

City of Jacksonville General Employees Retirement Plan

Actuarial Valuation and Review as of October 1, 2022



This report has been prepared at the request of the Board of Trustees to assist in administering the Plan. This valuation report may not otherwise be copied or reproduced in any form without the consent of the Board of Trustees and may only be provided to other parties in its entirety, unless expressly authorized by Segal. The measurements shown in this actuarial valuation may not be applicable for other purposes.

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Segal



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February 17, 2023

Board of Trustees
City of Jacksonville General Employees Retirement Plan
117 West Duval Street, Suite 330
Jacksonville, FL 32202

Dear Board Members:

We are pleased to submit this Actuarial Valuation and Review as of October 1, 2022. It summarized the actuarial data used in the valuation, analyzes the preceding year's experience, and establishes the funding requirement for fiscal 2024. This report was prepared in accordance with generally accepted actuarial principles and practices at the request of the Board of Trustees to assist in administering the City of Jacksonville General Employees Retirement Plan. The census information on which our calculations were based was prepared by the Plan and the financial information was provided by the the City's Finance Department. That assistance is gratefully acknowledged.

Statement by Enrolled Actuary: This actuarial valuation was prepared and completed by me, or under my direct supervision, and I acknowledge responsibility for the results. To the best of my knowledge, the results are complete and accurate, and in my opinion, the techniques and assumptions used are reasonable and meet the requirements and intent of part VII, Chapter 112, Florida Statutes. There is no benefit or expense to be provided by the plan and/or paid from the plan's assets for which liabilities or current costs have not been established or otherwise taken into account in the valuation. All known events or trends which may require a material increase in plan costs or required contribution rates have been taken into account in the valuation.

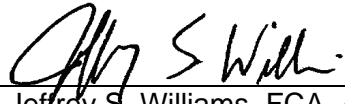
The actuarial calculations were directed under the supervision of Jeffrey S. Williams. I am a member of the American Academy of Actuaries and I meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion herein. Segal does not audit the data provided. The accuracy and comprehensiveness of the data is the responsibility of those supplying the data. To the extent we can, however, Segal does review the data for reasonableness and consistency. Based on our review of the data, we have no reason to doubt the substantial accuracy of the information on which we have based this report and we have no reason to believe there are facts or circumstances that would affect the validity of these results. The measurements shown in this actuarial valuation may not be applicable for other purposes. Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the

economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements; and changes in plan provisions or applicable law.

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

Sincerely,

Segal



Jeffrey S. Williams, FCA, ASA, MAAA, EA
Vice President and Consulting Actuary
Enrolled Actuary No. 20-07009

Table of Contents

Section 1: Actuarial Valuation Summary	6
Purpose and basis	6
Valuation highlights.....	7
Changes from prior valuation.....	9
Risk	10
Summary of key valuation results	11
Important information about actuarial valuations.....	12
Section 2: Actuarial Valuation Results.....	14
Participant information	14
Actuarial experience	20
Florida’s Chapter 112 Determined Employer Contribution and City’s Minimum Required Contribution	25
Schedule of funding progress through September 30, 2022	27
Risk	29
GFOA funded liability by type	31
Section 3: Supplemental Information.....	33
Exhibit A: Table of Plan Demographics.....	33
Exhibit B: Participants in Active Service as of September 30, 2022	34
Exhibit C: Reconciliation of Participant Data	35
Exhibit D: Summary Statement of Income and Expenses on a Market Value Basis	36
Exhibit E: Summary Statement of Plan Assets.....	37
Exhibit F: Development of the Fund through September 30, 2022.....	38
Exhibit G: Table of Amortization Bases.....	39
Exhibit H: Section 415	41
Exhibit I: Supplementary State of Florida Information Summary of Salary Changes	42
Exhibit J: Supplementary State of Florida Information Recent History of Recommended and Actual Contributions	43

Table of Contents

Exhibit K: Supplementary State of Florida Information	44
Exhibit L: Supplementary State of Florida Information Actuarial Present Value of Accumulated Plan Benefits.....	46
Exhibit M: Actuarial Projections through Fiscal 2062.....	47
Section 4: Actuarial Valuation Basis.....	48
Exhibit I: Actuarial Assumptions, Methods and Models	48
Exhibit II: Summary of Plan Provisions	54
Section 5: GASB Information	57
General information about the pension plan	57
Net pension liability.....	58
Determination of discount rate and investment rates of return	59
Schedule of changes in Net Pension Liability – Last two fiscal years.....	61
Deferred outflows of resources and deferred inflows of resources – Total for all employers	63
Schedule of recognition of change in total Net Pension Liability	65
Pension expense – Total for all employers	69
Schedule of reconciliation of Net Pension Liability –Total for all employers	70
Schedule of contributions – Last ten fiscal years	71
Section 6: GASB Results by Employer.....	73
Determination of Proportionate Share.....	73
Schedule of Proportionate Share of the Net Pension Liability – Total for all Employers	75
Allocation of Changes in Total Net Pension Liability	76
Schedule of Proportionate Share of the Net Pension Liability – City of Jacksonville	83
Schedule of Proportionate Share of the Net Pension Liability – Jacksonville Electrical Authority	87
Schedule of Proportionate Share of the Net Pension Liability – Jacksonville Housing Authority	91
Schedule of reconciliation of Net Pension Liability – North Florida Transportation Planning Organization	94
Appendix A: Definition of Pension Terms	96

Section 1: Actuarial Valuation Summary

Purpose and basis

This report has been prepared by Segal to present a valuation of the City of Jacksonville General Employees Retirement Plan as of October 1, 2022. 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 Board;
- The characteristics of covered active participants, inactive vested participants, and retired participants and beneficiaries as of September 30, 2022, provided by the Retirement System Administrative Office;
- The assets of the Plan as of September 30, 2022, 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
- The funding policy adopted by the Board, subject to the requirements of Part VII, Chapter 112, Florida Statutes.

Section 1: Actuarial Valuation Summary

Valuation highlights

1. 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.
2. The City's minimum required contribution calculated in the October 1, 2022 actuarial valuation is for the plan year beginning October 1, 2023. The "City's minimum required contribution" refers to the cumulative minimum required contribution for all contributing employers.
3. The City's minimum required contribution (the amount which will be contributed) for fiscal 2024 is \$96,592,629, an increase of \$12,985,153 from the amount being contributed in fiscal 2023.
4. Actual contributions made during the fiscal year ending September 30, 2022 were \$84,353,000, 100.78% of the City's minimum required contribution for fiscal 2022. In the prior fiscal year, actual contributions were \$77,269,000, 100.57% of the prior year's minimum required contribution.
5. Actuarial Standard of Practice No. 4, Measuring Pension Obligations and Determining Pension Plan Costs or Contributions, states that an actuary preparing calculations of actuarially determined contributions should assess the material implications of the funding policy. This report includes two distinct contribution amounts, each with different implications.
 - a. The **Florida Chapter 112 Determined Employer Contribution** is an amount consistent with a funding policy which seeks to stabilize the unfunded actuarial accrued liability (UAAL) as a percentage of total General Employees Retirement Plan (GERP) payroll, including Defined Contribution participants, where UAAL is measured relative to assets currently available to make benefit payments. Under this policy, assuming that all assumptions are met in aggregate, the UAAL is expected to be reduced to zero over a period of 24 years after reflecting an amortization period reset as of October 1, 2016. Over the short term, this contribution policy would be expected to keep the UAAL roughly level over the next few years, primarily making payments on interest, and begin paying down the UAAL after that point.
 - b. The **City's required minimum contribution**, which is the Chapter 112 contribution adjusted to comply with state law, reduced by amortization of discounted allocated surtax revenue, is an amount consistent with a funding policy which seeks to stabilize the contribution requirement as a percentage of total GERP payroll, including General Employee Defined Contribution Plan participants, relative to an anticipated increase in contribution income set to begin January 1, 2031. Under this policy, assuming that all assumptions are met in aggregate, the UAAL is expected to be reduced to zero by December 31, 2060, after all of the surtax revenue allocated to the plan is collected and contributed. Over the short term, this contribution policy is expected to lead to an increase in the UAAL, prior to the revenue stream commencing and paying it down.

Use of this contribution policy has been authorized by the Florida State Legislature and Jacksonville City Council.

Section 1: Actuarial Valuation Summary

6. The actuarial loss from investment and other experience is \$86,977,520, or 2.41% of actuarial accrued liability.
 - The actuarial loss from investment experience was \$54,310,199, or 1.51% of actuarial accrued liability.
 - The net experience loss from sources other than investment experience was \$32,667,321, or 0.90% of the actuarial accrued liability.
7. The rate of return on the market value of assets was -15.68% for the October 1, 2021 to September 30, 2022 Plan Year. The return on the actuarial value of assets was 3.99% for the same period due to the recognition of prior years' investment gains and losses. This resulted in an actuarial loss when measured against the assumed rate of return of 6.625%.
8. The actuarial value of assets is 113.8% of the market value of assets. The investment experience in the past years has only been partially recognized in the actuarial value of assets. As the deferred net loss is recognized in future years, the cost of the Plan is likely to increase unless the net loss is offset by future experience. The recognition of the market net losses of \$252,693,181 will also have an impact on the future funded ratio. If the net deferred losses were recognized immediately in the actuarial value of assets, the City's minimum contribution would increase from 41.76% to about 49.5% of projected payroll.
9. There were no changes in plan provisions since the prior valuation.
10. The following change in actuarial assumptions is first reflected with this valuation:
 - The discount rate was lowered from 6.625% to 6.50%.

As a result of this assumption change, the total normal cost increased by \$1,207,835 (3.08%) and the actuarial accrued liability increased by \$48,782,223 (1.35%). The present value of surtax revenue allocated to GERP increased by \$19,473,682 (2.57%) as a result of the discount rate change. The net impact was an increase in the City's minimum required contribution of \$3,185,976 (1.38% of pay).
11. The City changed the surtax allocation percentage from the prior valuation to the current valuation. In the 2021 valuation, GERP's allocation percentage was 35.50%; in the 2022 valuation, the allocation percentage has been lowered to 35.00%. This change was directed by the City based on its updated calculation of the General Employees Retirement Plan's share of the City's unfunded liabilities. The change in the surtax allocation percentage caused the City's minimum required contribution to increase by \$763,447.
12. Additionally, the method used to recognize surtax revenue for the purpose of calculating the surtax offset for the City's minimum contribution was changed from immediate recognition to recognizing the difference between actual and expected revenue growth over a period of five years. The effect of this change was an increase of \$2,015,949 in the City's minimum contribution.
13. The City is solely responsible for the assumption as to what percentage the surtax revenue will grow and Segal relies on the City for this assumption. This rate was set at 4.25% by the City for the projection period January 1, 2022 through December 31, 2060, and will be recalculated by the City every year and adopted by the City Council. Segal will ask the City each year to

Section 1: Actuarial Valuation Summary

provide actual surtax revenue for the preceding fiscal year and an assumption as to future growth. The difference in actual and projected surtax revenue each year will be amortized over the period by which each year's gain or loss is being amortized. If surtax revenue grows more slowly or more quickly than expected, contribution requirements will increase or decrease accordingly.

14. The present value of the projected surtax revenue was determined and used in determination of the City's required contribution as follows:
 - a. Actual 2022 surtax revenue was projected to increase by 4.25% each year thereafter through 2060.
 - b. A share of 35.00% of the projected revenue for January 1, 2031 through December 31, 2060 was allocated to GERP.
 - c. The revenue allocated to GERP was discounted at the valuation discount rate of 6.50% to October 1, 2022.
 - d. The original allocated present value amount of \$332,190,859 was amortized over a 30-year initial period (Section 3, Exhibit F), with subsequent changes amortized over new periods. The present value of projected surtax revenue as of October 1, 2022 allocated to GERP is \$749,110,100.
 - e. After the amortized value amount was adjusted for the timing of contributions and projected to October 1, 2023, this amount was used as an offset to the Florida Chapter 112 Determined Employer Contribution to determine the City's minimum required contribution for fiscal 2023.
15. The present value of projected surtax revenue does not decrease the unfunded actuarial accrued liability. The amortized value of the projected surtax revenue is used as an offset to the Chapter 112 contribution.
16. This actuarial report as of October 1, 2022 is based on financial and demographic data as of that date. Changes subsequent to that date are not reflected and will affect future actuarial costs of the plan.
17. The financial information received states all results rounded to the nearest thousand. The results in this valuation are shown to the nearest dollar. Therefore, occasionally rounded numbers are combined with unrounded numbers.

Changes from prior valuation

18. The funded ratio (the ratio of the actuarial value of assets to actuarial accrued liability) is 56.93%, compared to the prior year funded ratio of 60.04%. This ratio is one measure of funding status, and its history is a measure of funding progress. Using the market value of assets, the funded ratio is 50.01%, compared to 65.16% as of the prior valuation date. These measurements are not necessarily appropriate for assessing the sufficiency of the Plan assets to cover the estimated cost of settling the Plan's benefit obligation or the need for or the amount of future contributions.
19. The unfunded actuarial accrued liability is \$1,573,517,914, which is an increase of \$163,272,732 since the prior valuation.

Section 1: Actuarial Valuation Summary

Risk

20. It is important to note that this actuarial valuation is based on plan assets as of September 30, 2022. 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, 2022 due to COVID-19. Segal is available to prepare projections of potential outcomes of market conditions and other demographic experience upon request.
21. Since the actuarial valuation results are dependent on a given set of assumptions, there is a risk that emerging results may differ significantly as actual experience proves to be different from the assumptions. We have not been engaged to perform a detailed analysis of the potential range of the impact of risk relative to the Plan's future financial condition but have included a brief discussion of some risks that may affect the Plan in *Section 2*. A more detailed assessment would provide the Board with a better understanding of the inherent risks and could be important for the Plan because:
 - Relatively small changes in investment performance can produce large swings in the unfunded liabilities
 - Retired participants account for most of the Plan's liabilities, leaving limited options for reducing costs in the event of adverse experience.
 - The Board has not performed a detailed risk assessment.

GASB

22. This report constitutes an actuarial valuation for the purpose of determining the ADC under the Plan's funding policy. The information contained in *Section 5* provides the accounting information for Governmental Accounting Standards Board (GASB) Statements No. 67 and No. 68, for inclusion in the Plan's and employer's financial statements as of September 30, 2023. The accounting information utilizes different methodologies from those employed in the funding valuation, as required by the GASB.
23. The Net Pension Liability (NPL) is equal to the difference between the Total Pension Liability (TPL) and the Plan's fiduciary net position (equal to the market value of assets). The NPL as of September 30, 2022 is \$1,826,211,095.
24. GASB accounting does not permit any recognition of the allocated surtax revenue in determining the Net Pension Liability or Pension Expense. It is Segal's understanding that the City has discussed this issue with their external auditors and does not include any recognition of allocated surtax revenue in its audited financial statements.

