumptions as to the probability of death, disability, withdrawal, and retirement of participants in each year, as well as forecasts of the plan's benefits for each of those events. In addition, the benefits forecasted for each of those events in each future year reflect actuarial assumptions as to salary increases and cost-of-living adjustments. The forecasted benefits are then discounted to a present value, typically based on an estimate of the rate of return that will be achieved on the plan's assets. All of these factors are uncertain and unknowable. Thus, there will be a range of reasonable assumptions, and the results may vary materially based on which assumptions are selected within that range. That is, there is no right answer (except with hindsight). It is important for any user of an actuarial valuation to understand and accept this constraint. The actuarial model may use approximations and estimates that will have an immaterial impact on our results. In addition, the actuarial assumptions may change over time, and while this can have a significant impact on the reported results, it does not mean that the previous assumptions or results were unreasonable or wrong.

The user of Segal's actuarial valuation (or other actuarial calculations) should keep the following in mind:

- The actuarial valuation is prepared at the request of the Committee and Panel. Segal is not responsible for the use or misuse of its report, particularly by any other party.
- An actuarial valuation is a measurement at a specific date it is not a prediction of a plan's future financial condition. Accordingly, Segal did not perform an analysis of the potential range of financial measurements, except where otherwise noted.
- If the Committee or Panel is aware of any event or trend that was not considered in this valuation that may materially change the results of the valuation, Segal should be advised, so that we can evaluate it.
- Segal does not provide investment, legal, accounting, or tax advice. Segal's valuation is based on our understanding of applicable guidance in these areas and of the plan provisions, but they may be subject to alternative interpretations. The City should look to their other advisors for expertise in these areas.
- While Segal maintains extensive quality assurance procedures, an actuarial valuation involves complex computer models and numerous inputs. In the event that an inaccuracy is discovered after presentation of Segal's valuation, Segal may revise that valuation or make an appropriate adjustment in the next valuation.
- Segal's report shall be deemed to be final and accepted by the City upon delivery and review. Trustees should notify Segal immediately of any questions or concerns about the final content.

As Segal has no discretionary authority with respect to the management or assets of the Plan, it is not a fiduciary in its capacity as actuaries and consultants with respect to the Plan.

Actuarial experience

- Assumptions should consider experience and should be based on reasonable expectations for the future.
- Each year actual experience is compared to that projected by the assumptions. Differences are reflected in the actuarial valuation.
- Assumptions are not changed if experience is believed to be a short-term development that will not continue over the long term. On the other hand, if experience is expected to continue, assumptions are changed.

Actuarial Experience for Year Ended September 30, 2023

	Assumption	Amount
1.	Net gain from investments	\$247,810
2.	Net gain/(loss) from contributions	2,187,816
3.	Net loss from other experience	-627,351
4.	Net experience gain: 1 + 2 + 3	\$1,808,275

Sources of experience variation

Experience variation is the difference between the expected and the actual experience that appear when the new valuation is compared with the projections from the previous valuation. These include:

- Mortality experience (more or fewer than expected deaths)
- The extent of turnover among participants
- The number of disability retirements (more or fewer than projected)
- Salary increases (greater or smaller than projected)

Unfunded actuarial accrued liability

Development of Unfunded Actuarial Accrued Liability for Year Ended September 30, 2023

	Unfunded Actuarial Accrued Liability	Change	Amount
1.	Unfunded actuarial accrued liability at beginning of year		\$10,323,383
2.	Employer normal cost at beginning of year		1,712,789
3.	Actuarially determined contribution at beginning of year		-2,405,709
4.	Interest on 1, 2 & 3		625,980
5.	Expected unfunded actuarial accrued liability		\$10,256,443
6.	Changes due to:		
	a. Net experience gain*	-\$1,808,275	
	b. Assumptions	253,427	
	Total changes		-\$1,554,848
7.	Unfunded actuarial accrued liability at end of year		\$8,701,595



^{*} Consisting of a \$2,187,816 gain on contributions more than the actuarially determined contribution and a \$379,541 loss on other experience. City of Jacksonville General Employees Defined Contribution Plan Disability and Survivorship Benefits Actuarial Valuation as of October 1, 2023

Actuarially determined contribution

The actuarially determined contribution is equal to the employer normal cost payment and a payment on the unfunded actuarial accrued liability. As of October 1, 2023, the actuarially determined contribution payable for the fiscal year beginning October 1, 2024 is \$2,997,873 or 1.54% of projected payroll.

The contribution requirement as of October 1, 2023 are based on the data described in Exhibit A, the actuarial assumptions and Plan provisions described in *Section 4*, including all changes affecting future costs adopted at the time of the actuarial valuation, actuarial gains and losses, and changes in the actuarial assumptions.

Actuarially Determined Contribution

Contribution	2023 Amount	2023 Percent of Projected Payroll	2022 Amount	2022 Percent of Projected Payroll
Total normal cost	\$2,793,293	1.44%	\$2,131,710	1.37%
Administrative expenses	40,000	0.02%	40,000	0.03%
Expected employee contributions	-574,999	-0.30%	-458,921	-0.30%
	<u> </u>		·	
4. Employer normal cost: (1) + (2) + (3)	\$2,258,294	1.16%	\$1,712,789	1.10%
5. Actuarial accrued liability	\$16,182,595		\$12,849,383	
6. Actuarial value of assets	7,481,000		2,526,000	
7. Unfunded actuarial accrued liability: (5) - (6)	\$8,701,595		\$10,323,383	
8. Payment on projected unfunded actuarial accrued liability	596,692	0.31%	692,920	0.45%
9. Adjustment for timing*	142,887	0.07%	120,401	0.08%
10. Actuarially determined contribution: (4) + (8) + (9)	\$2,997,873	1.54%	\$2,526,110	1.63%
11. Projected payroll	\$194,541,244		\$155,268,333	

^{*} Adjusted for timing and projected to next fiscal year; actuarially determined contributions are assumed to be paid at the end of every month.



Reconciliation of actuarially determined contribution

Reconciliation of Actuarially Determined Contribution from October 1, 2023 to October 1, 2024

Step	Amount
1. Actuarially determined contribution as of October 1, 2023	\$2,526,110
2. Effect of expected change in amortization payment due to payroll growth	10,914
3. Effect of change in other actuarial assumptions	93,748
4. Effect of investment gain	-17,844
5. Effect of other gains and losses on accrued liability	45,172
6. Net effect of other changes, including composition and number of participants	339,773
7. Total change	\$471,763
8. Actuarially determined contribution as of October 1, 2024	\$2,997,873

Low-Default-Risk Obligation Measure (LDROM)

In December 2021, the Actuarial Standards Board issued a revision of Actuarial Standard of Practice No. 4 (ASOP 4) *Measuring Pension Obligations and Determining Pension Plan Costs or Contributions*. One of the revisions to ASOP 4 requires the disclosure of a Low-Default-Risk Obligation Measure (LDROM) when performing a funding valuation. The LDROM presented in this report is calculated using the same methodology and assumptions used to determine the Actuarial Accrued Liability (AAL) used for funding, except for the discount rate. The LDROM is required to be calculated using "a discount rate...derived from low-default-risk fixed income securities whose cash flows are reasonably consistent with the pattern of benefits expected to be paid in the future."

The LDROM is a calculation assuming a plan's assets are invested in an all-bond portfolio, generally lowering expected long-term investment returns. The discount rate selected and used for this purpose is the Bond Buyer General Obligation 20-year Municipal Bond Index Rate, published at the end of each week. The last published rate in September of the measurement period, by The Bond Buyer (www.bondbuyer.com), is 4.09% for use effective September 30, 2023. This is the rate used to determine the discount rate for valuing reported public pension plan liabilities in accordance with Governmental Accounting Standards when plan assets are projected to be insufficient to make projected benefit payments, and the 20-year period reasonably approximates the duration of plan liabilities. The LDROM is not used to determine a plan's funded status or Actuarially Determined Contribution. The plan's expected return on assets, currently 6.50%, is used for these calculations.

As of September 30, 2023, the LDROM for the system is \$22,347,332. The difference between the plan's AAL of \$16,182,595 and the LDROM can be thought of as the increase in the AAL if the entire portfolio were invested in low-default-risk securities. Alternatively, this difference could also be viewed as representing the expected savings from investing in the plan's diversified portfolio compared to investing only in low-default-risk securities.

ASOP 4 requires commentary to help the intended user understand the significance of the LDROM with respect to the funded status of the plan, plan contributions, and the security of participant benefits. In general, if plan assets were invested exclusively in low-default-risk securities, the funded status would be lower and the Actuarially Determined Contribution would be higher. While investing in a portfolio with low-default-risk securities may be more likely to reduce investment volatility and the volatility of employer contributions, it also may be more likely to result in higher employer contributions or lower benefits.

Risk

Since the actuarial valuation results are dependent on a given set of assumptions and data as of a specific date, there is a risk that emerging results may differ significantly as actual experience differs from the assumptions.

This report does not contain a detailed analysis of the potential range of future measurements but does include a brief discussion of some risks that may affect the Plan. A more detailed assessment would provide the Trustees with a better understanding of the risks inherent in the Plan. This assessment may include scenario testing, sensitivity testing, stress testing and stochastic modeling.

- Investment Risk (the risk that returns will be different than expected)
 - The Plan's assets are comingled with the assets of the other three City of Jacksonville Retirement System plans and allocated among each plan.
- Longevity Risk (the risk that mortality experience will be different than expected)
 - The actuarial valuation includes an expectation of future improvement in life expectancy. Emerging plan experience that does not match these expectations will result in either an increase or decrease in the actuarially determined contribution. It is not yet known what long-term impact the COVID-19 pandemic may have on the Plan's mortality experience.
- Contribution Risk (the risk that actual contributions will be different from actuarially determined contribution)
 - Plan contributions are set by statute. The Plan's funding policy requires payment of 0.30% of payroll. As shown in this report, this is not enough to cover the City's contribution requirement. As such, the City should begin to contribute the actuarial determined contribution.
- Demographic Risk (the risk that participant experience will be different than assumed)

Examples of this risk include:

- More or less active participant turnover than assumed.
- More of less disabilities than assumed.
- More or less deaths than assumed.
- Transfer Risk

Because the ordinances defining the City's plans allow for members of the General Employees Retirement Plan (GERP) to elect a lump sum pay out of their retirement benefit to be paid as part of a transfer to the General Employees Defined Contribution Plan, there is a potential incentive to make this transfer before applying for disability benefits.

GFOA funded liability by type

The Actuarial Accrued Liability represents the present value of benefits earned, calculated using the Plan's actuarial cost method. The Actuarial Value of Assets reflects the financial resources available to liquidate the liability. The portion of the liability covered by assets reflects the extent to which accumulated plan assets are sufficient to pay future benefits, and is shown for liabilities associated with employee contributions, pensioner liabilities, and other liabilities. The Government Finance Officers Association (GFOA) recommends that the funding policy aim to achieve a funded ratio of 100 percent.

GFOA Funded Liability by Type as of September 30

Туре	2023	2022
Actuarial accrued liability (AAL)		
Retirees and beneficiaries	\$8,703,737	\$7,115,889
Active and inactive members (employer-financed)	7,478,858	5,733,494
Total	\$16,182,595	\$12,849,383
Actuarial value of assets	7,481,000	2,526,000
Cumulative portion of AAL covered		
Retirees and beneficiaries	85.95%	35.50%
Active and inactive members (employer-financed)	0.00%	0.00%

Exhibit A: Table of plan demographics

Category	Year Ended September 30, 2023	Year Ended September 30, 2022	Change From Prior Year
Active participants in valuation:	•		
Number	3,096	2,691	15.1%
Average age	42.9	42.6	0.3
Average years of service	3.2	3.1	0.1
Covered payroll	\$191,666,250	\$152,973,727	25.3%
Average payroll	\$61,908	\$56,846	8.9%
Disabled participants:			
Number in pay status	16	15	6.7%
Average age	60.8	59.5	1.3
Average monthly benefit	\$2,324	\$2,286	1.7%
Beneficiaries:			
Number in pay status	9	7	28.6%
Average age	59.0	61.9	-2.9
Average monthly benefit	\$2,012	\$1,869	7.7%

Exhibit B: Summary statement of income and expenses on a market value basis

Year Ended September 30, 2023 versus Year Ended September 30, 2022

Item	Income and Expenses	Assets as of YE 2023	Income and Expenses	Assets as of YE 2022
Net assets at market value at the beginning of the year		\$2,526,000		\$2,381,000
Contribution income:				
Employer contributions	\$4,614,000		\$364,000	
Employee contributions	<u>530,000</u>		<u>426,000</u>	
Total contribution income		\$5,144,000		\$790,000
Investment income:				
Investment income	\$562,000		\$0	
Less investment fees	<u>-7,000</u>		<u>0</u>	
Net investment income		<u>\$555,000</u>		<u>\$0</u>
Total income available for benefits		\$5,699,000		\$790,000
Less benefit payments:				
Net benefit payments and administrative expenses		-\$744,000		-\$645,000
Change in market value of assets		\$4,955,000		\$145,000
Net assets at market value at the end of the year		\$7,481,000		\$2,526,000

Exhibit C: Table of amortization bases

Туре	Date Established	Initial Period	Initial Amount	Annual Payment*	Years Remaining	Outstanding Balance
Initial liability	10/01/2020	27	\$10,789,981	\$717,525	24	\$10,463,687
Experience loss	10/01/2021	26	6,889,357	467,146	24	6,812,399
Change in assumptions	10/01/2021	26	-9,066,164	-614,749	24	-8,964,890
Experience loss	10/01/2022	25	1,767,858	120,441	24	1,756,395
Change in assumptions	10/01/2022	25	190,085	12,950	24	188,852
Experience gain	10/01/2023	24	-1,808,275	-123,999	24	-1,808,275
Change in assumptions	10/01/2023	24	253,427	17,378	24	253,427
Total				\$596,692		\$8,701,595

^{*} Level percentage of payroll

Exhibit D: Supplementary State of Florida Information Summary of Salary Changes

Year Ended September 30	Total Salary	Percent Change in Total Salary	Percent Change in Salary of Employees Remaining Active	Expected Percent Change in Salary of Employees Remaining Active
2020	\$106,643,201	N/A	N/A	N/A
2021	136,731,327	30.66%	5.39%	5.90%
2022	152,973,727	11.88%	5.94%	6.21%
2023	191,666,250	25.29%	10.23%	7.46%

Exhibit E: Supplementary State of Florida Information Comparative Summary of Principal Valuation Results

Year Ended September 30, 2023

	New Assumptions	Old Assumptions	Year Ended September 30, 2022
Participant data			
Active members	3,096	3,096	2,691
Total annual payroll	\$191,666,250	\$191,666,250	\$152,973,727
Retired members and beneficiaries	25	25	22
Total annualized benefit	\$663,621	\$663,621	\$568,578
Actuarial value of assets	\$7,481,000	\$7,481,000	\$2,526,000
Present value of all future expected benefit payments:			
Active members:			
Disability benefits	\$13,051,399	\$11,633,118	\$8,926,940
Death benefits	<u>24,804,320</u>	<u>22,473,687</u>	<u>17,429,580</u>
Total	\$37,855,719	\$34,106,805	\$26,356,520
Retired members and beneficiaries	<u>8,703,737</u>	<u>8,703,737</u>	<u>7,115,889</u>
Total	\$46,559,456	\$42,810,542	\$33,472,409