Section 1: Actuarial Valuation Summary

Summary of key valuation results

		2023	2022	2021
Contributions for plan year beginning October 1:	• Florida Chapter 112 determined employer contribution	\$134,889,081	\$120,695,825	\$115,204,974
	• Less amortized value of discounted value of projected surtax revenue	<u>-38,296,452</u>	<u>-37,088,349</u>	<u>-31,508,163</u>
	• City's required minimum contribution*	\$96,592,629	\$83,607,476	\$83,696,811
	• Actual employer contributions	--	--	84,353,000
Actuarial accrued liability for plan year beginning October 1:	• Retired participants and beneficiaries		\$2,522,749,776	\$2,424,667,249
	• Inactive vested participants		22,227,231	24,778,567
	• Active participants		1,108,179,088	1,079,987,779
	• Total actuarial accrued liability		3,653,156,095	3,529,433,595
	• Total normal cost including administrative expenses		42,277,986	41,144,985
Assets for plan year beginning October 1:	• Market value of assets (MVA)		\$1,826,945,000	\$2,299,661,000
	• Actuarial value of assets (AVA)		2,079,638,181	2,119,188,413
	• Actuarial value of assets as a percentage of market value of assets		113.83%	92.15%
Funded status for plan year beginning October 1:	• Unfunded actuarial accrued liability on market value of assets		\$1,826,211,095	\$1,229,772,595
	• Funded percentage on MVA basis		50.01%	65.16%
	• Unfunded actuarial accrued liability on actuarial value of assets		\$1,573,517,914	\$1,410,245,182
	• Funded percentage on AVA basis		56.93%	60.04%
Key assumptions	• Net investment return		6.50%	6.625%
	• Inflation rate		2.50%	2.50%
	• Payroll growth for amortization purposes		1.50%	1.50%
Demographic data for plan year beginning October 1:	• Number of retired participants and beneficiaries		5,339	5,342
	• Number of inactive vested participants		147	160
	• Number of active participants		3,027	3,289
	• Covered payroll		\$227,912,274	\$233,266,593
	• Average payroll		75,293	70,923
	• Projected payroll for next fiscal year		231,330,958	236,765,592

*Pursuant to State Law Chapter 2016-146 and City of Jacksonville Ordinance 2017-257-E and 2017-258-E.

Section 1: Actuarial Valuation Summary

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:

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 Retirement Administrative Office. 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, as provided by the City's Finance Department. 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. The Jacksonville Retirement System uses 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.

Section 1: Actuarial Valuation Summary

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 Board of Trustees. 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 Board 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 Board 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 Board of Trustees upon delivery and review. Trustees should notify Segal immediately of any questions or concerns about the final content.

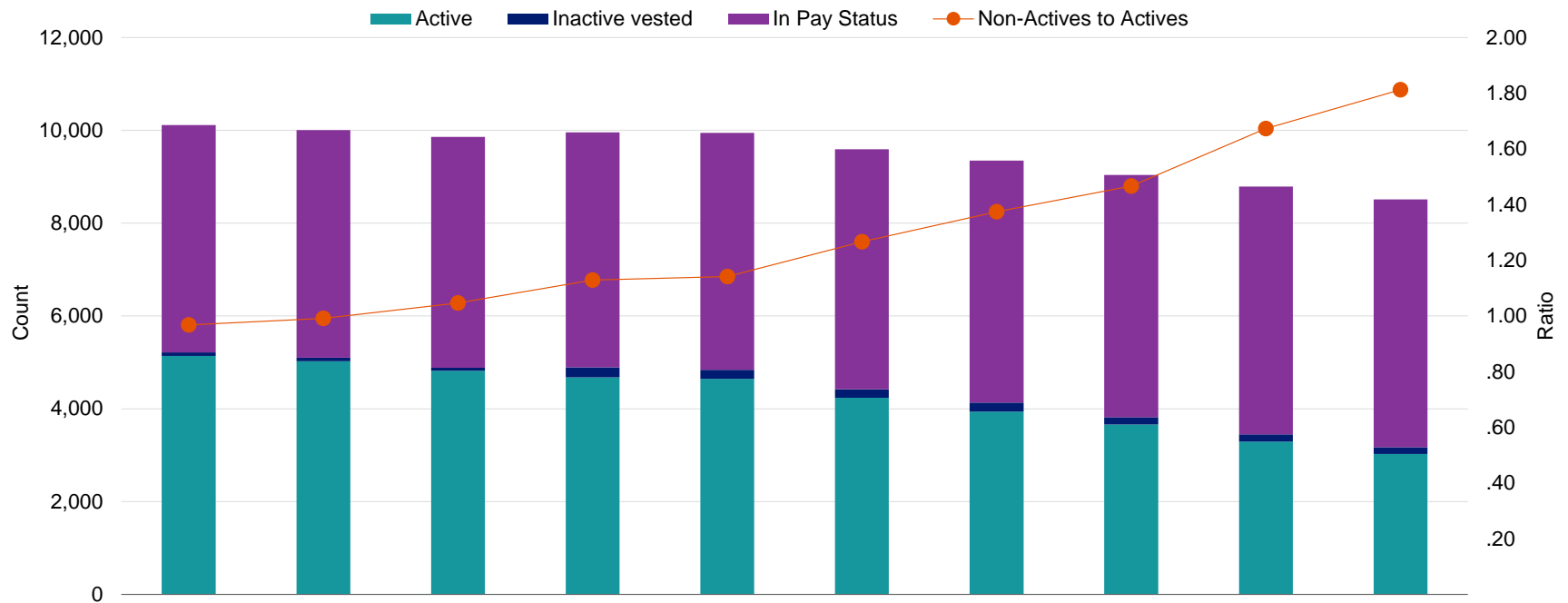
As Segal has no discretionary authority with respect to the management or assets of the Plan, it is not a fiduciary in its capacity as actuaries and consultants with respect to the Plan.

Section 2: Actuarial Valuation Results

Participant information

This section presents a summary of significant statistical data on these participant groups. Since the Plan is closed to new entrants, the ratio of in-pay to active participants will continue to increase.

Participant Population as of September 30



	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
In Pay Status	4,896	4,907	4,976	5,065	5,105	5,176	5,215	5,218	5,342	5,339
Inactive Vested ¹	78	76	65	217	195	185	196	156	160	147
Active	5,139	5,026	4,817	4,678	4,644	4,234	3,937	3,663	3,289	3,027
Ratio	0.97	0.99	1.05	1.13	1.14	1.27	1.37	1.47	1.67	1.81

¹ Excluding terminated participants due a refund of employee contributions

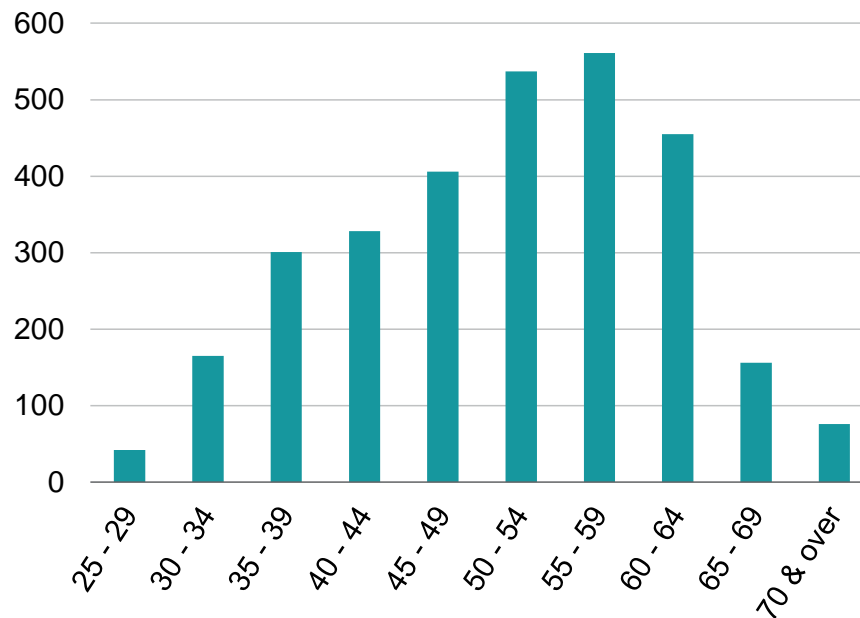
Section 2: Actuarial Valuation Results

Active participants

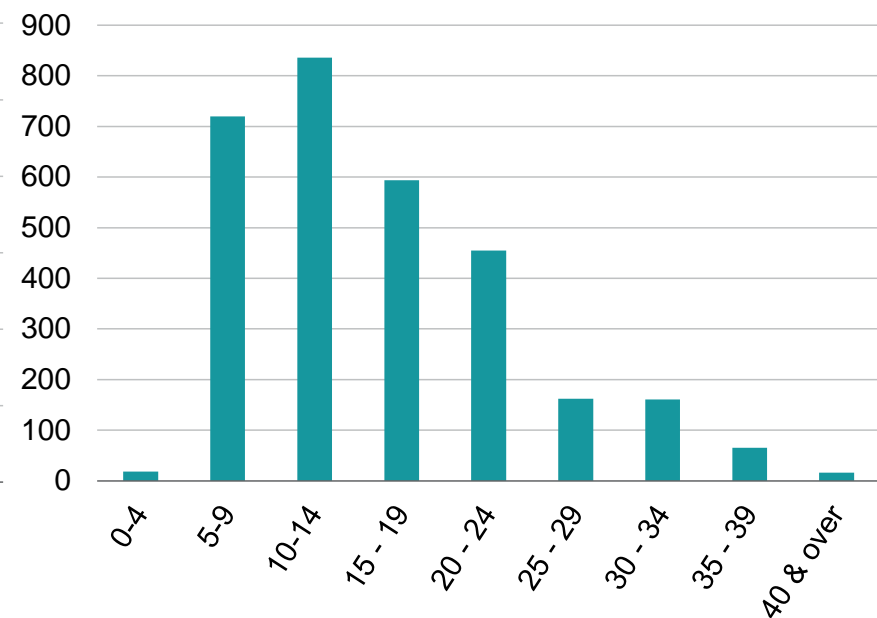
As of September 30,	2022	2021	Change
Active participants	3,027	3,289	-8.0%
Average age	51.6	51.1	0.5
Average years of service	16.2	15.5	0.7
Average compensation	\$75,293	\$70,923	6.2%

Distribution of Active Participants as of September 30, 2022

Actives by Age



Actives by Years of Service



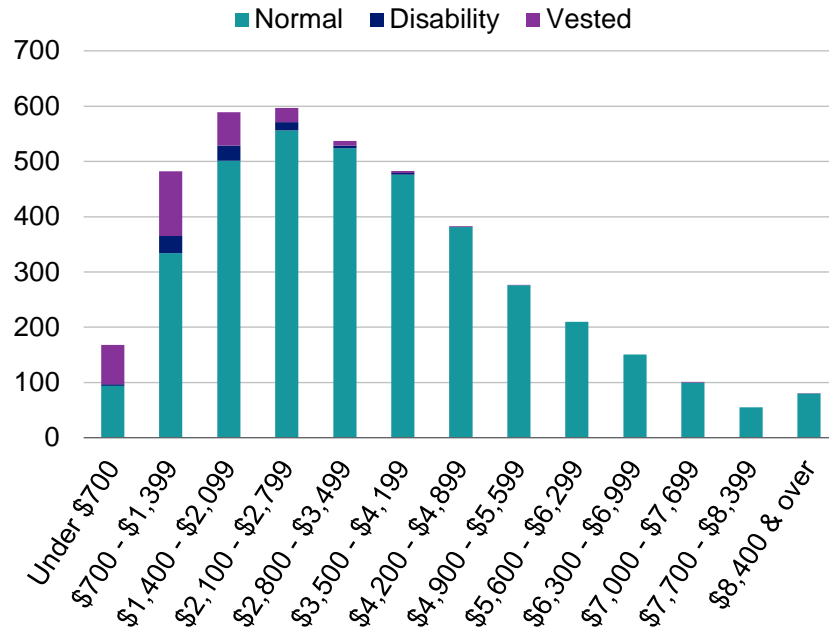
Section 2: Actuarial Valuation Results

Retired participants and beneficiaries

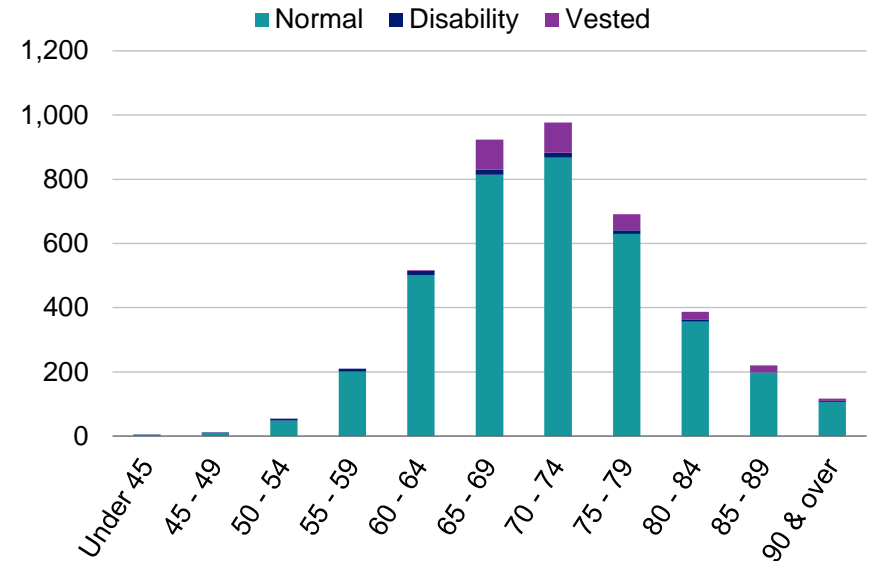
As of September 30,	2022	2021	Change
Retired participants	4,114	4,108	0.1%
Beneficiaries	1,225	1,234	-0.7%
Average age	72.8	72.5	0.3
Average regular benefit amount	\$3,159	\$3,039	3.9%
Average supplemental amount	124	124	0.0%
Total monthly amount	\$17,527,953	\$16,889,781	3.8%

Distribution of Retired Participants and Beneficiaries as of September 30, 2022

By Type and Monthly Amount



By Type and Age



Section 2: Actuarial Valuation Results

It is desirable to have level and predictable plan costs from one year to the next. For this reason, the Board has approved an asset valuation method that gradually adjusts to market value. Under this valuation method, the full value of market fluctuations is not recognized in a single year and, as a result, the asset value and the plan costs are more stable. The amount of the adjustment to recognize market value is treated as income, which may be positive or negative. Realized and unrealized gains and losses are treated equally and, therefore, the sale of assets has no immediate effect on the actuarial value.