Exhibit E: Supplementary State of Florida Information Comparative Summary of Principal Valuation Results

	Year Ended September 30, 2023	Year Ended September 30, 2022
Unfunded actuarial accrued liability	\$8,701,595	\$10,323,383
Actuarial present value of accrued benefits		
Vested accrued benefits		
Active members	\$5,705,800	\$3,562,295
Retirees and beneficiaries	8,703,737	7,115,889
Nonvested active members	<u>13,330,418</u>	<u>12,700,861</u>
Total	\$27,739,955	\$23,379,045
Pension Cost		
Normal cost, including expected administrative expenses	\$2,833,293	\$2,171,710
Expected employee contributions	-574,999	-458,921
Level % of payroll payment to amortize unfunded actuarial accrued liability	596,692	692,920
Total minimum annual cost payable monthly at valuation date	2,854,986	2,405,709
Total employer cost projected to budget year	2,997,873	2,526,110
Projected payroll	194,541,244	155,268,333
As % of projected payroll	1.54%	1.63%
Present value of active members' future salaries at attained age	\$2,064,640,086	\$1,477,373,465
Present value of active members' future contributions at attained age	6,193,920	4,432,120

Exhibit 1: Actuarial assumptions, methods and models

Rationale for assumptions

The information and analysis used in selecting each demographic assumption that has a significant effect on this actuarial valuation is shown in the General Employees Retirement Plan Experience Study Report for the five-year period ended September 30, 2017.

Net investment return

6.50%

The net investment return assumption was chosen by the Retirement System's Board of Trustees with input from the actuary. The assumption is a long-term estimate derived from historical data, current and recent market expectations, and professional judgment.

Salary increases (including inflation)

COJ/JHA/NFTPO	JEA
	JL/

Service	Rate (%)	Service	Rate (%)
0	10.00	0	10.00
1-3	7.00	1	9.00
4-10	5.50	2-4	8.00
11-24	4.25	5-9	5.75
25+	3.50	10-18	5.00
		19-25	4.50
		26+	3.50

Inflation Rate

2.50%

Payroll growth

1.50% used for amortization of unfunded liability amounts, based on the requirement in the Florida Statutes that the assumption for this purpose may not exceed the average annual growth for the preceding ten years. Negotiated pay level increases and pay of DC Plan participants were taken into consideration in setting a payroll growth that is expected to be achieved and maintained on a tenyear average basis. The Fund's long-term payroll growth assumption is equal to the inflation assumption of 2.50%.

Mortality rates

Healthy pre-retirement: FRS pre-retirement mortality tables for personnel other than special risk and K-12 instructional personnel,

set forward 2 years, projected generationally from 2010 with Scale MP2018

Spouse post-retirement: FRS healthy post-retirement mortality tables for personnel other than special risk and K-12 instructional

personnel, set forward 2 years, projected generationally from 2010 with Scale MP2018

Disabled: FRS disabled mortality tables for personnel other than special risk, with no set forward, projected

generationally from 2010 with Scale MP2018

The FRS tables for personnel other than special risk and K-12 instructional personnel, set forward 2 years, reasonably reflect the healthy annuitant mortality experience of the General Employees Retirement Plan as of the measurement date. The FRS disabled mortality tables for personnel other than special risk

reasonably reflect the disabled annuitant mortality experience as of the measurement date.

Annuitant Mortality Rates (%)

Healthy

Age	Male	Female
55	1.04	0.55
60	1.16	0.61
65	1.45	0.88
70	2.34	1.51
75	3.90	2.62
80	6.63	4.65
85	11.21	8.64
90	18.13	15.47

Disabled

Age	Male	Female
55	2.53	1.91
60	3.08	2.27
65	3.93	2.83
70	5.08	3.79
75	6.98	5.46
80	10.12	8.31
85	14.68	12.60
90	21.29	17.72

Mortality rates shown for base table.

Termination Rates (%) Before Retirement

	<u>Mort</u>	<u>ality</u>	<u>Disal</u>	oility ²
Age	Male	Female	Male	Female
20	0.04	0.01	0.01	0.01
25	0.05	0.02	0.01	0.01
30	0.06	0.03	0.02	0.02
35	0.08	0.04	0.03	0.03
40	0.11	0.06	0.04	0.04
45	0.16	0.09	0.06	0.06
50	0.25	0.13	0.10	0.10
55	0.36	0.20	0.16	0.16
60	0.52	0.29	0.25	0.25
65	0.75	0.47	0.00	0.00

¹ Mortality rates shown for base table.

² 100% of disabilities are assumed to be non-service incurred

Withdrawal

Withdrawal¹

Williamawai				
Service	COJ	JEA		
0	16.00	10.00		
1	15.00	3.25		
2	13.00	3.25		
3	10.00	3.25		
4	10.00	3.25		
5	10.00	3.25		
6	10.00	2.75		
7	10.00	2.75		
8	4.00	2.00		
9	4.00	2.00		
10	4.00	2.00		
11	4.00	2.00		
12	4.00	2.00		
13	4.00	2.00		
14	4.00	2.00		
15	4.00	1.00		
16	4.00	1.00		
17	3.00	1.00		
18	3.00	1.00		
19	3.00	1.00		
20+	3.00	0.50		

¹All withdrawal rates are set to 0% after eligibility for retirement.

Retirement rates

rewer than 31 Years of Service			
Age	Rate (%) ¹		
45	50		
46-47	5		
48-49	20		
50-53	4		
54-58	9		
59-62	15		
63	10		
64-65	25		
66	20		
67-69	15		
70 & Over	100		

31 or More Years of Service		
Service	Rate (%) ¹	
31	5	
32-33	15	
34-35	20	
36	25	
37	40	
38	15	
39	5	
40	100	

Note: For the purposes of applying retirement rates, participants are treated as being eligible for retirement based on the eligibility provisions from the General Employees' Retirement Plan. Rates first apply at the earliest of age 65 with five years of Credited Service, age 50 with 20 years of Credited Service, and any age with 30 years of Credited Service

Refund of Contributions

No refunds of contributions are assumed to be payable from this fund.

Unknown Data for Participants

Same as those exhibited by participants with similar known characteristics. If not specified, participants are assumed to be male.

¹ 100% retirement is assumed at the earlier of age 70 or 40 years of service.

Administrative Expenses

\$40,000 for plan year beginning October 1, 2023.

Family Composition

75% of males and 55% of females are assumed to be married. None are assumed to have dependent children. Females are assumed to be three years younger than their spouses.

Actuarial Value of Assets

Market value of assets

Actuarial cost method

Entry Age Normal Actuarial Cost Method. Entry Age is the age at the time the participant commenced employment. Normal Cost and Actuarial Accrued Liability are calculated on an individual basis based on each member's benefit accrual rate and are allocated by compensation.

Normal Cost is not included for participants who are assumed to retire with 100% certainty in the upcoming plan year based on the retirement assumptions.

Models

Segal valuation results are based on proprietary actuarial modeling software. The actuarial valuation models generate a comprehensive set of liability and cost calculations that are presented to meet regulatory, legislative and client requirements. Our Actuarial Technology and Systems unit, comprised of both actuaries and programmers, is responsible for the initial development and maintenance of these models. The models have a modular structure that allows for a high degree of accuracy, flexibility and user control. The client team programs the assumptions and the plan provisions, validates the models, and reviews test lives and results, under the supervision of the responsible actuary.