Determination of Actuarial Value of Assets for Year Ended September 30, 2022

1	Market value of assets, September 30, 2022				\$1,826,945,000
2	Calculation of unrecognized return	Original Amount¹	Percent Deferred²	Unrecognized Amount³	
	(a) Year ended September 30, 2022	-\$499,432,276	80%	-\$399,545,821	
	(b) Year ended September 30, 2021	278,128,416	60%	166,877,049	
	(c) Year ended September 30, 2020	13,253,788	40%	5,301,516	
	(d) Year ended September 30, 2019	-126,629,625	20%	-25,325,925	
	(e) Year ended September 30, 2018	3,347,148	0%	<u>0</u>	
	(f) Total unrecognized return				-\$252,693,181
3	Preliminary actuarial value: (1) - (2f)				2,079,638,181
4	Adjustment to be within 20% corridor				<u>0</u>
5	Final actuarial value of assets as of September 30, 2022: (3) + (4)				\$2,079,638,181
6	Actuarial value as a percentage of market value: (5) ÷ (1)				113.8%
7	Amount deferred for future recognition: (1) - (5)				-\$252,693,181

¹ Total return minus expected return on a market value basis

² Percent deferred applies to the current valuation year

³ Recognition at 20% per year over five years

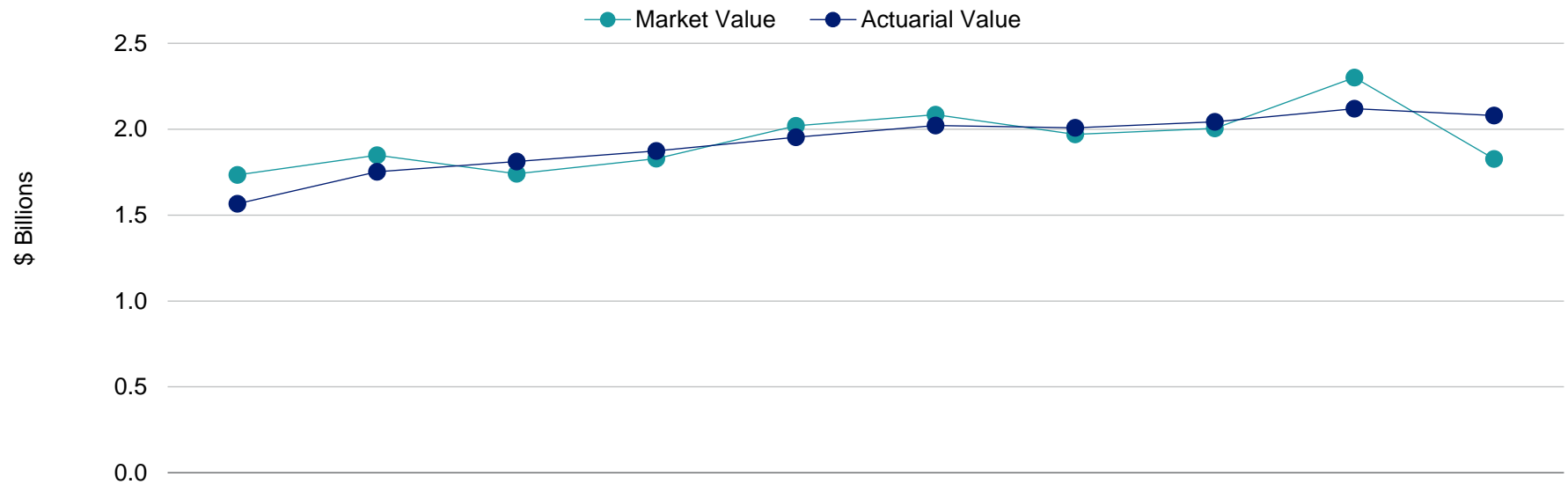
Deferred return as of September 30, 2022 recognized in each of the next four years:

(a) Amount recognized on September 30, 2023	-\$66,935,939
(b) Amount recognized on September 30, 2024	-41,610,014
(c) Amount recognized on September 30, 2025	-44,260,772
(d) Amount recognized on September 30, 2026	-99,886,455

Section 2: Actuarial Valuation Results

Asset history for years ended September 30

Actuarial Value of Assets vs Market Value of Assets



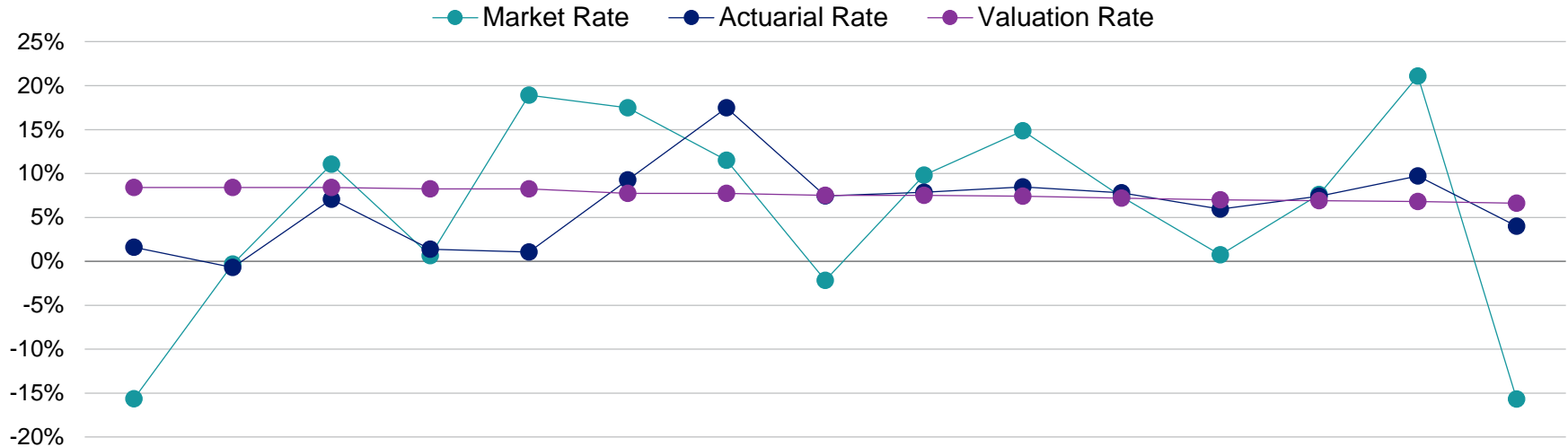
	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Actuarial Value ¹	\$1.57	\$1.75	\$1.81	\$1.87	\$1.95	\$2.02	\$2.01	\$2.04	\$2.12	\$2.08
Market Value ¹	1.73	1.85	1.74	1.83	2.02	2.09	1.97	2.01	2.30	1.83
Ratio	0.90	0.95	1.04	1.02	0.97	0.97	1.02	1.02	0.92	1.14

¹ In \$ billions

Section 2: Actuarial Valuation Results

Historical investment returns

Market and Actuarial Rates of Return for Years Ended September 30



	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Market rate	-15.65%	-0.31%	11.07%	0.66%	18.92%	17.48%	11.51%	-2.18%	9.82%	14.86%	7.35%	0.73%	7.59%	21.08%	-15.68%
Actuarial rate	1.59%	-0.70%	7.07%	1.39%	1.07%	9.27%	17.48%	7.46%	7.86%	8.46%	7.81%	5.94%	7.41%	9.71%	3.99%
Assumed rate	8.40%	8.40%	8.40%	8.25%	8.25%	7.75%	7.75%	7.50%	7.50%	7.40%	7.20%	7.00%	6.90%	6.80%	6.625%

Average Rates of Return	Actuarial Value	Market Value
Most recent five-year average return:	6.94%	3.61%
Most recent ten-year average return:	8.31%	6.54%
Most recent fifteen-year average return:	6.38%	5.54%

Section 2: Actuarial Valuation Results

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, 2022

1	Net loss from investments ¹	-\$54,310,199
2	Net loss from administrative expenses	-613,881
3	Net loss from other experience	<u>-32,053,440</u>
4	Net experience loss: 1 + 2 + 3	-\$86,977,520

¹ Details on next page

Section 2: Actuarial Valuation Results

Investment experience

Actuarial planning is long term. The obligations of a pension plan are expected to continue for the lifetime of all its participants.

The assumed long-term rate of return of 6.50% considers past experience, the asset allocation policy of the Board and future expectations.

Investment Experience

Year Ended
September 30, 2022

	Market Value	Actuarial Value
1 Net investment income	-\$351,108,000	\$82,057,768
2 Average value of assets	2,238,857,000	2,058,384,413
3 Rate of return: 1 ÷ 2	-15.68%	3.99%
4 Assumed rate of return	6.625%	6.625%
5 Expected investment income: 2 x 4	148,324,276	136,367,967
6 Investment gain/(loss): 1 - 5	-\$499,432,276	-\$54,310,199

Section 2: Actuarial Valuation Results

Non-investment experience

Administrative expenses

Administrative expenses for the year ended September 30, 2022 totaled \$1,832,000, as compared to the assumption of \$1,194,000. This resulted in a loss of \$613,881 for the year, including an adjustment for interest.

Other experience

There are other differences 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
- Retirement experience (earlier or later than projected)
- The number of disability retirements (more or fewer than projected)
- Salary increases (greater or smaller than projected)

The net loss from this other experience for the year ended September 30, 2022 amounted to \$32,053,440, which is 0.9% of the actuarial accrued liability.

Section 2: Actuarial Valuation Results

Actuarial assumptions

- The only assumption change reflected in this report is:
 - The discount rate was lowered from 6.625% to 6.50%
 - These changes increased the actuarial accrued liability by 1.35% and increased the total normal cost by 3.08%.

Plan provisions

- There were no changes in plan provisions since the prior valuation.

Section 2: Actuarial Valuation Results

Unfunded Actuarial Accrued Liability

Development of Unfunded Actuarial Accrued Liability for Year Ended September 30, 2022

1	Unfunded actuarial accrued liability at beginning of year		\$1,410,245,182
2	Employer normal cost at beginning of year		19,666,050
3	Employer contributions		-84,353,000
4	Interest on 1, 2 & 3		<u>92,179,939</u>
5	Expected unfunded actuarial accrued liability		\$1,437,738,171
6	Changes due to:		
	(a) Net experience (gain)/loss	\$86,997,520	
	(b) Assumptions	<u>48,782,223</u>	
	Total changes		<u>\$135,779,743</u>
7	Unfunded actuarial accrued liability at end of year		\$1,573,517,914

Section 2: Actuarial Valuation Results

Florida's Chapter 112 Determined Employer Contribution and City's Minimum Required Contribution

The chart below shows the calculations of the Florida Chapter 112 determined employer contribution and the City's minimum required contribution pursuant to State Law Chapter 2016-146 and City of Jacksonville Ordinances 2017-257-E and 2017-258-E.

The contribution requirements as of October 1, 2022 are based on the data previously described, 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.

Florida Chapter 112 Determined Contribution and City's Minimum Required Contribution for Year Beginning October 1

	2023		2022	
	Amount	% of Projected Payroll	Amount	% of Projected Payroll
1. Total normal cost	\$40,445,986	17.48%	\$39,950,985	16.87%
2. Administrative expenses	1,832,000	0.79%	1,194,000	0.50%
3. Expected employee contributions	<u>-20,903,681</u>	<u>-9.04%</u>	<u>-21,478,935</u>	<u>-9.07%</u>
4. Employer normal cost: (1) + (2) + (3)	\$21,374,305	9.24%	\$19,666,050	8.31%
5. Actuarial accrued liability	\$3,653,156,095		\$3,529,433,595	
6. Actuarial value of assets	<u>2,079,638,181</u>		<u>2,119,188,413</u>	
7. Unfunded actuarial accrued liability: (5) - (6)	\$1,573,517,914		\$1,410,245,182	
8. Payment on unfunded actuarial accrued liability	\$107,085,615	46.29%	\$95,204,799	40.21%
9. Florida Chapter 112 determined employer contribution: (4) + (8) ¹	134,889,081	58.31%	120,695,825	50.98%
10. Discounted and amortized value of projected surtax revenue ^{1,2}	-38,296,452	-16.55%	-37,088,349	-15.66%
11. City's minimum required contribution: (9) + (10) ²	<u>\$96,592,629</u>	<u>41.76%</u>	<u>\$83,607,476</u>	<u>35.31%</u>
12. Projected payroll	\$231,330,958		\$236,765,592	

¹Adjusted for timing and projected to next fiscal year; contributions are assumed to be paid at the end of every month.

²Pursuant to State Law Chapter 2016-146 and City of Jacksonville ordinances 2017-257-E and 2017-258-E

Section 2: Actuarial Valuation Results

Reconciliation of City's Minimum Required Contribution

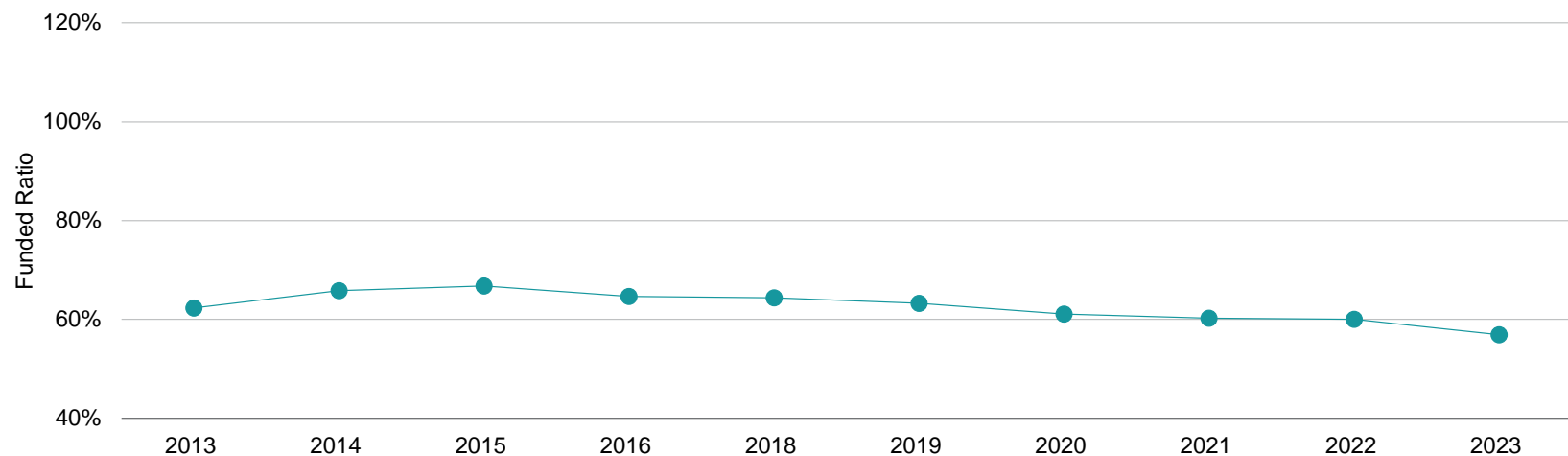
Reconciliation of City's Minimum Required Contribution
from October 1, 2022 to October 1, 2023

	Amount
1 City's Minimum Required Contribution as of October 1, 2022	\$83,607,476
2 Effect of expected change in amortization payment due to payroll growth	944,163
3 Effect of change in administrative expense assumption	670,352
4 Effect of change in other actuarial assumptions	5,295,019
5 Effect of investment loss	3,873,287
6 Effect of other gains and losses on accrued liability	2,346,887
7 Net effect of other changes, including composition and number of participants	<u>-144,555</u>
8 Total change	\$12,985,153
9 City's Minimum Required Contribution as of October 1, 2023	\$96,592,629

Section 2: Actuarial Valuation Results

Schedule of funding progress through September 30, 2022

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded/ (Overfunded) AAL (UAAL) (b) - (a)	Funded Ratio (a) / (b)	Covered Compensation (c)	UAAL as a Percentage of Covered Compensation [(b) - (a)] / (c)
10/01/2013	\$1,565,291,310	\$2,512,635,436	\$947,344,126	62.30%	\$265,404,735	356.94%
10/01/2014	1,751,888,510	2,662,187,817	910,299,307	65.81%	262,368,813	346.95%
10/01/2015	1,811,172,111	2,711,408,803	900,236,692	66.80%	254,034,479	354.38%
10/01/2016	1,872,790,100	2,897,287,172	1,024,497,072	64.64%	250,894,295	408.34%
10/01/2017	1,952,332,857	3,033,646,298	1,081,313,441	64.36%	257,850,484	419.36%
10/01/2018	2,021,545,306	3,196,680,516	1,175,135,210	63.24%	253,982,175	462.68%
10/01/2019	2,008,173,331	3,286,313,481	1,278,140,150	61.11%	249,982,877	511.29%
10/01/2020	2,042,779,798	3,389,704,002	1,346,924,204	60.26%	246,864,141	545.61%
10/01/2021	2,119,188,413	3,529,433,595	1,410,245,182	60.04%	233,266,593	604.56%
10/01/2022	2,079,638,181	3,653,156,095	1,573,517,914	56.93%	227,912,274	690.41%



Section 2: Actuarial Valuation Results

History of employer contributions

History of Employer Contributions: 2015 – 2024

Fiscal Year Ended September 30	City's Minimum Required Contribution	Actual Employer Contribution	Percent Contributed
2015	\$86,069,361	\$81,751,000	94.98%
2016	89,058,931	84,898,000	95.33%
2017	94,526,754	94,700,000	100.18%
2018	70,166,221	71,024,000	101.22%
2019	69,247,524	70,338,000	101.57%
2020	71,249,679	72,194,000	101.33%
2021	76,832,977	77,269,000	100.57%
2022	83,696,811	84,353,000	100.78%
2023	83,607,476	--	--
2024	96,529,629	--	--

Section 2: Actuarial Valuation Results

Risk

The actuarial valuation results are dependent on a single set of assumptions; however, there is a risk that emerging results may differ significantly as actual experience proves to be different from the current 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. Upon request, a more detailed assessment of the risk can be provided to enable 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 market value rate of return over the last ten years has ranged from a low of -15.68% to a high of 21.08%. These two large movements have occurred over the past two years.

- **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)

The Plan's funding policy requires payment of the City's minimum required contribution, which is the Florida Chapter 112 determined contribution reduced for anticipated funding from allocated surtax income. This policy produces a risk that this reduction in immediate funding might be either too large or too small, depending on whether the surtax income grows as quickly as expected.

If the City paid the Florida Chapter 112 determined contribution, the effective amortization period would be 24 years, meaning that the current contribution level, with amortization payments growing 1.5%, would be adequate to be expected to reduce the unfunded liability to zero over 24 years. Under the City's current policy of paying the City's required contribution, over the immediate term, the unfunded liability has an expected growth rate of 1.7% and increases at this level can be expected to continue until the surtax income becomes payable to the Plan's trust. If plan experience is less favorable than anticipated, the unfunded liability will grow faster than 1.7% per year. By comparison, the surtax revenue is assumed to grow 4.25% per year.

If the surtax revenue for fiscal 2022 had been 1% lower, the City's required contribution would increase by \$527,978 or 0.23% of projected payroll. For comparison purposes, the allocated surtax revenue is 41.0% of the market value of assets and 20.5% of the actuarial accrued liability.

Section 2: Actuarial Valuation Results

- **Demographic Risk** (the risk that participant experience will be different than assumed)

Examples of this risk include:

- Actual retirements occurring earlier or later than assumed. The value of retirement plan benefits is sensitive to the rate of benefit accruals and any early retirement subsidies that apply.
- More or less active participant turnover than assumed.
- Participants' use of plan provisions allowing conversion of benefits from the DB plan to the DC plan.

- **Actual Experience** Over the Last Ten years and Implications for the Future

Past experience can help demonstrate the sensitivity of key results to the Plan's actual experience. Over the past ten years:

- The investment gain/loss on a market basis for a year has ranged from a loss of \$499,432,276 to a gain of \$278,128,416. Over the past ten years, the Plan's market value performance has, on average, been similar to the current return assumption of 6.50%.
- The non-investment gain/loss for a year has ranged from a loss of \$55,702,357 to a gain of \$12,506,125.
- The funded percentage on the actuarial value of assets has ranged from a low of 56.9% to a high of 71.4% since 2012.

- **Maturity Measures**

As pension plans mature, the cash needed to fulfill benefit obligations will increase over time. Therefore, cash flow projections and analysis should be performed to assure that the Plan's asset allocation is aligned to meet emerging pension liabilities.

Currently the Plan has a pay status to active participant ratio of 1.81. For the prior year benefits and expenses paid were \$121.6 million more than contributions received. As the Plan matures, more cash will be needed from the investment portfolio to meet benefit payments. Since the Plan is closed to new entrants, the amount of employee contributions is expected to continue to decline each year as the number of active participants decrease.

Section 2: Actuarial Valuation Results

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

	2022	2021
Actuarial accrued liability (AAL)		
Active member contributions	\$205,642,305	\$202,949,998
Retirees and beneficiaries	2,522,749,776	2,424,667,249
Active and inactive members (employer-financed)	<u>924,764,014</u>	<u>901,816,348</u>
Total	\$3,653,156,095	\$3,529,433,595
Actuarial value of assets	2,079,638,181	2,119,188,413
Cumulative portion of AAL covered		
Active member contributions	100.00%	100.00%
Retirees and beneficiaries	74.28%	79.03%
Active and inactive members (employer-financed)	0.00%	0.00%

Section 2: Actuarial Valuation Results

Actuarial balance sheet

An overview of the Plan's funding is given by an Actuarial Balance Sheet. In this approach, first the amount and timing of all future payments that will be made by the Plan for current participants is determined. Then these payments are discounted at the valuation interest rate to the date of the valuation, thereby determining the present value, referred to as the "liability" of the Plan.

Second, this liability is compared to the assets. The "assets" for this purpose include the net amount of assets already accumulated by the Plan, the present value of future member contributions, the present value of future employer normal cost contributions, and the present value of future employer amortization payments for the unfunded actuarial accrued liability.

Actuarial Balance Sheet

	Year Ended	
	September 30, 2022	September 30, 2021
Liabilities		
Present value of benefits for retired participants and beneficiaries	\$2,522,749,776	\$2,424,667,249
Present value of benefits for inactive vested participants	22,227,231	24,778,567
Present value of benefits for active participants	<u>1,457,695,013</u>	<u>1,425,584,338</u>
Total liabilities	\$4,002,672,020	\$3,875,030,154
Assets		
Total valuation value of assets	\$2,079,638,181	\$2,119,188,413
Present value of future contributions by members	177,039,965	182,504,023
Present value of future employer contributions for:		
Entry age cost	172,475,960	163,092,536
Unfunded actuarial accrued liability	<u>1,573,517,914</u>	<u>1,410,245,182</u>
Total of current and future assets	\$4,002,672,020	\$3,875,030,154

Section 3: Supplemental Information

Exhibit A: Table of Plan Demographics

Category	Year Ended September 30		Change From Prior Year
	2022	2021	
Active participants in valuation:			
Number	3,027	3,289	-8.0%
Average age	51.6	51.1	0.5
Average years of service	16.2	15.5	0.7
Covered payroll	\$227,912,274	\$233,266,593	-2.3%
Average compensation	\$75,293	\$70,923	6.2%
Account balances	205,642,305	202,949,998	1.3%
Total active vested participants	3,009	3,077	-2.2%
Inactive participants	147	160	-8.1%
Retired participants:			
Number in pay status	4,028	4,008	0.5%
Average age	71.7	71.4	0.3
Average monthly benefit	\$3,602	\$3,485	3.4%
Disabled participants:			
Number in pay status	86	100	-14.0%
Average age	67.8	67.3	0.5
Average monthly benefit	\$1,835	\$1,796	2.2%
Beneficiaries:			
Number in pay status	1,225	1,234	-0.7%
Average age	76.7	76.5	0.2
Average monthly benefit	\$2,337	\$2,223	5.1%

Section 3: Supplemental Information

Exhibit B: Participants in Active Service as of September 30, 2022 by Age, Years of Service, and Average Compensation

Age	Total	Years of Service								
		0-4	5-9	10-14	15 - 19	20 - 24	25 - 29	30 - 34	35 - 39	40 & over
25 - 29	42	1	41	--	--	--	--	--	--	--
	\$60,806	\$37,510	\$61,374	--	--	--	--	--	--	--
30 - 34	165	--	116	45	4	--	--	--	--	--
	72,476	--	68,232	\$82,474	\$83,094	--	--	--	--	--
35 - 39	301	5	126	116	52	2	--	--	--	--
	73,118	65,692	66,205	81,749	71,936	\$57,272	--	--	--	--
40 - 44	328	1	85	123	98	21	--	--	--	--
	78,359	52,367	71,634	77,938	84,687	79,753	--	--	--	--
45 - 49	406	3	82	130	91	78	22	--	--	--
	79,055	187,017	70,139	76,968	84,056	81,155	\$81,775	--	--	--
50 - 54	537	2	99	134	105	113	45	37	2	--
	80,281	43,190	71,741	79,877	82,111	84,741	82,966	\$83,544	\$98,407	--
55 - 59	561	3	86	126	112	104	47	52	28	3
	75,157	104,041	68,597	68,043	78,107	73,309	85,271	87,680	75,147	\$111,554
60 - 64	455	1	60	107	84	93	33	49	25	3
	70,349	26,422	71,180	60,750	73,903	70,263	75,578	73,219	87,128	69,704
65 - 69	156	2	20	38	31	27	8	16	7	7
	73,735	105,479	71,370	70,341	72,672	82,765	76,058	67,444	58,432	86,755
70 & over	76	--	5	17	17	17	7	7	3	3
	63,258	--	68,648	51,833	57,611	68,418	73,544	62,203	98,794	64,697
Total	3,027	18	720	836	594	455	162	161	65	16
	\$75,293	\$89,737	\$68,967	\$74,304	\$78,840	\$77,476	\$81,220	\$79,209	\$79,762	\$84,072

Section 3: Supplemental Information

Exhibit C: Reconciliation of Participant Data

	Active Participants	Inactive Vested Participants	Disableds	Retired Participants	Beneficiaries	Total
Number as of October 1, 2021	3,289	160	100	4,008	1,234	8,791
New participants	0	N/A	N/A	N/A	N/A	0
Terminations – with vested rights	0	0	0	0	0	0
Terminations – without vested rights	-99	N/A	N/A	N/A	N/A	-99
Retirements	-169	-12	N/A	181	N/A	0
New disabilities	-4	0	4	N/A	N/A	0
Return to work	2	-1	0	0	N/A	1
Deceased	-6	0	-9	-172	-86	-273
New beneficiaries	0	0	0	0	81	81
Lump sum cash-outs	0	0	0	0	0	0
Rehire	0	0	N/A	0	N/A	0
Certain period expired	N/A	N/A	0	0	-3	-3
Data adjustments	0	0	-9	11	-1	1
Active participants no longer accruing benefits	0	0	N/A	N/A	N/A	0
Net transfers (to)/from DC Plan or Corrections	14	0	0	0	0	14
Number as of October 1, 2022	3,027	147	86	4,028	1,225	8,516

Section 3: Supplemental Information

Exhibit D: Summary Statement of Income and Expenses on a Market Value Basis

	Year Ended September 30, 2022	Year Ended September 30, 2021
Net assets at market value at the beginning of the year	\$2,299,661,000	\$2,005,459,000
Contribution income:		
• Employer contributions	\$84,353,000	\$77,269,000
• Employee contributions	27,713,000	29,116,000
• Less administrative expenses	<u>-\$1,832,000</u>	<u>-1,194,000</u>
<i>Net contribution income</i>	\$110,234,000	\$105,191,000
Investment income:		
• Interest, dividends, and other income	\$34,827,000	\$11,975,000
• Realized appreciation	81,783,000	118,409,000
• Unrealized appreciation	-453,216,000	287,983,000
• Less investment fees	<u>-14,502,000</u>	<u>-7,823,000</u>
<i>Net investment income</i>	<u>-\$351,108,000</u>	<u>\$410,544,000</u>
Total income available for benefits	-\$240,874,000	\$515,735,000
Less benefit payments:		
• Benefit payments	-\$206,207,000	-\$197,481,000
• Refunds	-25,635,000	-24,052,000
<i>Net benefit payments</i>	-\$231,842,000	-\$221,533,000
Change in market value of assets	-\$472,716,000	\$294,202,000
Net assets at market value at the end of the year	\$1,826,945,000	\$2,299,661,000

Section 3: Supplemental Information

Exhibit E: Summary Statement of Plan Assets

	September 30, 2022	September 30, 2021
Cash equivalents	\$9,570,000	\$40,642,000
Total accounts receivable	3,945,000	2,542,000
Investments:		
Equities	\$1,105,422,000	\$1,645,692,000
Fixed income	398,277,000	441,977,000
Real estate	476,160,000	414,024,000
Other assets	82,197,000	59,813,000
Equity in pooled investments	<u>-248,666,000</u>	<u>-297,732,000</u>
Total investments at market value	1,823,294,000	2,263,774,000
Total assets	1,826,905,000	2,306,958,000
Total accounts payable	41,000	-7,297,000
Net assets at market value	\$1,826,945,000	\$2,299,661,000
Net assets at actuarial value	\$2,079,638,181	\$2,119,188,413

Section 3: Supplemental Information

Exhibit F: Development of the Fund through September 30, 2022

Year Ended September 30	Employer Contributions	Employee Contributions	Other Income	Net Investment Return ¹	Admin. Expenses	Benefit Payments	Market Value of Assets at Year-End	Actuarial Value of Assets at Year-End	Actuarial Value as a Percent of Market Value
2013	\$55,386,000	\$21,878,000	\$0	\$264,541,000	\$671,000	\$166,460,000	\$1,733,319,000	\$1,565,291,310	90.3%
2014	71,000,000	20,961,000	0	194,864,000	828,000	171,127,000	1,848,189,000	1,751,888,510	94.8%
2015	81,751,000	20,893,000	0	-39,506,000	762,000	170,674,000	1,739,891,000	1,811,172,111	104.1%
2016	84,898,000	21,840,000	0	167,067,000	762,000	183,692,000	1,829,242,000	1,872,790,100	102.4%
2017	94,700,000	23,037,000	0	266,138,000	787,000	192,662,000	2,019,668,000	1,952,332,857	96.7%
2018	71,024,000	29,919,000	11,397,000	145,470,000	1,193,000	191,229,000	2,085,056,000	2,021,545,306	97.0%
2019	70,338,000	28,334,000	0	14,787,000	959,000	227,350,000	1,970,206,000	2,008,173,331	101.9%
2020	72,194,000	26,014,000	0	145,398,000	1,084,000	207,269,000	2,005,459,000	2,042,779,798	101.9%
2021	77,269,000	29,116,000	0	410,544,000	1,194,000	221,533,000	2,299,661,000	2,119,188,413	92.2%
2022	84,353,000	27,713,000	0	-351,108,000	1,832,000	231,842,000	1,826,945,000	2,079,638,181	113.8%

¹ On a market basis, net of investment fees and administrative expenses

Section 3: Supplemental Information

Exhibit G: Table of Amortization Bases

Florida Chapter 112 Recommended Contribution Amortization Bases

Type	Date Established	Initial Period	Initial Amount	Annual Payment ¹	Years Remaining	Outstanding Balance
Fresh start	10/01/2016	30	\$1,024,497,072	\$69,393,632	24	\$1,011,968,752
Experience gain	10/01/2017	30	-5,594,096	-372,442	25	-5,548,783
Plan change	10/01/2017	30	-3,528,667	-234,931	25	-3,500,084
Change in assumptions	10/01/2017	30	64,164,450	4,271,924	25	63,644,709
Experience gain	10/01/2018	29	-922,806	-61,361	25	-914,174
Change in assumptions	10/01/2018	29	88,449,536	5,881,317	25	87,622,044
Plan change	10/01/2018	29	5,920,390	393,667	25	5,865,002
Experience loss	10/01/2019	28	99,415,197	6,611,748	25	98,504,285
Change in assumptions	10/01/2019	28	4,913,569	326,784	25	4,868,547
Experience loss	10/01/2020	27	35,775,946	2,382,949	25	35,502,063
Change in assumptions	10/01/2020	27	36,145,490	2,407,564	25	35,868,777
Experience gain	10/01/2021	26	-982,671	-65,647	25	-978,036
Change in assumptions	10/01/2021	26	65,604,895	4,382,724	25	65,295,447
Plan change	10/01/2021	26	3,982,042	266,020	25	3,963,260
Experience loss	10/01/2022	25	122,573,882	8,227,334	25	122,573,882
Change in assumptions	10/01/2022	25	48,782,223	3,274,333	25	48,782,223
Total				\$107,085,615		\$1,573,517,914

¹ Level percentage of payroll

Section 3: Supplemental Information

City's Minimum Recommended Contribution Surtax Amortization Bases

Type	Date Established	Initial Period	Initial Amount	Annual Payment ¹	Years Remaining	Outstanding Balance
Discounted surtax revenue applied	10/01/2016	30	-\$322,190,859	-22,500,728	24	-328,128,579
Surtax offset gain	10/01/2017	30	-7,927,401	-527,788	25	-7,863,189
Allocation change	10/01/2017	30	-10,588,075	-704,930	25	-10,502,312
Discount rate change	10/01/2017	30	-18,720,570	-1,246,373	25	-18,568,932
Surtax offset gain	10/01/2018	29	-8,089,137	-537,878	25	-8,013,509
Allocation change	10/01/2018	29	-20,241,389	-1,345,920	25	-20,052,020
Discount rate change	10/01/2018	29	-21,761,957	-1,447,028	25	-21,558,363
Surtax offset gain	10/01/2019	28	-2,042,344	-135,829	25	-2,023,632
Allocation change	10/01/2019	28	-17,780,689	-1,182,530	25	-17,617,770
Discount rate change	10/01/2019	28	-12,100,053	-804,731	25	-11,989,184
Surtax offset loss	10/01/2020	27	35,288,381	2,350,474	25	35,018,228
Allocation change	10/01/2020	27	-17,315,069	-1,153,315	25	-17,182,512
Discount rate change	10/01/2020	27	-12,334,670	-821,583	25	-12,240,242
Surtax offset gain	10/01/2021	26	-58,945,999	-3,937,877	25	-58,667,960
Allocation change	10/01/2021	26	3,362,614	224,639	25	3,346,753
Discount rate change	10/01/2021	26	-24,944,399	-1,666,406	25	-24,826,740
Surtax offset gain	10/01/2022	25	-35,356,259	-2,373,163	25	-35,356,259
Allocation change	10/01/2022	25	10,831,989	727,059	25	10,831,989
Discount rate change	10/01/2022	25	-19,473,682	-1,307,101	25	-19,473,682
Surtax method change	10/01/2022	25	28,602,830	1,941,444	25	28,602,830
Total				-\$36,471,145		-\$536,265,085

¹ Level percentage of payroll; per Part VII, Chapter 112.64 (5)(b) of Florida Statutes, outstanding balances were amortized using a 1.50% payroll growth rate for October 1, 2021 valuation.