Change in Actuarial Assumptions

The following changes in actuarial assumptions occurred with this valuation:

- COJ withdrawal rates were increased for participants with between four and seven years of service and 12 or more years of service.
- JEA withdrawal rates were updated to reflect more of a stair-step rate rather than a smooth reduction in rates.
- COJ and JEA retirement rates were updated across all ages and service buckets, and the 90% BACKDROP election assumption was removed (now inherent in the rate table).
- The COJ salary scale was modified to reflect higher merit and promotional increases.
- The JEA salary scale was also updated with higher rates across all service levels.

Exhibit 2: Summary of plan provisions

This exhibit summarizes the major provisions of the Plan included in the valuation. It is not intended to be, nor should it be interpreted as, a complete statement of all plan provisions.

Plan year

October 1 through September 30

Plan status

Ongoing

Off the Job Disability

• Age Requirement None

• Service Requirement Five years of Credited Service

• Amount 25% of final compensation, plus 2.5% of final compensation per year of service in excess of five years, not

to exceed 50% of final compensation in total

On the Job Disability

Age Requirement NoneService Requirement None

• Amount 25% of final compensation, plus 2.5% of final compensation per year of service in excess of five years, not

to exceed 50% of final compensation in total

Spouse Retirement Death Benefit

• Age Requirement None

• Service Requirement Two years of Credited Service

• *Amount* 45% of the participant's earnable compensation at date of death

Cost of living adjustments (COLAs)

On the April 1st nearest the fifth anniversary of the initial benefit commencement date, and on each April 1st thereafter, the regular benefit is increased by 3%; only applicable to spouse's pre-retirement death benefit.

Member Contribution

0.3% of Earnable Compensation

Section 5: GASB Information

General information about the pension plan

Plan description

Plan membership. At September 30, 2023, pension plan membership consisted of the following:

Membership	Amount
Retired participants or beneficiaries currently receiving benefits	25
Inactive participants with a vested right to a deferred or immediate benefit	0
Active members	3,096
Total	3,121

Exhibit 1: Net Pension Liability

Components of the Net Pension Liability	Current	Prior
Reporting date for employer under GASB 68	September 30, 2024	September 30, 2023
Measurement date and reporting date for the Plan under GASB 67	September 30, 2023	September 30, 2022
Total Pension Liability	\$16,182,595	\$12,849,383
Plan Fiduciary Net Position	7,481,000	2,526,000
Net Pension Liability	8,701,595	10,323,383
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	46.23%	19.66%

Actuarial assumptions. The Total Pension Liability (TPL) as of September 30, 2023, which was determined based on the results of an actuarial valuation as of October 1, 2023, used the following actuarial assumptions, applied to all periods included in the measurement:

Section 5: GASB Information

Assumption Type	Assumption
Salary increases	3.50% - 10.00%, of which 2.50% is the Plan's long term payroll inflation
Net investment rate of return	6.50%,
Other assumptions	See Section 4 of this report for a complete description of all actuarial assumptions. These assumptions were developed in the analysis of actuarial experience study for the General Employees Retirement Plan for the period October 1, 2017 through September 30, 2022.

Detailed information regarding all actuarial assumptions can be found in Section 4, Exhibit I.

Section 5: GASB Information

Determination of discount rate and investment rates of return

The long-term expected rate of return on pension plan investments was determined using a building-block method in which expected future real rates of return (expected returns, net of inflation) are developed for each major asset class. These returns are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage, adding expected inflation. The target allocation (approved by the Board) and projected arithmetic real rates of return for each major asset class, after deducting inflation, but before investment expenses, used in the derivation of the long-term expected investment rate of return assumption are summarized in the following table:

Asset Class	Target Allocation	Long-Term Expected Real Rate of Return*
Domestic equity	30.00%	6.60%
International equity	20.00%	6.70%
Fixed income	20.00%	1.80%
Real estate	15.00%	3.40%
Private equity	7.50%	9.90%
Alternatives	7.50%	3.00%
Total	100.00%	5.16%

Discount rate. The discount rate used to measure the Total Pension Liability (TPL) was 6.50% as of September 30, 2023 and September 30, 2022. The projection of cash flows used to determine the discount rate assumed plan member contributions will be made at the current contribution rate and that employer contributions will be made at rates equal to the actuarially determined contribution rates. For this purpose, only employer contributions that are intended to fund benefits for current plan members and their beneficiaries are included. Projected employer contributions that are intended to fund the service costs for future plan members and their beneficiaries, as well as projected contributions from future plan members, are not included. Based on those assumptions, the Plan Fiduciary Net Position (FNP) was projected to be available to make all projected future benefit payments for current plan members. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the TPL as of both September 30, 2023 and September 30, 2022.



Based on capital market assumptions provided by Segal Marco Advisors

Discount rate sensitivity

Sensitivity of the Net Pension Liability to changes in the discount rate. The following presents the Net Pension Liability of the Plan as of September 30, 2023 calculated using the discount rate of 6.50%, as well as what the Plan's NPL would be if it were calculated using a discount rate that is 1-percentage-point lower (5.50%) or 1-percentage-point higher (7.50%) than the current rate.

		Current	
Item	1% Decrease (5.50%)	Discount Rate (6.50%)	1% Increase (7.50%)
Net Pension Liability	\$10,893,505	\$8,701,595	\$6,899,165

Exhibit 2: Schedule of changes in Net Pension Liability

Components of the Net Pension Liability	Current	Prior
Reporting and Measurement Dates		
Reporting date for employer under GASB 68	September 30, 2024	September 30, 2023
Measurement date and reporting date for the Plan under GASB 67	September 30, 2023	September 30, 2022
Total Pension Liability		
Service cost	\$2,131,710	\$1,910,076
Interest	949,591	819,755
Change of benefit terms	0	0
Differences between expected and actual experience	742,484	-211,620
Changes of assumptions	253,427	190,085
Benefit payments, including refunds of member contributions	<u>-744,000</u>	-645,000
Net change in Total Pension Liability	\$3,333,212	\$2,063,296
Total Pension Liability — beginning	12,849,383	10,786,087
Total Pension Liability — ending	\$16,182,595	\$12,849,383
Plan Fiduciary Net Position		
Contributions — employer	\$4,614,000	\$364,000
Contributions — employee	530,000	426,000
Net investment income	555,000	0
Benefit payments, including refunds of member contributions	-744,000	-645,000
Administrative expense	0	0
Other	0	0
Net change in Plan Fiduciary Net Position	\$4,955,000	\$145,000
Plan Fiduciary Net Position — beginning	2,526,000	2,381,000
Plan Fiduciary Net Position — ending	\$7,481,000	\$2,526,000

Components of the Net Pension Liability	Current	Prior
Net Pension Liability		
Net Pension Liability – ending	\$8,701,595	\$10,323,383
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	46.23%	19.66%
Covered payroll*	\$191,666,250	\$155,268,333
Plan Net Pension Liability as percentage of covered payroll	4.54%	6.65%

Notes to Schedule:

- Benefit changes: None
- Change of Assumptions: The discount rate was lowered from 6.625% to 6.50% based on a September 30, 2022 measurement date.

The following changes in assumptions were made based on a September 30, 2023 measurement date:

- COJ withdrawal rates were increased for participants with between four and seven years of service and 12 or more years of service.
- JEA withdrawal rates were updated to reflect more of a stair-step rate rather than a smooth reduction in rates.
- COJ and JEA retirement rates were updated across all ages and service buckets, and the 90% BACKDROP election assumption was removed (now inherent in the rate table).
- The COJ salary scale was modified to reflect higher merit and promotional increases.
- The JEA salary scale was also updated with higher rates across all service levels.