Section 3: Supplemental Information

Exhibit H: Section 415

Section 415 of the Internal Revenue Code (IRC) specifies the maximum benefits that may be paid to an individual from a defined benefit plan and the maximum amounts that may be allocated each year to an individual's account in a defined contribution plan.

A qualified pension plan may not pay benefits in excess of the Section 415 limits. The ultimate penalty for non-compliance is disqualification: active participants could be taxed on their vested benefits and the IRS may seek to tax the income earned on the plan's assets.

In particular, Section 415(b) of the IRC limits the maximum annual benefit payable at the Normal Retirement Age to a dollar limit of \$160,000 indexed for inflation. That limit is \$245,000 for 2022. Normal Retirement Age for these purposes is age 62. These are the limits in simplified terms. They must be adjusted based on each participant's circumstances, for such things as age at retirement, form of benefits chosen and after tax contributions.

Benefits in excess of the limits may be paid through a qualified governmental excess plan that meets the requirements of Section 415(m).

Legal Counsel's review and interpretation of the law and regulations should be sought on any questions in this regard.

Section 3: Supplemental Information

Exhibit I: 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
2010 ¹	\$275,173,962	-0.39%	0.61%	5.36%
2010	322,530,502	17.21%	N/A	N/A
2011	314,054,361	-2.63%	0.94%	5.62%
2012	283,020,575	-9.88%	2.31%	5.83%
2013	265,404,735	-6.22%	1.60%	2.84%
2014	262,368,813	-1.14%	0.04%	2.84%
2015	254,034,479	-3.18%	3.85%	2.48%
2016	250,894,295	-1.24%	2.76%	4.27%
2017	257,850,484	2.77%	4.64%	5.30%
2018	253,982,175	-1.50%	7.33%	5.13%
2019	249,982,877	-1.57%	5.78%	5.03%
2020	246,864,141	-1.25%	5.60%	4.01%
2021	233,266,593	-5.51%	3.78%	3.88%
2022	227,912,274	-2.30%	5.81%	3.77%

Note: The Plan was closed to new entrants as of October 1, 2017.

The average total payroll growth for the most recent ten years was -2.2% per year. Additional analysis of pay of DC Plan participants was used support a payroll increases assumption of 1.50%.

¹Prior to the inclusion of new participants with greater than one year of employment.

Section 3: Supplemental Information

Exhibit J: Supplementary State of Florida Information Recent History of Recommended and Actual Contributions

Fiscal Year Ended September 30	Valuation Date October 1	Contribution Rate as Percent of Valuation Payroll	Valuation Payroll	Florida Chapter 112 Recommended Contribution	City's Minimum Required Contribution	Actual Contribution
2012	2010	17.22%	\$333,819,070	\$57,497,706	--	\$49,899,000
2013	2011	20.51%	325,046,264	66,659,915	--	55,386,000
2014	2012	27.91%	291,511,192	81,351,295	--	71,000,000
2015	2013	31.60%	272,358,339	86,069,361	--	81,751,000
2016	2014	33.20%	268,245,874	89,058,931	--	84,898,000
2017	2015	36.79%	256,930,472	94,526,764	--	94,700,000
2018	2016	36.81%	254,657,709	93,743,647	\$70,166,211	71,024,000
2019	2017	36.41%	261,718,241	95,290,428	69,247,529	70,338,000
2020	2018	39.03%	257,791,908	100,620,425	71,249,679	72,194,000
2021	2019	42.79%	253,732,620	108,568,188	76,832,977	77,269,000
2022	2020	45.98%	250,567,103	115,204,974	83,696,811	84,353,000
2023	2021	50.98%	236,765,592	120,695,825	83,607,476	--
2024	2022	58.31%	231,330,958	134,889,081	96,592,629	--

The Plan was closed to new entrants as of October 1, 2017; as a result, valuation payroll is expected to continue declining.

Section 3: Supplemental Information

Exhibit K: Supplementary State of Florida Information

	Year Ended September 30, 2022		Year Ended September 30, 2021
	New Assumptions	Old Assumptions	
Participant data			
• Active members	3,027	3,027	3,289
• Total annual payroll	\$227,912,274	\$227,912,274	\$233,266,593
• Retired members and beneficiaries	5,339	5,339	5,342
• Total annualized benefit	\$210,335,439	\$210,335,439	\$194,808,852
• Terminated vested members	147	147	160
• Total annualized benefit	\$2,650,917	\$2,650,917	\$2,980,896
Actuarial value of assets	\$2,079,638,181	\$2,079,638,181	\$2,119,188,413
Present value of all future expected benefit payments:			
• Active members:			
• Retirement benefits	\$1,188,318,226	\$1,155,691,434	\$1,157,143,757
• Vesting benefits	19,610,632	19,475,128	21,511,444
• Disability benefits	18,346,691	17,920,988	18,280,618
• Death benefits	25,777,158	25,158,660	25,698,521
• Return of contributions	<u>205,642,305</u>	<u>205,642,305</u>	<u>202,949,998</u>
• Total	\$1,457,695,012	\$1,423,888,515	\$1,425,584,338
• Terminated vested members	22,227,231	21,775,542	24,778,567
• Retired members and beneficiaries	<u>2,522,749,777</u>	<u>2,495,007,523</u>	<u>2,424,667,249</u>
Total	\$4,002,672,020	\$3,940,671,580	\$3,875,030,154

Section 3: Supplemental Information

Exhibit K: Supplementary State of Florida Information Comparative Summary of Principal Valuation Results (Cont'd)

Year Ended September 30, 2022

	New Assumptions	Old Assumptions	Year Ended September 30, 2021
Unfunded actuarial accrued liability	\$1,573,517,914	\$1,524,735,691	\$1,410,245,182
Actuarial present value of accrued benefits			
Vested accrued benefits			
Active members	\$791,452,051	\$775,746,283	\$774,756,851
Inactive members	22,227,231	21,775,542	24,778,567
Retirees and beneficiaries	2,522,749,776	2,495,007,523	2,424,667,249
Nonvested active members	<u>31,379,364</u>	<u>30,888,277</u>	<u>32,316,394</u>
Total	\$3,367,808,422	\$3,323,417,625	\$3,256,519,061
Pension cost			
Normal cost, including administrative expenses	\$42,277,986	\$40,432,151	\$41,144,985
Expected employee contributions	-20,903,681	-20,903,681	-21,478,935
Level % of payroll payment to amortize unfunded actuarial accrued liability	107,085,615	104,952,691	95,204,799
Discounted and amortized value of allocated surtax revenue	-36,471,145	-38,391,008	-35,298,405
Total minimum annual cost payable monthly at valuation date	95,165,151	89,287,939	82,371,897
Total employer cost projected to budget year	96,592,629	90,627,258	83,607,476
Projected Payroll	231,330,958	231,330,958	236,765,592
As % of projected payroll	40.88%	39.18%	35.31%
Present value of active members' future salaries at attained age	\$1,770,399,649	\$1,757,693,679	\$1,843,517,477
Present value of expected future employee contributions	177,039,965	175,769,368	184,351,748

Section 3: Supplemental Information

Exhibit L: Supplementary State of Florida Information Actuarial Present Value of Accumulated Plan Benefits

Factors	Change in Actuarial Present Value of Accumulated Plan Benefits
	\$3,256,519,061
Benefits accumulated, net experience gain or loss, changes in data	\$90,675,942
Benefits paid	-231,842,000
Interest	208,064,622
Changes in assumptions	44,390,797
Plan changes	--
Net increase	\$111,289,361
As % of payroll	48.83%
Actuarial present value of accumulated benefits as of October 1, 2022	\$3,367,808,422

Exhibit M: Actuarial Projections through Fiscal 2062

City of Jacksonville General Employees Retirement Plan
Actuarial Projections through Fiscal Year Ending September 30, 2062

Plan Year Beginning	Actuarial Accrued Liability	Actuarial Value of Assets	Unfunded Actuarial Accrued Liability	Funded Ratio	Fiscal Year Ending	Surtax Contribution	% of Total Contribution	Required City Contribution	% of Total Contribution	Total Contribution
					2023	\$0	0.0%	\$83,607,476	100.0%	\$83,607,476
2022	\$3,653,156,095	\$2,079,638,181	\$1,573,517,914	56.93%	2024	0	0.0%	96,592,629	100.0%	96,592,629
2023	3,691,618,559	1,995,864,101	1,695,754,458	54.06%	2025	0	0.0%	102,924,692	100.0%	102,924,692
2024	3,727,921,352	1,945,362,788	1,782,558,564	52.18%	2026	0	0.0%	107,328,869	100.0%	107,328,869
2025	3,759,689,586	1,892,084,380	1,867,605,206	50.33%	2027	0	0.0%	111,916,938	100.0%	111,916,938
2026	3,787,303,223	1,781,717,803	2,005,585,420	47.04%	2028	0	0.0%	120,793,831	100.0%	120,793,831
2027	3,810,184,497	1,769,552,766	2,040,631,731	46.44%	2029	0	0.0%	121,614,478	100.0%	121,614,478
2028	3,828,465,835	1,760,410,446	2,068,055,389	45.98%	2030	0	0.0%	122,418,559	100.0%	122,418,559
2029	3,841,542,535	1,745,904,826	2,095,637,709	45.45%	2031	43,080,312	25.9%	123,285,843	74.1%	166,366,155
2030	3,849,367,074	1,770,399,490	2,078,967,584	45.99%	2032	59,881,634	32.6%	124,048,420	67.4%	183,930,054
2031	3,850,316,844	1,808,214,765	2,042,102,079	46.96%	2033	62,426,604	33.3%	124,871,751	66.7%	187,298,355
2032	3,844,081,555	1,845,486,667	1,998,594,888	48.01%	2034	65,079,734	34.1%	125,723,413	65.9%	190,803,147
2033	3,830,665,298	1,882,821,140	1,947,844,158	49.15%	2035	67,845,623	34.9%	126,545,843	65.1%	194,391,466
2034	3,808,975,392	1,919,798,410	1,889,176,982	50.40%	2036	70,729,062	35.7%	127,407,680	64.3%	198,136,742
2035	3,779,308,043	1,957,305,350	1,822,002,693	51.79%	2037	73,735,047	36.5%	128,295,287	63.5%	202,030,334
2036	3,742,029,870	1,996,428,330	1,745,601,540	53.35%	2038	76,868,787	37.3%	129,232,553	62.7%	206,101,340
2037	3,697,525,488	2,038,285,192	1,659,240,296	55.13%	2039	80,135,710	38.1%	130,221,090	61.9%	210,356,800
2038	3,645,924,636	2,083,815,536	1,562,109,100	57.15%	2040	83,541,478	38.9%	131,254,588	61.1%	214,796,066
2039	3,587,150,510	2,133,819,599	1,453,330,911	59.49%	2041	87,091,991	39.7%	132,385,293	60.3%	219,477,284
2040	3,521,392,722	2,189,366,308	1,332,026,414	62.17%	2042	90,793,400	40.5%	133,561,789	59.5%	224,355,189
2041	3,449,023,353	2,251,878,790	1,197,144,563	65.29%	2043	94,652,120	41.3%	134,757,678	58.7%	229,409,798
2042	3,368,806,263	2,321,221,881	1,047,584,382	68.90%	2044	98,674,835	42.0%	136,063,399	58.0%	234,738,234
2043	3,282,389,072	2,400,101,101	882,287,971	73.12%	2045	102,868,515	42.8%	137,457,615	57.2%	240,326,130
2044	3,191,187,323	2,491,182,021	700,005,302	78.06%	2046	107,240,427	43.6%	138,908,921	56.4%	246,149,348
2045	3,094,091,103	2,594,704,821	499,386,282	83.86%	2047	111,798,145	44.3%	140,426,777	55.7%	252,224,922
2046	2,993,413,373	2,714,386,258	279,027,115	90.68%	2048	116,549,566	45.5%	142,000,000	54.5%	258,549,566
2047	2,890,741,391	2,853,284,757	37,456,634	98.70%	2049	121,502,923	46.9%	143,500,000	53.1%	265,002,923
2048	2,785,646,648	2,905,059,971	(119,413,323)	104.29%	2050	0	0.0%	4,856,715	100.0%	4,856,715
2049	2,679,309,976	2,806,806,697	(127,496,721)	104.76%	2051	0	0.0%	4,658,941	100.0%	4,658,941
2050	2,572,919,964	2,708,951,806	(136,031,842)	105.29%	2052	0	0.0%	4,495,988	100.0%	4,495,988
2051	2,466,066,460	2,611,157,496	(145,091,036)	105.88%	2053	0	0.0%	4,349,174	100.0%	4,349,174
2052	2,358,598,495	2,513,325,977	(154,727,482)	106.56%	2054	0	0.0%	4,285,882	100.0%	4,285,882
2053	2,253,738,806	2,418,646,768	(164,907,962)	107.32%	2055	0	0.0%	4,261,925	100.0%	4,261,925
2054	2,150,977,376	2,326,690,330	(175,712,954)	108.17%	2056	0	0.0%	4,291,619	100.0%	4,291,619
2055	2,051,547,868	2,238,715,416	(187,167,548)	109.12%	2057	0	0.0%	4,367,843	100.0%	4,367,843
2056	1,955,701,482	2,155,022,188	(199,320,706)	110.19%	2058	0	0.0%	4,460,503	100.0%	4,460,503
2057	1,862,621,557	2,074,870,302	(212,248,745)	111.40%	2059	0	0.0%	4,565,367	100.0%	4,565,367
2058	1,772,315,865	1,998,322,165	(226,006,300)	112.75%	2060	0	0.0%	4,679,442	100.0%	4,679,442
2059	1,684,827,352	1,925,477,681	(240,650,329)	114.28%	2061	0	0.0%	4,796,428	100.0%	4,796,428
2060	1,600,012,890	1,856,257,888	(256,244,998)	116.02%	2062	0	0.0%	4,916,338	100.0%	4,916,338
2061	1,517,947,434	1,790,799,568	(272,852,134)	117.98%	2063	0	0.0%	5,039,246	100.0%	5,039,246
Total:						\$1,614,495,913	33.5%	\$3,198,690,654	66.5%	\$4,813,186,567
Total Present Value at 6.625%:						\$490,592,730	25.8%	\$1,409,673,588	74.2%	\$1,900,266,318

Assumptions

Investment Return Assumption	6.625% per year
Actuarial Value of Assets	5-year smoothed market value
Payroll Growth Assumption	1.50% per year
Pension Liability Surtax Proceeds	35.50%, projected to increase 4.25% annually
Administrative Expenses	Projected to increase 2.5% annually

Projections are not a guarantee of future results. They are intended to serve as estimates of future financial outcomes that are based on assumptions about future experience and the information available at the time the modeling is undertaken and completed. Projected results will change if demographic or economic assumptions, or plan provisions, change in the future, or if the contributing employers make contributions other than expected.

Section 4: Actuarial Valuation Basis

Exhibit I: 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 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. As part of the analysis, a building block approach was used that reflects inflation expectations and anticipated risk premiums for each of the portfolio's asset classes as provided by Segal Marco Advisors, as well as the Plan's target asset allocation.					
Salary Increases (including inflation):	COJ/JHA/NFTPO				JEA	
	Service	Rate (%)	Service	Rate (%)	Service	Rate (%)
	0	6.5	11	3.9	0-4	7.5
	1	6.1	12	3.8	5	5.1
	2	5.7	13	3.7	6	4.9
	3	5.3	14	3.6	7	4.7
	4	4.9	15	3.5	8	4.5
	5	4.5	16	3.4	9	4.3
	6	4.4	17	3.3	10	4.1
	7	4.3	18	3.2	11	3.9
	8	4.2	19	3.1	12	3.7
	9	4.1	20	3.0	13-24	3.5
10	4.0			25+	3.0	
Inflation Rate:	2.50%					

Section 4: Actuarial Valuation Basis

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 ten-year average basis. The Fund's long-term payroll growth assumption is equal to the inflation assumption of 2.50%.				
Mortality Rates:	<i>Healthy pre-retirement:</i>	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			
	<i>Healthy post-retirement:</i>	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			
	<i>Disabled:</i>	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:	Rate (%)				
		Healthy		Disabled	
Age	Male	Female	Male	Female	
55	1.04	0.55	2.53	1.91	
60	1.16	0.61	3.08	2.27	
65	1.45	0.88	3.93	2.83	
70	2.34	1.51	5.08	3.79	
75	3.90	2.62	6.98	5.46	
80	6.63	4.65	10.12	8.31	
85	11.21	8.64	14.68	12.60	
90	18.13	15.47	21.29	17.72	
	Mortality rates shown for base table.				

Section 4: Actuarial Valuation Basis

Termination Rates Before Retirement:

Age	Rate (%)			
	Mortality ¹		Disability	Withdrawal ²
	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.

Section 4: Actuarial Valuation Basis

Termination Retirement before Retirement (continued)

Service	Withdrawal ¹	
	COJ	JEA
0	16.00	6.00
1	15.00	5.50
2	13.00	4.50
3	10.00	3.50
4	9.50	3.25
5	9.00	3.00
6	8.50	2.75
7	8.00	2.50
8	7.50	2.25
9	7.00	2.00
10	6.50	2.00
11	5.60	2.00
12	4.70	2.00
13	3.80	2.00
14	2.90	2.00
15	2.00	2.00
16	1.80	1.80
17	1.60	1.60
18	1.40	1.40
19	1.20	1.20
20	1.00	1.00
21	0.80	0.80
22	0.60	0.60
23	0.40	0.40
24+	0.20	0.20

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

Section 4: Actuarial Valuation Basis

Retirement Rates:	Fewer Than 31 Years of Service		31 or More Years of Service	
	Age	Rate (%) ¹	Service	Rate (%) ¹
	45-54	5	31-33	15
	55	15	34-35	30
	56-60	7	36	35
	61-63	10	37	60
	64-65	30	38-39	50
	66-69	20	40	100
	70 & Over	100		

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

Interest on BACKDROP Account:	4.00%
Refund of Contributions:	95% of participants that are vested and terminate are assumed to take a refund of their employee contributions in lieu of their accrued benefit deferred to age 65
Retirement Age for Inactive Vested Participants:	65, or date of retirement as provided in data
Unknown Data for Participants:	Same as those exhibited by participants with similar known characteristics. If not specified, participants are assumed to be male.
Value of Applicable Tax Revenue:	<p>Smoothed revenue of \$112,840,490 for fiscal 2022 is used as the basis of the City's revenue projection. This amount is prior to the application of the allocation percentage. Smoothed revenue is calculated as actual revenue less unrecognized revenue growth. Unrecognized revenue growth is equal to the difference between actual and expected revenue growth, and is recognized over a five-year period, further adjusted, if necessary, to be within 20% of the market value. This method is applied prospectively to revenue growth occurring during fiscal 2022 and later.</p> <p>Actual revenue for fiscal 2022 was \$117,149,012.</p>
Tax Revenue Growth Rate:	4.25%. This assumption is determined by the City. Segal has not reviewed the information used to set this assumption, but Segal previously reviewed the sensitivity of this assumption when it was initially set.
Projected Tax Revenue Allocation:	35.00%. This percentage is determined by the City; last year's percentage was 35.50%.
Administrative Expenses:	Previous year's actual expenses; \$1,832,000 for October 1, 2022.
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.

Section 4: Actuarial Valuation Basis

Actuarial Value of Assets:	Market value of assets less unrecognized returns in each of the last five years. Unrecognized return is equal to the difference between the actual and the expected market return, and is recognized over a five-year period, further adjusted, if necessary, to be within 20% of the market value.
Actuarial Cost Method:	<p>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.</p> <p>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.</p>
Justification for Change in Actuarial Assumptions and Methods:	<p>Following ongoing board review of discount rate options:</p> <ul style="list-style-type: none">➤ The discount rate was lowered from 6.625% to 6.50%.

Section 4: Actuarial Valuation Basis

Exhibit II: 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:	Closed as of October 1, 2017	
Normal Retirement:	<i>Age Requirement</i>	Age 65 with five years of Credited Service, age 55 with 20 years of Credited Service or any age with 30 years of Credited Service.
	<i>Regular Benefit Amount</i>	2.5% of Final Monthly Compensation times years of Credited Service, not more than 80% of Final Monthly Compensation.
	<i>Supplemental Benefit Amount</i>	Monthly benefit of \$5 times years of Credited Service, not less than \$25 per month or more than \$150 per month.
	<i>Minimum Benefit Amount</i>	\$72.08 per whole year of Credited Service, not to exceed 30. Minimum accrual rate increases 4% each October 1 st .
Early Retirement:	<i>Age Requirement</i>	Age 50 with 20 years of Credited Service
	<i>Regular Benefit Amount</i>	Accrued Service Retirement Regular Benefit Amount reduced by 0.5 percent for each month the benefit commencement precedes age 55.
	<i>Supplemental Benefit Amount</i>	Monthly benefit of \$5 times years of Credited Service, not less than \$25 per month or more than \$150 per month.
	<i>Minimum Benefit Amount</i>	\$72.08 per whole year of Credited Service, not to exceed 30. Minimum accrual rate increases 4% each October 1 st .
	<i>Age Requirement</i>	Any age with 25 years of Credited Service
	<i>Regular Benefit Amount</i>	2.0% of Final Monthly Compensation times years of Credited Service
	<i>Supplemental Benefit Amount</i>	Monthly benefit of \$5 times years of Credited Service, not less than \$25 per month or more than \$150 per month.
	<i>Minimum Benefit Amount</i>	\$72.08 per whole year of Credited Service, not to exceed 30. Minimum accrual rate increases 4% each October 1 st .

Section 4: Actuarial Valuation Basis

Off-the-job Disability:	<i>Service Requirement</i>	5 years of Credited Service
	<i>Regular Benefit Amount</i>	Final Monthly Compensation times 25% plus 2.5% per year of Credited Service in excess of 5, not to exceed 50% of Final Monthly Compensation
	<i>Supplemental Benefit Amount</i>	Monthly benefit of \$5 times years of Credited Service, not less than \$25 per month or more than \$150 per month.
	<i>Minimum Benefit Amount</i>	\$72.08 per whole year of Credited Service, not to exceed 30. Minimum accrual rate increases 4% each October 1 st .
On-the-job Disability:	<i>Service Requirement</i>	Immediate eligibility
	<i>Regular Benefit Amount</i>	Final Monthly Compensation times 25% plus 2.5% per year of Credited Service in excess of 5, not to exceed 50% of Final Monthly Compensation
	<i>Supplemental Benefit Amount</i>	Monthly benefit of \$5 times years of Credited Service, not less than \$25 per month or more than \$150 per month.
	<i>Minimum Benefit Amount</i>	\$72.08 per whole year of Credited Service, not to exceed 30. Minimum accrual rate increases 4% each October 1 st .
Vesting:	<i>Age Requirement</i>	None
	<i>Service Requirement</i>	5 years of Credited Service
	<i>Regular Benefit Amount</i>	Accrued Service Retirement Regular Benefit payable at age 65.
	<i>Supplemental Benefit Amount</i>	Monthly benefit of \$5 times years of Credited Service, not less than \$25 per month or more than \$150 per month. Payable at Age 65.
	<i>Minimum Benefit Amount</i>	\$72.08 per whole year of Credited Service, not to exceed 30. Minimum accrual rate increases 4% each October 1 st .
Spouse's Pre-Retirement Death Benefit:	<i>Age Requirement</i>	None
	<i>Service Requirement</i>	None
	<i>Regular Benefit Amount</i>	If the Member is eligible for retirement, the surviving spouse is entitled to 75% of the member's accrued regular benefit. If the Member is not eligible for retirement, the surviving spouse is entitled to 75% of the pension the Member would have received if the Member had worked to eligibility for a Service Retirement at current salary with the benefit based on a 2% accrual rate.
	<i>Supplemental Benefit Amount</i>	Monthly benefit of \$5 times years of Member's Credited Service, not less than \$25 per month or more than \$150 per month.
	<i>Minimum Benefit Amount</i>	75% of \$72.08 per whole year of Member's Credited Service, not to exceed 30.

Section 4: Actuarial Valuation Basis

Member:	All full-time JEA, JHA, NFTPO, and City General Employees hired prior to October 1, 2017.
Member Contributions:	10.0% of Earnable Compensation
Credited Service:	The number of full years and months worked from date of participation to date of termination or retirement, plus any prior service purchased.
Final Monthly Compensation:	Average monthly rate of Earnable Compensation during the highest 36 consecutive months (78 pay periods) out of the last ten years of employment.
Earnable Compensation:	Base pay for regular hours worked as an employee, plus service raises and excluding bonuses, adjusted compensation, overtime or any extra compensation over and above regularly budgeted salaries.
Cost of Living Adjustment:	On the April 1 st nearest the fifth anniversary of the initial benefit commencement date, and on each April 1 st thereafter, the regular benefit is increased by 3%.
BackDROP:	Members with 30 or more years of service may elect to have their retirement benefits calculated as if the member had retired up to 5 years earlier on or after October 1, 2005. Benefits that would have been payable are accumulated with interest to date of termination and paid or rolled over in a single sum, and payments are made directly to the Member thereafter. The 5-year wait to receive COLA increases starts at termination of employment rather than at the start of BackDROP.
Partial Lump-sum Option (PLOP):	Members who are eligible for retirement may elect to receive a lump-sum benefit of up to 15% of the benefit value and a reduced life annuity actuarially equivalent to the benefit that would otherwise be payable.
Changes in Plan Provisions:	There have been no changes in plan provisions since the last valuation.

Section 5: GASB Information

General information about the pension plan

Plan Description

Plan membership. At January 1, 2021, pension plan membership consisted of the following:

Retired members or beneficiaries currently receiving benefits	5,339
Vested terminated members entitled to but not yet receiving benefits	147
Active members	<u>3,027</u>
Total	8,513

Section 5: GASB Information

Net pension liability

Reporting Date for Employer under GASB 68	September 30, 2023	September 30, 2022
Measurement Date	September 30, 2022	September 30, 2021
Components of the Net Pension Liability		
Total Pension Liability	\$3,653,156,095	\$3,529,433,595
Plan Fiduciary Net Position	1,826,945,000	2,299,661,000
Net Pension Liability	1,826,211,095	1,229,772,595
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	50.01%	65.16%

The Net Pension Liability (NPL) for the plan was measured as of September 30, 2022 and 2021. Plan Fiduciary Net Position (plan assets) was valued as of the measurement dates and the Total Pension Liability (TPL) was determined from actuarial valuations as of October 1, 2022 and 2021, respectively.

Plan provisions. The plan provisions used in the measurement of the NPL are the same as those used in the GERP actuarial valuations as of October 1, 2022 and October 1, 2021, respectively.

Actuarial assumptions. The TPL as of September 30, 2021 and 2020, that were measured by actuarial valuations as of October 1, 2021 and 2020, respectively, used the following actuarial assumptions, applied to all periods included in the measurement:

Inflation	2.50%
Salary increases	3.00% - 7.50%, of which 2.50% is the Plan's long-term payroll inflation
Investment rate of return	6.50%, net of pension plan investment expense, including inflation (previously 6.625%)
Other assumptions	See the October 1, 2022 valuation for a complete description of all actuarial assumptions. These assumptions were developed in the analysis of actuarial experience study for the period October 1, 2012 through September 30, 2017.

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 and subtracting expected investment expenses and a risk margin. 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 Return¹
Domestic equity	30.0%	6.40%
International equity	20.0%	6.80%
Fixed income	20.0%	0.40%
Real estate	15.0%	3.90%
Private equity	7.5%	10.40%
Alternatives	7.5%	2.75%
Total	100.0%	

Discount rate. The discount rates used to measure the Total Pension Liability (TPL) were 6.50% and 6.625% as of September 30, 2022 and September 30, 2021, respectively. 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, 2022 and September 30, 2021.

¹ Based on capital market assumptions provided by Segal Marco Advisors

Section 5: GASB Information

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, 2022, which is allocated to all employers, 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.