Exhibit 3: Schedule of employer contributions

Year Ended September 30	Actuarially Determined Contributions	Contributions in Relation to the Actuarially Determined Contributions	Contribution Deficiency (Excess)	Covered Payroll	Contributions as a Percentage of Covered Payroll
2020	N/A	\$217,818	N/A	\$106,212,849	0.21%
2021	N/A	558,000	N/A	138,782,297	0.40%
2022	\$3,513,815	364,000	\$3,149,815	155,268,333	0.23%
2023	2,205,757	4,614,000	(2,408,243)	191,666,250	2.41%

Exhibit 4: Pension expense

Components of pension expense	Current	Prior
Reporting date for employer under GASB 68	September 30, 2024	September 30, 2023
Measurement date	September 30, 2023	September 30, 2022
Service cost	\$2,131,710	\$1,910,076
Interest	949,591	819,755
Expensed portion of current-period changes in proportion and differences between employer's contributions and proportionate share of contributions	0	0
Current-period benefit changes	_	_
Expensed portion of current-period difference between expected and actual experience in the Total Pension Liability	67,494	-19,240
Expensed portion of current-period changes of assumptions	23,037	17,285
Member contributions	-530,000	-426,000
Projected earnings on pension plan investments	-307,190	-162,544
Expensed portion of current-period differences between actual and projected earnings on pension plan investments	-49,562	32,508
Administrative expense	_	_
Other	_	_
Recognition of beginning of year deferred outflows of resources as pension expense	438,058	388,269
Recognition of beginning of year deferred inflows of resources as pension expense	-843,435	-824,197
Net amortization of deferred amounts from changes in proportion and differences between employer's contributions and proportionate share of contributions	0	_
Pension expense	\$1,879,703	\$1,735,912

Deferred outflows of resources and deferred inflows of resources

Reporting date for employer under GASB 68 September 30, 2023 September 30, 2023 September 30, 2023 September 30, 2022 Deferred outflows of resources September 30, 2022 September 30, 2022 Deferred outflows of resources September 30, 2023 September 30, 2022 September 30, 2023 September 30, 2022 September 30, 2023 September 30, 2022 September 30, 2023 September 30, 2022 September 30, 2023	Deferred Outflows and Inflows	Current	Prior
Measurement date September 30, 2022 Deferred outflows of resources ************************************	Reporting and measurement dates	-	-
Deferred outflows of resources Changes in proportion and differences between employer's contributions and proportionate share of contributions' \$1,418,577 \$1,370,335 Changes of assumptions 385,910 172,800 Net difference between projected and actual earnings on pension plan investments 0 159,955 Difference between expected and actual experience in the Total Pension Liability 3,701,358 3,404,664 Total deferred outflows of resources \$5,505,845 \$5,107,754 Deferred inflows of resources \$5,505,845 \$5,107,754 Changes in proportion and differences between employer's contributions and proportionate share of contributions¹ \$1,418,577 \$1,370,335 Changes of assumptions 6,593,576 7,417,773 \$1,4773 \$1,370,335 Changes of assumptions of centre between projected and actual earnings on pension plan investments 80,775 0 Difference between expected and actual experience in the Total Pension Liability 173,142 192,380 Total deferred inflows of resources \$8,266,070 \$8,980,488 Deferred outflows of resources and deferred inflows of resources related to pension will be recognized as follows: \$1,418,577 \$364,401 \$405,377	Reporting date for employer under GASB 68	September 30, 2024	September 30, 2023
Changes in proportion and differences between employer's contributions and proportionate share of contributions' 385,910 11,310,335 Changes of assumptions 385,910 172,800 Net difference between projected and actual earnings on pension plan investments 0 159,955 Difference between expected and actual experience in the Total Pension Liability 3,701,358 3,404,664 Total deferred outflows of resources \$5,505,845 \$5,107,754 Deferred inflows of resources 51,418,577 \$1,370,335 Changes in proportion and differences between employer's contributions and proportionate share of contributions¹ \$1,418,577 \$1,370,335 Changes of assumptions 6,593,576 7,417,773 \$1,370,335 Net difference between projected and actual earnings on pension plan investments 80,775 0 Difference between expected and actual experience in the Total Pension Liability 173,142 192,380 Total deferred outflows of resources \$8,266,070 \$8,980,488 Deferred outflows of resources and deferred inflows of resources related to pension will be recognized as follows: \$8,266,070 \$8,980,488 Reporting date for employer under GASB 68 year ended September 30: \$8,266,070 \$364,401 <td< td=""><td>Measurement date</td><td>September 30, 2023</td><td>September 30, 2022</td></td<>	Measurement date	September 30, 2023	September 30, 2022
Changes of assumptions 385,910 172,800 Net difference between projected and actual earnings on pension plan investments 0 159,955 Difference between expected and actual experience in the Total Pension Liability 3,701,358 3,404,664 Total deferred outflows of resources \$5,505,845 \$5,107,754 Deferred inflows of resources **** **** Changes in proportion and differences between employer's contributions and proportionate share of contributions¹ 6,593,576 7,417,773 Changes of assumptions 6,593,576 7,417,773 **** Net difference between projected and actual earnings on pension plan investments 80,775 0 Difference between expected and actual experience in the Total Pension Liability 173,142 192,380 Total deferred inflows of resources \$8,266,070 \$8,380,488 Deferred outflows of resources and deferred inflows of resources related to pension will be recognized as follows: *** Reporting date for employer under GASB 68 year ended September 30: *** Reporting date for employer under GASB 68 year ended September 30: *** ** 2024 N/A ** *405,377 20	Deferred outflows of resources		
Net difference between projected and actual earnings on pension plan investments 0 159,955 Difference between expected and actual experience in the Total Pension Liability 3,701,358 3,404,664 Total deferred outflows of resources \$5,505,845 \$5,107,754 Deferred inflows of resources \$1,418,577 \$1,370,335 Changes in proportion and differences between employer's contributions and proportionate share of contributions. 6,593,576 7,417,773 Changes of assumptions 80,775 0 Net difference between projected and actual earnings on pension plan investments 80,775 0 Difference between expected and actual experience in the Total Pension Liability 173,142 192,380 Total deferred inflows of resources \$8,266,070 \$8,980,488 Deferred outflows of resources and deferred inflows of resources related to pension will be recognized as follows: 8,266,070 \$8,980,488 Deferred outflows of resources and deferred inflows of resources related to pension will be recognized as follows: 8,266,070 \$8,980,488 Deferred outflows of resources and deferred inflows of resources related to pension will be recognized as follows: 8,266,070 \$8,980,488 Reporting date for employer under GASB 68 year ended September	Changes in proportion and differences between employer's contributions and proportionate share of contributions*	\$1,418,577	\$1,370,335
Difference between expected and actual experience in the Total Pension Liability 3,701,358 3,404,664 Total deferred outflows of resources \$5,505,845 \$5,107,754 Deferred inflows of resources Changes in proportion and differences between employer's contributions and proportionate share of contributions. \$1,418,577 \$1,370,335 Changes of assumptions 6,593,576 7,417,773 0.00	Changes of assumptions	385,910	172,800
Total deferred outflows of resources \$5,505,845 \$5,107,754 Deferred inflows of resources Changes in proportion and differences between employer's contributions and proportionate share of contributions.1 \$1,418,577 \$1,370,335 Changes of assumptions 6,593,576 7,417,773 Net difference between projected and actual earnings on pension plan investments 80,775 0 Difference between expected and actual experience in the Total Pension Liability 173,142 192,380 Total deferred inflows of resources \$8,266,070 \$8,890,488 Deferred outflows of resources and deferred inflows of resources related to pension will be recognized as follows: **** Reporting date for employer under GASB 68 year ended September 30: N/A -\$405,377 2024 N/A -\$405,377 2025 -\$364,401 -405,377 2026 -364,401 -405,377 2027 -374,374 -415,350 2028 -406,883 -447,859 2029 -357,321 -447,859	Net difference between projected and actual earnings on pension plan investments	0	159,955
Deferred inflows of resources Changes in proportion and differences between employer's contributions and proportionate share of contributions¹ \$1,418,577 \$1,370,335 Changes of assumptions 6,593,576 7,417,773 Net difference between projected and actual earnings on pension plan investments 80,775 0 Difference between expected and actual experience in the Total Pension Liability 173,142 192,380 Total deferred inflows of resources \$8,266,070 \$8,980,488 Deferred outflows of resources and deferred inflows of resources related to pension will be recognized as follows: *** Reporting date for employer under GASB 68 year ended September 30: *** *** 2024 N/A -\$405,377 2025 -\$364,401 -405,377 2026 -364,401 -405,377 2027 -374,374 -415,350 2028 -406,883 -447,859 2029 -357,321 -447,859	Difference between expected and actual experience in the Total Pension Liability	3,701,358	3,404,664
Changes in proportion and differences between employer's contributions and proportionate share of contributions¹ \$1,418,577 \$1,370,335 Changes of assumptions 6,593,576 7,417,773 Net difference between projected and actual earnings on pension plan investments 80,775 0 Difference between expected and actual experience in the Total Pension Liability 173,142 192,380 Total deferred inflows of resources \$8,266,070 \$8,980,488 Deferred outflows of resources and deferred inflows of resources related to pension will be recognized as follows: N/A -\$405,377 Reporting date for employer under GASB 68 year ended September 30: N/A -\$405,377 2024 N/A -\$405,377 2025 -\$364,401 -405,377 2026 -364,401 -405,377 2026 -374,374 -415,350 2028 -406,883 -447,859 2029 -357,321 -447,859	Total deferred outflows of resources	\$5,505,845	\$5,107,754
Contributions¹ 6,593,576 7,417,773 Changes of assumptions 6,593,576 7,417,773 Net difference between projected and actual earnings on pension plan investments 80,775 0 Difference between expected and actual experience in the Total Pension Liability 173,142 192,380 Total deferred inflows of resources \$8,266,070 \$8,980,488 Deferred outflows of resources and deferred inflows of resources related to pension will be recognized as follows: *** Reporting date for employer under GASB 68 year ended September 30: N/A -\$405,377 2024 N/A -\$405,377 2025 -\$364,401 -405,377 2026 -364,401 -405,377 2027 -374,374 -415,350 2028 -406,883 -447,859 2029 -357,321 -447,859	Deferred inflows of resources		
Net difference between projected and actual earnings on pension plan investments 80,775 0 Difference between expected and actual experience in the Total Pension Liability 173,142 192,380 Total deferred inflows of resources \$8,266,070 \$8,980,488 Deferred outflows of resources and deferred inflows of resources related to pension will be recognized as follows: Reporting date for employer under GASB 68 year ended September 30: N/A -\$405,377 2024 N/A -\$405,377 2025 -\$364,401 -405,377 2026 -364,401 -405,377 2027 -374,374 -415,350 2028 -406,883 -447,859 2029 -357,321 -447,859	Changes in proportion and differences between employer's contributions and proportionate share of contributions ¹	\$1,418,577	\$1,370,335
Difference between expected and actual experience in the Total Pension Liability 173,142 192,380 Total deferred inflows of resources \$8,266,070 \$8,980,488 Deferred outflows of resources and deferred inflows of resources related to pension will be recognized as follows: Reporting date for employer under GASB 68 year ended September 30: 2024 N/A -\$405,377 2025 -\$364,401 -405,377 2026 -364,401 -405,377 2027 -374,374 -415,350 2028 -406,883 -447,859 2029 -357,321 -447,859	Changes of assumptions	6,593,576	7,417,773
Total deferred inflows of resources \$8,266,070 \$8,980,488 Deferred outflows of resources and deferred inflows of resources related to pension will be recognized as follows: Reporting date for employer under GASB 68 year ended September 30: 2024 N/A -\$405,377 2025 -\$364,401 -405,377 2026 -364,401 -405,377 2027 -374,374 -415,350 2028 -406,883 -447,859 2029 -357,321 -447,859	Net difference between projected and actual earnings on pension plan investments	80,775	0
Deferred outflows of resources and deferred inflows of resources related to pension will be recognized as follows: Reporting date for employer under GASB 68 year ended September 30: 2024 N/A -\$405,377 2025 -\$364,401 -405,377 2026 -364,401 -405,377 2027 -374,374 -415,350 2028 -406,883 -447,859 2029 -357,321 -447,859	Difference between expected and actual experience in the Total Pension Liability	173,142	192,380
follows: Reporting date for employer under GASB 68 year ended September 30: N/A -\$405,377 2025 -\$364,401 -405,377 2026 -364,401 -405,377 2027 -374,374 -415,350 2028 -406,883 -447,859 2029 -357,321 -447,859	Total deferred inflows of resources	\$8,266,070	\$8,980,488
2024 N/A -\$405,377 2025 -\$364,401 -405,377 2026 -364,401 -405,377 2027 -374,374 -415,350 2028 -406,883 -447,859 2029 -357,321 -447,859	Deferred outflows of resources and deferred inflows of resources related to pension will be recognized as follows:		
2025 -\$364,401 -405,377 2026 -364,401 -405,377 2027 -374,374 -415,350 2028 -406,883 -447,859 2029 -357,321 -447,859	Reporting date for employer under GASB 68 year ended September 30:		
2026 -364,401 -405,377 2027 -374,374 -415,350 2028 -406,883 -447,859 2029 -357,321 -447,859	2024	N/A	-\$405,377
2027 -374,374 -415,350 2028 -406,883 -447,859 2029 -357,321 -447,859	2025	-\$364,401	-405,377
2028 -406,883 -447,859 2029 -357,321 -447,859	2026	-364,401	-405,377
2029 -357,321 -447,859	2027	-374,374	-415,350
7-7-	2028	-406,883	-447,859
Thereafter -892,845 -1,345,535	2029	-357,321	-447,859
	Thereafter	-892,845	-1,345,535