Net Pension Liability	1% Decrease (5.50%)	Current Discount Rate (6.50%)	1% Increase (7.50%)
City of Jacksonville	\$1,049,956,489	\$848,643,780	\$680,601,105
Jacksonville Electrical Authority	1,175,686,629	950,267,134	762,101,693
Jacksonville Housing Authority	30,776,295	24,875,423	19,949,761
North Florida Transportation Planning Organization	2,999,952	2,424,758	1,944,624
Total for all Employers	\$2,259,419,365	\$1,826,211,095	\$1,464,597,183

Section 5: GASB Information

Schedule of changes in Net Pension Liability – Last two fiscal years

Reporting Date for Employer under GASB 68	January 1, 2021	January 1, 2020
Measurement Date	January 1, 2021	January 1, 2020
Total Pension Liability		
Service cost	\$39,950,985	\$40,608,463
Interest	228,791,962	225,729,126
Change of benefit terms	0	3,982,042
Differences between expected and actual experience	38,039,330	25,338,067
Changes of assumptions	48,782,223	65,604,895
Benefit payments, including refunds of member contributions	<u>-231,842,000</u>	<u>-221,533,000</u>
Net change in Total Pension Liability	\$123,722,500	\$139,729,593
Total Pension Liability – beginning	3,529,433,595	3,389,704,002
Total Pension Liability – ending	\$3,653,156,095	\$3,529,433,595
Plan Fiduciary Net Position		
Contributions – employer	\$84,353,000	\$77,269,000
Contributions – employee	27,713,000	29,116,000
Net investment income	-351,108,000	410,544,000
Benefit payments, including refunds of member contributions	-231,842,000	-221,533,000
Administrative expense	-1,832,000	-1,194,000
Other	<u>0</u>	<u>0</u>
Net change in Plan Fiduciary Net Position	-\$472,716,000	\$294,202,000
Plan Fiduciary Net Position – beginning	2,299,661,000	2,005,459,000
Plan Fiduciary Net Position – ending	\$1,826,945,000	\$2,299,661,000
Net Pension Liability – ending	\$1,826,211,095	\$1,229,772,595
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	50.01%	65.16%
Covered payroll ¹	\$227,912,274	\$233,266,593
Plan Net Pension Liability as percentage of covered payroll	801.28%	527.20%

¹ Pensionable payroll as of the measurement date

Section 5: GASB Information

Notes to Schedule:

Benefit changes:

An early retirement window was offered during the period of April 1, 2021 through September 30, 2021 for all non-JEA participants and for the period May 1, 2021 through October 31, 2021 for all JEA participants. During the window periods, normal retirement eligibility was changed from either: age 65 with five years of credited service, age 55 with 20 years of credited service or any age with 30 years of credited service, to age 60 with five years of credited service or age 55 with 10 years of credited service. Also during the window periods, early retirement eligibility was changed from either: age 50 with 20 years of credited service, or any age with 25 years of service with a 2.0% benefit multiplier, to any age with 20 years of service, with a 2.0% benefit multiplier.

Assumption changes:

As of September 30, 2021 the assumed investment return was lowered from 6.80% to 6.625%.

As of September 30, 2022 the assumed investment return was lowered from 6.625% to 6.50%.

Section 5: GASB Information

Deferred outflows of resources and deferred inflows of resources – Total for all employers

Reporting Date for Employer under GASB 68	September 30, 2023	September 30, 2022
Measurement Date	September 30, 2022	September 30, 2021
Deferred Outflows of Resources		
Changes in proportion and differences between employer's contributions and proportionate share of contributions ¹	\$20,172,640	\$34,800,351
Changes of assumptions or other inputs	78,425,489	68,504,810
Net difference between projected and actual earnings on pension plan investments	261,141,390	0
Difference between expected and actual experience in the Total Pension Liability	<u>44,246,588</u>	<u>33,458,313</u>
Total Deferred Outflows of Resources	\$403,986,107	\$136,763,474
Deferred Inflows of Resources		
Changes in proportion and differences between employer's contributions and proportionate share of contributions ¹	\$20,172,640	\$34,800,351
Changes of assumptions or other inputs	0	0
Net difference between projected and actual earnings on pension plan investments	0	167,650,379
Difference between expected and actual experience in the Total Pension Liability	<u>0</u>	<u>0</u>
Total Deferred Inflows of Resources	\$20,172,640	\$202,450,730
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:		
2023	N/A	\$15,161,264
2024	\$127,753,435	6,161,591
2025	90,207,416	-31,384,428
2026	65,966,161	-55,625,683
2027	99,886,455	0
2028	0	0
Thereafter	0	0

¹ Calculated in accordance with Paragraphs 54 and 55 of GASB 68

Section 5: GASB Information

There are changes in each employer's proportionate share of the total Net Pension Liability (NPL) during the measurement period ended September 30, 2022. The net effect of the change on the employer's proportionate share of the collective NPL and collective deferred outflows of resources and deferred inflows of resources is recognized over the average of the expected remaining service lives of all employees that are provided with pensions through GERP which is four years determined as of September 30, 2021 (the beginning of the measurement period ending September 30, 2022). This is described in Paragraph 33a. of GASB 68.

In addition, the difference between the actual employer contributions and the proportionate share of the employer contributions during the measurement period ended September 30, 2022 is recognized over the same period. This is zero because the proportionate share was determined using the actual employer contributions.

The average of the expected service lives of all employees is determined by:

- Calculating each active employee's expected remaining service life as the present value of \$1 per year of future service at zero percent interest.
- Setting the remaining service life to zero for each nonactive or retired member.
- Dividing the sum of the above amounts by the total number of active employee, nonactive and retired members.

Section 5: GASB Information

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)	2022	2023	2024	2025	2026	2027	2028	Thereafter
2018	\$16,293,511	5	\$3,258,702	\$0	\$0	\$0	\$0	\$0	\$0	\$0
2019	-7,274,767	4	-1,818,692	0	0	0	0	0	0	0
2020	33,434,609	4	8,358,652	8,358,652	0	0	0	0	0	0
2021	12,192,218	4	3,048,055	3,048,055	3,048,055	0	0	0	0	0
2022	25,338,067	4	6,334,516	6,334,517	6,334,517	6,334,517	0	0	0	0
2023	38,039,330	4	N/A	<u>9,509,831</u>	<u>9,509,833</u>	<u>9,509,833</u>	<u>9,509,833</u>	<u>0</u>	<u>0</u>	<u>0</u>
Net increase (decrease) in pension expense			N/A	\$27,251,055	\$18,892,405	\$15,844,350	\$9,509,833	\$0	\$0	\$0

Section 5: GASB Information

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)	2022	2023	2024	2025	2026	2027	2028	Thereafter
2018	\$64,389,844	5	\$12,877,969	\$0	\$0	\$0	\$0	\$0	\$0	\$0
2019	80,635,093	4	20,158,773	0	0	0	0	0	0	0
2020	4,913,569	4	1,228,392	1,228,392	0	0	0	0	0	0
2021	36,145,490	4	9,036,373	9,036,373	9,036,373	0	0	0	0	0
2022	65,604,895	4	16,401,223	16,401,224	16,401,224	16,401,224	0	0	0	0
2023	48,782,223	4	<u>N/A</u>	<u>12,195,555</u>	<u>12,195,556</u>	<u>12,195,556</u>	<u>12,195,556</u>	<u>0</u>	<u>0</u>	<u>0</u>
Net increase (decrease) in pension expense			N/A	\$38,861,544	\$37,633,153	\$28,596,780	\$12,195,556	\$0	\$0	\$0

As described in Exhibit of Deferred Outflows of Resources and Deferred Inflows of Resources, the average of the expected remaining service lives of all employees that are provided with pensions through GERP (active and inactive employees) determined as of September 30, 2021 (the beginning of the measurement period ending September 30, 2022) is four years.

Section 5: GASB Information

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)	2022	2023	2024	2025	2026	2027	2028	Thereafter
2018	-\$133,575,436	5	-\$26,715,087	\$0	\$0	\$0	\$0	\$0	\$0	\$0
2019	-2,936,856	5	-587,371	-587,371	0	0	0	0	0	0
2020	127,307,955	5	25,461,591	25,461,591	25,461,591	0	0	0	0	0
2021	7,527,572	5	1,505,514	1,505,514	1,505,514	1,505,514	0	0	0	0
2022	-278,128,416	5	-55,625,684	-55,625,683	-55,625,683	-55,625,683	-55,625,683	0	0	0
2023	499,432,276	5	<u>N/A</u>	<u>99,886,456</u>	<u>99,886,455</u>	<u>99,886,455</u>	<u>99,886,455</u>	<u>99,886,455</u>	<u>0</u>	<u>0</u>
Net increase (decrease) in pension expense			N/A	\$70,640,507	\$71,227,877	\$45,766,286	\$44,260,772	\$99,886,455	\$0	\$0

Section 5: GASB Information

Total Increase (Decrease) in Pension Expense

Reporting Date for Employer under GASB 68 Year Ended September 30	Total Increase (Decrease) in Pension Expense	2022	2023	2024	2025	2026	2027	2028	Thereafter
2018	-52,892,081	-\$10,578,416	\$0	\$0	\$0	\$0	\$0	\$0	\$0
2019	70,423,470	17,752,710	-587,371	0	0	0	0	0	0
2020	165,656,133	35,048,635	35,048,635	25,461,591	0	0	0	0	0
2021	55,865,280	13,589,942	13,589,942	13,589,942	1,505,514	0	0	0	0
2022	-187,185,454	-32,889,945	-32,889,942	-32,889,942	-32,889,942	-55,625,683	0	0	0
2023	586,253,829	<u>N/A</u>	<u>121,591,842</u>	<u>121,591,844</u>	<u>121,591,844</u>	<u>121,591,844</u>	<u>99,886,455</u>	<u>0</u>	<u>0</u>
Net increase (decrease) in pension expense		N/A	\$136,753,106	\$127,753,435	\$90,207,416	\$65,966,161	\$99,886,455	\$0	\$0

Section 5: GASB Information

Pension expense – Total for all employers

Reporting Date for Employer under GASB 68	September 30, 2023	September 30, 2022
Measurement Date	September 30, 2022	September 30, 2021
Components of Pension Expense		
Service cost	\$39,950,985	\$40,608,463
Interest on the Total Pension Liability	228,791,962	225,729,126
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	0	3,982,042
Expensed portion of current-period difference between expected and actual experience in the Total Pension Liability	9,509,831	6,334,516
Expensed portion of current-period changes of assumptions or other inputs	12,195,555	16,401,223
Member contributions	-27,713,000	-29,116,000
Projected earnings on plan investments	-148,324,276	-132,415,584
Expensed portion of current-period differences between actual and projected earnings on plan investments	99,886,456	-55,625,684
Administrative expense	1,832,000	1,194,000
Other	0	0
Recognition of beginning of year deferred outflows of resources as pension expense	71,374,318	84,934,021
Recognition of beginning of year deferred inflows of resources as pension expense	-56,213,054	-29,121,150
Net amortization of deferred amounts from changes in proportion and differences between employer's contributions and proportionate share of contributions	0	0
Pension Expense	\$231,290,777	\$132,904,973

Section 5: GASB Information

Schedule of reconciliation of Net Pension Liability –Total for all employers

Reporting Date for Employer under GASB 68	September 30, 2023	September 30, 2022
Measurement Date	September 30, 2022	September 30, 2021
Beginning Net Pension Liability	\$1,229,772,595	\$1,384,245,002
Pension expense	231,290,777	132,904,973
Employer contributions	-84,353,000	-77,269,000
New net deferred inflows/outflows	464,661,987	-154,295,509
New net deferred inflows/outflows due to change in proportion	0	0
Recognition of prior deferred inflows/outflows	-15,161,264	-55,812,871
Ending Net Pension Liability	\$1,826,211,095	\$1,229,772,595

Section 5: GASB Information

Schedule of contributions – Last ten fiscal years

Year Ended September 30	Actuarially Determined Contributions	Contributions in Relation to the Actuarially Determined Contributions	Contribution Deficiency / (Excess)	Covered Payroll ¹	Contributions as a Percentage of Covered Payroll ²
2013	\$66,659,915	\$55,386,000	\$11,273,915	\$265,404,735	20.87%
2014	81,351,295	71,000,000	10,351,295	262,368,813	27.06%
2015	86,069,361	81,751,000	4,318,361	254,034,479	32.18%
2016	89,058,931	84,898,000	4,160,931	250,894,295	33.84%
2017	94,526,754	94,700,000	-173,246	257,850,484	36.73%
2018	93,743,647	71,024,000	22,719,647	253,982,175	27.96%
2019	95,290,428	70,338,000	24,952,428	249,982,877	28.14%
2020	100,620,425	72,194,000	28,426,425	246,864,141	29.24%
2021	108,568,188	77,269,000	31,299,188	233,266,593	33.12%
2022	115,204,974	84,353,000	30,851,974	227,912,274	37.01%

See accompanying notes to this schedule on next page.

¹ Pensionable payroll as of the measurement date.

² The City contributed the percentage of payroll represented by the actuarially determined contribution in the corresponding actuarial valuation for years ending on or before September 30, 2016. Actual dollar contributions may be more or less than the actuarially determined contributions due to actual payroll being different from projected payroll. Effective with the September 30, 2017 fiscal year, the City implemented a policy to ensure that the calculated dollar amount of the actuarially determined contribution was met.

Effective with the September 30, 2018 fiscal year, the City began contributing based on an adjusted state minimum required contribution that reflects an adjustment for an offset for amortization of the discounted value of projected surtax revenue allocated to the plan beginning in 2030.

Section 5: GASB Information

Notes to Schedule:

Methods and assumptions used to establish “actuarially determined contribution” rates:

Valuation date	Actuarially determined contribution rates are calculated as of October 1, two years prior to the end of the fiscal year in which contributions are reported
Actuarial cost method	Entry Age Actuarial Cost Method
Amortization method	Level percent of payroll, using 1.50% annual increases ¹
Remaining amortization period	As of October 1, 2020 the effective amortization period is 26 years.
Asset valuation method	The market value of assets less unrecognized returns in each of the last five years. Unrecognized return is equal to the difference between actual and expected returns on a market value basis and is recognized over a five-year period. The deferred return is further adjusted, if necessary, so that the actuarial value of assets will stay within 20% of the market value of assets.
Actuarial assumptions:	
Investment rate of return	6.80%, net of pension plan investment expense, including inflation.
Inflation rate	2.50%
Projected salary increases	3.00% - 7.50%, of which 2.50% is the Plan’s long-term payroll inflation
Cost of living adjustments	Plan provisions contain a 3.00% COLA
Other assumptions	Same as those used in the October 1, 2020 funding actuarial valuation.

¹ The Fund’s payroll inflation assumption was 2.50% as of October 1, 2020. Per Part VII, Chapter 112.64(5)(a) of Florida Statutes, the payroll growth assumption used for amortization of the unfunded liability is not allowed to exceed the average annual payroll growth for the proceeding ten years. However, pursuant to Chapter 112.64(5)(b), and after adjusting this analysis to account for bargained pay level increases and inclusion of DC plan participants in the total payroll, the assumption was set at 1.50%.

Section 6: GASB Results by Employer

Determination of Proportionate Share

Actual Employer Contributions by Employer September 30, 2021 to September 30, 2022

Employer	Contributions	Percentage
City of Jacksonville	\$39,199,000	46.4702%
Jacksonville Electrical Authority	43,893,000	52.0349%
Jacksonville Housing Authority	1,149,000	1.3621%
North Florida Transportation Planning Organization	112,000	0.1328%
Total for all Employers	84,353,000	100.0000%

Allocation of September 30, 2022 Net Pension Liability (NPL)

Employer	Net Pension Liability	Percentage
City of Jacksonville	\$848,643,780	46.4702%
Jacksonville Electrical Authority	950,267,134	52.0349%
Jacksonville Housing Authority	24,875,423	1.3621%
North Florida Transportation Planning Organization	2,424,758	0.1328%
Total for all Employers	1,826,211,095	100.0000%

Notes:

Based on the September 30, 2021 through September 30, 2022 employer contributions as provided by the City.

Section 6: GASB Results by Employer

For purposes of the above results, we have assumed that the reporting date for the employer under GASB 68 is September 30, 2023. The reporting date and measurement date for the plan under GASB 67 are assumed to be September 30, 2022. This means that assets and liabilities are determined as of September 30, 2022 and are not adjusted or “rolled forward” to September 30, 2023. Other results, such as the total deferred inflows and outflows would also be allocated based on the same proportionate shares determined above.