Note: Average expected remaining service is 11.00 years as of September 30, 2023 and September 30, 2022.

^{*} Calculated in accordance with Paragraphs 54 and 55 of GASB 68

Schedule of recognition of change in total Net Pension Liability

Increase (Decrease) in Pension Expense Arising from the Recognition of the Effects of Differences between Expected and Actual Experience on Total Pension Liability

Reporting Date for Employer under GASB 68 Year Ended September 30	Differences between Expected and Actual Experience	Recognition Period (Years)	2023	2024	2025	2026	2027	2028	2029	Thereafter
2022	\$4,161,261	11.00	\$378,296	\$378,296	\$378,296	\$378,296	\$378,296	\$378,296	\$378,296	\$1,134,888
2023	-211,620	11.00	-19,240	-19,238	-19,238	-19,238	-19,238	-19,238	-19,238	-76,952
2024	742,484	11.00	N/A	67,494	67,499	67,499	67,499	67,499	67,499	337,495
Total*			N/A	\$426,552	\$426,557	\$426,557	\$426,557	\$426,557	\$426,557	\$1,395,431

^{*} Net increase (decrease) in pension expense

Increase (Decrease) in Pension Expense Arising from the Recognition of the Effects of Assumption Changes

Reporting Date for Employer under GASB 68 Year Ended September 30	Assumption Changes	Recognition Period (Years)	2023	2024	2025	2026	2027	2028	2029	Thereafter
2022	-\$9,066,164	11.00	-\$824,197	-\$824,197	-\$824,197	-\$824,197	-\$824,197	-\$824,197	-\$824,197	-\$2,472,591
2023	190,085	11.00	17,285	17,280	17,280	17,280	17,280	17,280	17,280	69,120
2024	253,427	11.00	N/A	23,037	23,039	23,039	23,039	23,039	23,039	115,195
Total*			N/A	-\$783,880	-\$783,878	-\$783,878	-\$783,878	-\$783,878	-\$783,878	-\$2,288,276

^{*} Net increase (decrease) in pension expense

Increase (Decrease) in Pension Expense Arising from the Recognition of the Effects of Differences between Projected and Actual Earnings on Pension Plan Investments

Reporting Date for Employer under GASB 68 Year Ended September 30	Differences between Projected and Actual Earnings	Recognition Period (Years)	2023	2024	2025	2026	2027	2028	2029	Thereafter
2022	\$49,867	5.00	\$9,973	\$9,973	\$9,973	\$9,973	0	0	0	0
2023	162,544	5.00	32,508	32,509	32,509	32,509	32,509	0	0	0
2024	-247,810	5.00	N/A	-49,562	-49,562	-49,562	-49,562	-49,562	0	0
Total*			N/A	-\$7,080	-\$7,080	-\$7,080	-\$17,053	-\$49,562	\$0	\$0

^{*} Net increase (decrease) in pension expense

Total Increase (Decrease) in Pension Expense

Reporting Date for Employer under GASB 68 Year Ended September 30	Total Increase (Decrease) in Pension Expense	2023	2024	2025	2026	2027	2028	2029	Thereafter
2022	-\$4,855,036	-\$435,928	-\$435,928	-\$435,928	-\$435,928	-\$445,901	-\$445,901	-\$445,901	-\$1,337,703
2023	141,009	30,553	30,551	30,551	30,551	30,551	-1,958	-1,958	-7,832
2024	748,101	N/A	40,969	40,976	40,976	40,976	40,976	90,538	452,690
Total*		N/A	-\$364,408	-\$364,401	-\$364,401	-\$374,374	-\$406,883	-\$357,321	-\$892,845

^{*} Net increase (decrease) in pension expense

Schedule of reconciliation of Net Pension Liability

Total for all employers

Item	Current	Prior
Reporting and measurement dates		
Reporting date for employer under GASB 68	September 30, 2024	September 30, 2023
Measurement date and reporting date for plan under GASB 67	September 30, 2023	September 30, 2022
Net Pension Liability		
Beginning Net Pension Liability	\$10,323,383	\$8,405,087
Pension expense	1,879,703	1,735,912
Employer contributions	-4,614,000	-364,000
New net deferred inflows/outflows	707,132	110,456
Change in allocation of prior deferred inflows/outflows	0	0
New net deferred inflows/outflows due to change in proportion	0	0
Recognition of prior deferred inflows/outflows	405,377	435,928
Recognition of prior deferred inflows/outflows due to change in proportion	0	0
Ending Net Pension Liability	\$8,701,595	\$10,323,383

Exhibit 5: Determination of proportionate share

Employer Name	FY 2023 Total Appropriation	Percent of FY 2023 Total Appropriation	Share of NPL as of September 30, 2022	FY 2024 Total Appropriation	Percent of FY 2024 Total Appropriation	Share of NPL as of September 30, 2023
City of Jacksonville	\$99,827,786	65.26%	\$6,737,040	\$116,447,076	60.76%	\$5,287,090
Jacksonville Electric Authority	51,426,705	33.62%	3,470,721	73,242,797	38.21%	3,324,879
Jacksonville Housing Authority	1,719,235	1.12%	115,622	1,976,377	1.03%	89,626
Grand totals:	\$152,973,726	100.00%	\$10,323,383	\$191,666,250	100.00%	\$8,701,595

Exhibit 6: Determination of proportionate share amounts by employer

Net Pension Liability by Employer With Discount Rate Sensitivity

Employer Name	2024 Share of Cost Allocation	Net Pension Liability	Covered Employee Payroll	1% Decrease in Discount Rate (5.50%)	Current Discount Rate (6.50%)	1% Increase in Discount Rate (7.50%)
City of Jacksonville	60.76%	\$5,287,090	\$116,447,076	\$6,618,894	\$5,287,090	\$4,191,933
Jacksonville Electric Authority	38.21%	3,324,879	73,242,797	4,162,408	3,324,879	2,636,171
Jacksonville Housing Authority	1.03%	89,626	1,976,377	112,203	89,626	71,061
Grand totals:	100.00%	\$8,701,595	\$191,666,250	\$10,893,505	\$8,701,595	\$6,899,165

Exhibit 6: Determination of proportionate share by employer

Schedule of Contributions and Pension Expense by Employer

Employer Name	Statutory Required Contribution	Contributions in Relation to the Statutory Required Contribution	Contribution Deficiency / (Excess)	Contributions as a Percentage of Covered Employee Payroll	Proportionate Share of Plan Pension Expense	Deferred Amounts from Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Employer Pension Expense
City of Jacksonville	\$1,340,218	\$3,657,000	-\$2,316,782	3.14%	\$1,142,107	-\$31,625	\$1,110,482
Jacksonville Electric Authority	842,820	955,000	-112,180	1.30%	718,235	37,147	755,382
Jacksonville Housing Authority	22,719	2,000	20,719	0.11%	19,361	-5,522	13,839
Grand totals:	\$2,205,757	\$4,614,000	-\$2,408,243	2.41%	\$1,879,703	\$0	\$1,879,703

Net Amortization of

Exhibit 6: Determination of proportionate share by employer

Deferred Outflows and Inflows of Resources

Employer Name	Differences Between Expected and Actual Experience	Changes of Assumptions	Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Outflows of Resources	Differences Between Expected and Actual Experience	Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	Changes of Assumptions	Changes in Proportion and Differences Between Employer Contributions and Proportionate Share of Contributions	Total Deferred Inflows of Resources
City of Jacksonville	\$2,248,945	\$234,479	\$626,217	\$3,109,640	\$105,201	\$49,079	\$4,006,257	\$792,360	\$4,952,897
Jacksonville Electric Authority	1,414,289	147,456	753,944	2,315,689	66,158	30,864	2,519,405	528,001	3,144,428
Jacksonville Housing Authority	38,124	3,975	38,416	80,516	1,783	832	67,914	98,216	168,745
Grand totals:	\$3,701,358	\$385,910	\$1,418,577	\$5,505,845	\$173,142	\$80,775	\$6,593,576	\$1,418,577	\$8,266,070

Exhibit 6: Determination of proportionate share by employer

Deferred Inflows/(Outflows) Recognized In Future Pension Expense (Year Ended September 30)

Employer Name	2025	2026	2027	2028	2029	Thereafter
City of Jacksonville	-\$253,044	-\$253,044	-\$259,104	-\$278,856	-\$248,742	-\$550,467
Jacksonville Electric Authority	-102,082	-102,082	-105,892	-118,314	-99,376	-300,993
Jacksonville Housing Authority	-9,275	-9,275	-9,378	-9,713	-9,203	-41,385
Grand totals:	-\$364,401	-\$364,401	-\$374,374	-\$406,883	-\$357,321	-\$892,845

Exhibit G: Schedule of proportionate share of the Net Pension Liability

Total for All Employers

Reporting Date for Employer under GASB 68 as of September 30	Proportion of the Net Pension Liability	Proportionate Share of Net Pension Liability	Covered Payroll [*]	Proportionate Share of the Net Pension Liability as a Percentage of Its Covered Payroll	Plan Fiduciary Net Position as a Percentage of the Total Pension Liability
2021	100.0%	\$10,789,981	\$106,212,849	10.16%	13.17%
2022	100.0%	8,405,087	138,782,297	6.06%	22.07%
2023	100.0%	10,323,383	155,268,333	6.65%	19.66%
2024	100.0%	8,701,595	191,666,250	4.54%	46.23%

Covered payroll represents compensation earnable and pensionable compensation. Only compensation earnable and pensionable compensation that would possibly go into the determination of the retirement benefits are included.



The following list defines certain technical terms for the convenience of the reader:

Term	Definition
Actuarial accrued liability for actives	The equivalent of the accumulated normal costs allocated to the years before the valuation date.
Actuarial accrued liability for retirees and beneficiaries	Actuarial Present Value of lifetime benefits to existing retirees and beneficiaries. This sum takes account of life expectancies appropriate to the ages of the annuitants and the interest that the sum is expected to earn before it is entirely paid out in benefits.
Actuarial cost method	A procedure allocating the Actuarial Present Value of Future Benefits to various time periods; a method used to determine the Normal Cost and the Actuarial Accrued Liability that are used to determine the actuarially determined contribution.
Actuarial gain or 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 Valuation dates. To the extent that actual experience differs from that assumed, Actuarial Accrued Liabilities emerge which may be the same as forecasted or may be larger or smaller than projected. Actuarial gains are due to favorable experience, e.g., assets earn more than projected, salary increases are less than assumed, members retire later than assumed, etc. Favorable experience means actual results produce actuarial liabilities not as large as projected by the actuarial assumptions. On the other hand, actuarial losses are the result of unfavorable experience, i.e., actual results yield actuarial liabilities that are larger than projected.
Actuarially equivalent	Of equal Actuarial Present Value, determined as of a given date and based on a given set of Actuarial Assumptions.
Actuarial present value	The value of an amount or series of amounts payable or receivable at various times, determined as of a given date by the application of a particular set of Actuarial Assumptions. Each such amount or series of amounts is: Adjusted for the probable financial effect of certain intervening events (such as changes in compensation levels, marital status, etc.) Multiplied by the probability of the occurrence of an event (such as survival, death, disability, withdrawal, etc.) on which the payment is conditioned, and Discounted according to an assumed rate (or rates) of return to reflect the time value of money.

Term	Definition
Actuarial present value of future benefits	The Actuarial Present Value of benefit amounts expected to be paid at various future times under a particular set of Actuarial Assumptions, taking into account such items as the effect of advancement in age, anticipated future compensation, and future service credits. The Actuarial Present Value of Future Benefits includes the liabilities for active members, retired members, beneficiaries receiving benefits, and inactive members entitled to either a refund of member contributions or a future retirement benefit. Expressed another way, it is the value that would have to be invested on the valuation date so that the amount invested plus investment earnings would provide sufficient assets to pay all projected benefits and expenses when due.
Actuarial valuation	The determination, as of a valuation date, of the Normal Cost, Actuarial Accrued Liability, Actuarial Value of Assets, and related Actuarial Present Values for a plan, as well as Actuarially Determined Contributions.
Actuarial value of assets	The value of the Plan's assets as of a given date, used by the actuary for valuation purposes. This may be the market or fair value of plan assets, but commonly plans use a smoothed value in order to reduce the year-to-year volatility of calculated results, such as the funded ratio and the Actuarially Determined Contribution.
Actuarially determined	Values that have been determined utilizing the principles of actuarial science. An actuarially determined value is derived by application of the appropriate actuarial assumptions to specified values determined by provisions of the Plan.
Actuarially determined contribution	The employer's contributions, expressed as a dollar amount or a percentage of covered plan compensation, determined under the Plan's funding policy. The ADC consists of the Employer Normal Cost and the Amortization Payment.
Amortization method	A method for determining the Amortization Payment. The most common methods used are level dollar and level percentage of payroll. Under the Level Dollar method, the Amortization Payment is one of a stream of payments, all equal, whose Actuarial Present Value is equal to the Unfunded Actuarial Accrued Liability. 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 Unfunded Actuarial Accrued Liability. Under the Level Percentage of Pay method, the stream of payments increases at the assumed rate at which total covered payroll of all active members will increase.
Amortization payment	The portion of the pension plan contribution, or ADC, that is intended to pay off the Unfunded Actuarial Accrued Liability.
Assumptions or actuarial assumptions	The estimates upon which the cost of the Plan is calculated, including: Investment return — the rate of investment yield that the Plan will earn over the long-term future; Mortality rates — the rate or probability of death at a given age for employees and retirees; Retirement rates — the rate or probability of retirement at a given age or service; Disability rates — the rate or probability of disability retirement at a given age; Withdrawal rates — the rate or probability at which employees of various ages are expected to leave employment for reasons other than death, disability, or retirement; Salary increase rates — the rates of salary increase due to inflation, real wage growth and merit and promotion increases.



Term	Definition
Closed amortization period	A specific number of years that is counted down by one each year, and therefore declines to zero with the passage of time. For example, if the amortization period is initially set at 20 years, it is 19 years at the end of one year, 18 years at the end of two years, etc. See Open Amortization Period.
Decrements	Those causes/events due to which a member's status (active-inactive-retiree-beneficiary) changes, that is: death, retirement, disability, or withdrawal.
Defined benefit plan	A retirement plan in which benefits are defined by a formula based on the member's compensation, age and/or years of service.
Defined contribution plan	A retirement plan, such as a 401(k) plan, a 403(b) plan, or a 457 plan, in which the contributions to the plan are assigned to an account for each member, the plan's earnings are allocated to each account, and each member's benefits are a direct function of the account balance.
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.
Experience study	A periodic review and analysis of the actual experience of the Plan that may lead to a revision of one or more actuarial assumptions. Actual rates of decrement and salary increases are compared to the actuarially assumed values and modified based on recommendations from the Actuary.
Funded ratio	The ratio of the Actuarial Value of Assets (AVA) to the Actuarial Accrued Liability (AAL). Plans sometimes also calculate a market funded ratio, using the Market Value of Assets (MVA), rather than the AVA.
GASB 67 and GASB 68	Governmental Accounting Standards Board (GASB) Statements No. 67 and No. 68. These are the governmental accounting standards that set the accounting rules for public retirement systems and the employers that sponsor or contribute to them. Statement No. 68 sets the accounting rules for the employers that sponsor or contribute to public retirement systems, while Statement No. 67 sets the rules for the systems themselves.
Investment return	The rate of earnings of the Plan from its investments, including interest, dividends and capital gain and loss adjustments, computed as a percentage of the average value of the fund. For actuarial purposes, the investment return often reflects a smoothing of the capital gains and losses to avoid significant swings in the value of assets from one year to the next.
Net Pension Liability (NPL)	The Net Pension Liability is equal to the Total Pension Liability minus the Plan Fiduciary Net Position.
Normal cost	The portion of the Actuarial Present Value of Future Benefits and expenses, if applicable, allocated to a valuation year by the Actuarial Cost Method. Any payment with respect to an Unfunded Actuarial Accrued Liability is not part of the Normal Cost (see Amortization Payment). For pension plan benefits that are provided in part by employee contributions, Normal Cost refers to the total of member contributions and employer Normal Cost unless otherwise specifically stated.
Open amortization period	An open amortization period is one which is used to determine the Amortization Payment but which does not change over time. If the initial period is set as 30 years, the same 30-year period is used in each future year in determining the Amortization Period.

Term	Definition
Plan Fiduciary Net Position	Market value of assets.
Service costs	The portions of the actuarial present value of projected benefit payments that are attributed to valuation years.
Total Pension Liability (TPL)	The actuarial accrued liability under the entry age normal cost method and based on the blended discount rate as described in GASB 67 and 68.
Unfunded actuarial accrued liability	The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. This value may be negative, in which case it may be expressed as a negative Unfunded Actuarial Accrued Liability, also called the Funding Surplus or an Overfunded Actuarial Accrued Liability.
Valuation date or actuarial valuation date	The date as of which the value of assets is determined and as of which the Actuarial Present Value of Future Benefits is determined. The expected benefits to be paid in the future are discounted to this date.