The following items are allocated based on the corresponding proportionate share within each employer:

- Net Pension Liability
- Service cost
- Expensed portion of current-period difference between expected and actual experience in the Total Pension Liability
- Member contributions
- Projected earnings on plan investments
- Expensed portion of current-period differences between actual and projected earnings on plan investments
- Administrative expense

Recognition of beginning of year deferred outflows of resources as pension expense

Section 6: GASB Results by Employer

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 ¹	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
2016	100.0%	\$977,320,544	\$254,034,479	384.72%	64.03%
2017	100.0%	1,074,102,013	250,894,295	428.11%	63.00%
2018	100.0%	1,021,052,610	257,850,484	395.99%	66.42%
2019	100.0%	1,111,624,516	253,982,175	437.68%	65.23%
2020	100.0%	1,296,667,481	249,982,877	518.70%	60.54%
2021	100.0%	1,384,245,002	246,387,379	561.82%	59.16%
2022	100.0%	1,229,772,595	233,266,593	527.20%	65.16%
2023	100.0%	1,826,211,095	227,912,274	801.28%	50.01%

¹ Pensionable payroll as of the measurement date.

Section 6: GASB Results by Employer

Allocation of Changes in Total Net Pension Liability

In addition to the amounts shown in the preceding tables, there are changes in proportionate share of the total NPL between the measurement periods ending on September 30, 2022 and September 30, 2021 as a result of change in allocation percentage (the actual contributions made by an employer as a percentage of total contributions). The difference in proportionate share of the total NPL due to change in allocation percentage during the measurement period ending on September 30, 2022 is recognized over the average of the expected remaining service lives of all employees (four years). These amounts are shown below. While these amounts are different for each employer, they sum to zero over the GERP.

Increase (Decrease) in Pension Expense Arising from the Recognition of the Effects of the Change in Proportion and Change in Employer Contributions for September 30, 2023

Employer	Total Change to be Recognized	Recognition Period (Years)	2023	2024	2025	2026	Thereafter
City of Jacksonville	\$5,064,072	4	\$1,266,018	\$1,266,018	\$1,266,018	\$1,266,018	\$0
Jacksonville Electrical Authority	-3,255,079	4	-813,769	-813,770	-813,770	-813,770	0
Jacksonville Housing Authority	-1,969,846	4	-492,463	-492,461	-492,461	-492,461	0
North Florida Transportation Planning Organization	160,853	4	40,214	40,213	40,213	40,213	0
Total for all Employers	\$0		\$0	\$0	\$0	\$0	\$0

Section 6: GASB Results by Employer

Increase (Decrease) in Pension Expense Arising from the Recognition of the Effects of the Change in Proportion and Change in Employer Contributions for September 30, 2022

Employer	Total Change to be Recognized	Recognition Period (Years)	2022	2023	2024	2025	Thereafter
City of Jacksonville	\$10,054,681	4	\$2,513,671	\$2,513,670	\$2,513,670	\$2,513,670	\$0
Jacksonville Electrical Authority	-5,195,380	4	-1,298,845	-1,298,845	-1,298,845	-1,298,845	0
Jacksonville Housing Authority	-4,823,096	4	-1,205,774	-1,205,774	-1,205,774	-1,205,774	0
North Florida Transportation Planning Organization	-36,205	4	-9,052	-9,051	-9,051	-9,051	0
Total for all Employers	\$0		\$0	\$0	\$0	\$0	\$0

Section 6: GASB Results by Employer

Increase (Decrease) in Pension Expense Arising from the Recognition of the Effects of the Change in Proportion and Change in Employer Contributions for September 30, 2021

Employer	Total Change to be Recognized	Recognition Period (Years)	2021	2022	2023	2024	Thereafter
City of Jacksonville	-\$44,906,427	4	-\$11,226,606	-\$11,226,607	-\$11,226,607	-\$11,226,607	\$0
Jacksonville Electrical Authority	43,812,764	4	10,953,191	10,953,191	10,953,191	10,953,191	0
Jacksonville Housing Authority	1,056,496	4	264,124	264,124	264,124	264,124	0
North Florida Transportation Planning Organization	37,167	4	9,291	9,292	9,292	9,292	0
Total for all Employers	\$0		\$0	\$0	\$0	\$0	\$0

Section 6: GASB Results by Employer

Increase (Decrease) in Pension Expense Arising from the Recognition of the Effects of the Change in Proportion and Change in Employer Contributions for September 30, 2020

Employer	Total Change to be Recognized	Recognition Period (Years)	2020	2021	2022	2023	Thereafter
City of Jacksonville	\$19,224,508	4	\$4,806,127	\$4,806,127	\$4,806,127	\$4,806,127	\$0
Jacksonville Electrical Authority	-17,895,153	4	-4,473,789	-4,473,788	-4,473,788	-4,473,788	0
Jacksonville Housing Authority	-920,323	4	-230,080	-230,081	-230,081	-230,081	0
North Florida Transportation Planning Organization	-409,032	4	-102,258	-102,258	-102,258	-102,258	0
Total for all Employers	\$0		\$0	\$0	\$0	\$0	\$0

Section 6: GASB Results by Employer

Deferred outflows of resources and deferred inflows of resources – City of Jacksonville

Reporting Date for Employer under GASB 68	September 30, 2023	September 30, 2022
Measurement Date	September 30, 2022	September 30, 2021
Deferred Outflows of Resources		
Changes in proportion and differences between employer's contributions and proportionate share of contributions ¹	\$8,825,394	\$12,347,137
Changes of assumptions or other inputs	36,444,474	31,566,524
Net difference between projected and actual earnings on pension plan investments	121,352,902	0
Difference between expected and actual experience in the Total Pension Liability	<u>20,561,474</u>	<u>15,417,350</u>
Total Deferred Outflows of Resources	\$187,184,244	\$59,331,011
Deferred Inflows of Resources		
Changes in proportion and differences between employer's contributions and proportionate share of contributions ¹	\$11,226,607	\$22,453,214
Changes of assumptions or other inputs	0	0
Net difference between projected and actual earnings on pension plan investments	0	77,252,090
Difference between expected and actual experience in the Total Pension Liability	<u>0</u>	<u>0</u>
Total Deferred Inflows of Resources	\$11,226,607	\$99,705,304
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:		
2023	N/A	\$3,079,392
2024	\$51,920,346	-5,873,720
2025	45,699,246	-11,948,049
2026	31,920,619	-25,631,915
2027	46,417,426	0
2028	0	0
Thereafter	0	0

¹ Calculated in accordance with Paragraphs 54 and 55 of GASB 68

Section 6: GASB Results by Employer

Pension expense – City of Jacksonville

Reporting Date for Employer under GASB 68	September 30, 2023	September 30, 2022
Measurement Date	September 30, 2022	September 30, 2021
Components of Pension Expense		
Service cost	\$18,565,299	\$18,712,087
Interest on the Total Pension Liability	106,320,061	104,014,359
Expensed portion of current-period changes in proportion and differences between employer's contributions and proportionate share of contributions	1,266,018	2,513,671
Current-period benefit changes	0	1,834,896
Expensed portion of current-period difference between expected and actual experience in the Total Pension Liability	4,419,237	2,918,899
Expensed portion of current-period changes of assumptions or other inputs	5,667,298	7,557,566
Member contributions	-12,878,284	-13,416,443
Projected earnings on plan investments	-68,926,574	-61,016,150
Expensed portion of current-period differences between actual and projected earnings on plan investments	46,417,427	-25,631,916
Administrative expense	851,334	550,187
Other	0	0
Recognition of beginning of year deferred outflows of resources as pension expense	33,167,782	39,136,986
Recognition of beginning of year deferred inflows of resources as pension expense	-26,122,313	-13,418,816
Net amortization of deferred amounts from changes in proportion and differences between employer's contributions and proportionate share of contributions	<u>-3,906,810</u>	<u>-6,336,821</u>
Pension Expense	\$104,840,475	\$57,418,505

Section 6: GASB Results by Employer

Schedule of reconciliation of Net Pension Liability – City of Jacksonville

Reporting Date for Employer under GASB 68	September 30, 2023	September 30, 2022
Measurement Date	September 30, 2022	September 30, 2021
Beginning Net Pension Liability	\$566,670,375	\$626,624,248
Pension expense	104,840,475	57,418,505
Employer contributions	-39,199,000	-35,605,000
New net deferred inflows/outflows	215,929,312	-71,098,262
Change in allocation of prior deferred inflows/outflows	-256,777	1,171,223
New net deferred inflows/outflows due to change in proportion	3,798,054	7,541,010
Recognition of prior deferred inflows/outflows	-7,045,468	-25,718,170
Recognition of prior deferred inflows/outflows due to change in proportion	<u>3,906,810</u>	<u>6,336,821</u>
Ending Net Pension Liability	\$848,643,781	\$566,670,375

¹ Covered payroll as of the measurement date

Section 6: GASB Results by Employer

Schedule of Proportionate Share of the Net Pension Liability – City of Jacksonville

Reporting Date for Employer under GASB 68 as of September 30	Proportion of the Net Pension Liability	Proportionate Share of Net Pension Liability	Covered Payroll¹	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
2017	46.4%	473,462,095	118,506,089	399.53%	66.42%
2018	47.3%	526,354,208	113,773,163	462.63%	65.23%
2019	49.2%	638,349,401	110,781,005	576.23%	60.54%
2020	45.3%	626,624,247	108,964,730	575.07%	59.16%
2021	46.1%	566,670,375	98,890,802	573.03%	65.16%
2022	46.5%	848,643,780	95,950,582	884.46%	50.01%

¹ Covered payroll as of the measurement date

Section 6: GASB Results by Employer

Deferred outflows of resources and deferred inflows of resources – Jacksonville Electrical Authority

Reporting Date for Employer under GASB 68	September 30, 2023	September 30, 2022
Measurement Date	September 30, 2022	September 30, 2021
Deferred Outflows of Resources		
Changes in proportion and differences between employer's contributions and proportionate share of contributions ¹	\$10,953,191	\$21,906,382
Changes of assumptions or other inputs	40,808,626	35,818,541
Net difference between projected and actual earnings on pension plan investments	135,884,664	0
Difference between expected and actual experience in the Total Pension Liability	<u>23,023,668</u>	<u>17,494,070</u>
Total Deferred Outflows of Resources	\$210,670,149	\$75,218,993
Deferred Inflows of Resources		
Changes in proportion and differences between employer's contributions and proportionate share of contributions ¹	\$5,039,000	\$8,370,323
Changes of assumptions or other inputs	0	0
Net difference between projected and actual earnings on pension plan investments	0	87,657,961
Difference between expected and actual experience in the Total Pension Liability	<u>0</u>	<u>0</u>
Total Deferred Inflows of Resources	\$5,039,000	\$96,028,284
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:		
2023	N/A	\$13,107,801
2024	\$75,316,949	12,876,006
2025	44,826,725	-17,708,560
2026	33,511,657	-29,084,539
2027	51,975,818	0
2028	0	0
Thereafter	0	0

¹ Calculated in accordance with Paragraphs 54 and 55 of GASB 68

Section 6: GASB Results by Employer

Pension expense – Jacksonville Electrical Authority

Reporting Date for Employer under GASB 68	September 30, 2023	September 30, 2022
Measurement Date	September 30, 2022	September 30, 2021
Components of Pension Expense		
Service cost	\$20,788,455	\$21,232,610
Interest on the Total Pension Liability	119,051,671	118,025,113
Expensed portion of current-period changes in proportion and differences between employer's contributions and proportionate share of contributions	-813,769	-1,298,845
Current-period benefit changes	0	2,082,057
Expensed portion of current-period difference between expected and actual experience in the Total Pension Liability	4,948,431	3,312,076
Expensed portion of current-period changes of assumptions or other inputs	6,345,945	8,575,571
Member contributions	-14,420,432	-15,223,641
Projected earnings on plan investments	-77,180,390	-69,235,036
Expensed portion of current-period differences between actual and projected earnings on plan investments	51,975,818	-29,084,539
Administrative expense	953,279	624,297
Other	0	0
Recognition of beginning of year deferred outflows of resources as pension expense	37,139,556	44,408,746
Recognition of beginning of year deferred inflows of resources as pension expense	-29,250,407	-15,226,334
Net amortization of deferred amounts from changes in proportion and differences between employer's contributions and proportionate share of contributions	<u>5,180,558</u>	<u>6,262,608</u>
Pension Expense	\$124,718,715	\$74,454,683

Section 6: GASB Results by Employer

Schedule of reconciliation of Net Pension Liability – Jacksonville Electrical Authority

Reporting Date for Employer under GASB 68	September 30, 2023	September 30, 2022
Measurement Date	September 30, 2022	September 30, 2021
Beginning Net Pension Liability	\$643,000,978	\$729,569,247
Pension expense	124,718,715	74,454,683
Employer contributions	-43,893,000	-40,401,000
New net deferred inflows/outflows	241,786,405	-80,675,211
Change in allocation of prior deferred inflows/outflows	165,052	-605,186
New net deferred inflows/outflows due to change in proportion	-2,441,310	-3,896,535
Recognition of prior deferred inflows/outflows	-7,889,149	-29,182,412
Recognition of prior deferred inflows/outflows due to change in proportion	<u>-5,180,558</u>	<u>-6,262,608</u>
Ending Net Pension Liability	\$950,267,133	\$643,000,978

Section 6: GASB Results by Employer

Schedule of Proportionate Share of the Net Pension Liability – Jacksonville Electrical Authority

Reporting Date for Employer under GASB 68 as of September 30	Proportion of the Net Pension Liability	Proportionate Share of Net Pension Liability	Covered Payroll¹	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
2017	51.7%	527,679,989	134,443,316	392.49%	66.42%
2018	50.6%	562,370,843	135,708,572	414.40%	65.23%
2019	48.8%	633,292,398	134,548,830	470.68%	60.54%
2020	52.7%	729,569,248	133,713,681	545.62%	59.16%
2021	52.3%	643,000,979	130,399,899	493.10%	65.16%
2022	52.0%	950,267,134	130,164,282	730.05%	50.01%

¹ Covered payroll as of the measurement date

Section 6: GASB Results by Employer

Deferred outflows of resources and deferred inflows of resources – Jacksonville Housing Authority

Reporting Date for Employer under GASB 68	September 30, 2023	September 30, 2022
Measurement Date	September 30, 2022	September 30, 2021
Deferred Outflows of Resources		
Changes in proportion and differences between employer's contributions and proportionate share of contributions ¹	\$264,124	\$528,248
Changes of assumptions or other inputs	1,068,259	1,037,293
Net difference between projected and actual earnings on pension plan investments	3,557,093	0
Difference between expected and actual experience in the Total Pension Liability	<u>602,697</u>	<u>506,623</u>
Total Deferred Outflows of Resources	\$5,492,173	\$2,072,164
Deferred Inflows of Resources		
Changes in proportion and differences between employer's contributions and proportionate share of contributions ¹	\$3,888,931	\$3,847,403
Changes of assumptions or other inputs	0	0
Net difference between projected and actual earnings on pension plan investments	0	2,538,546
Difference between expected and actual experience in the Total Pension Liability	<u>0</u>	<u>0</u>
Total Deferred Inflows of Resources	\$3,888,931	\$6,385,949
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:		
2023	N/A	-\$942,161
2024	\$306,061	-848,352
2025	-469,490	-1,680,994
2026	406,086	-842,279
2027	1,360,586	0
2028	0	0
Thereafter	0	0

¹ Calculated in accordance with Paragraphs 54 and 55 of GASB 68

Section 6: GASB Results by Employer

Pension expense – Jacksonville Housing Authority

Reporting Date for Employer under GASB 68	September 30, 2023	September 30, 2022
Measurement Date	September 30, 2022	September 30, 2021
Components of Pension Expense		
Service cost	\$544,186	\$614,890
Interest on the Total Pension Liability	3,116,451	3,417,969
Expensed portion of current-period changes in proportion and differences between employer's contributions and proportionate share of contributions	-492,463	-1,205,774
Current-period benefit changes	0	60,296
Expensed portion of current-period difference between expected and actual experience in the Total Pension Liability	129,537	95,917
Expensed portion of current-period changes of assumptions or other inputs	166,120	248,346
Member contributions	-377,488	-440,872
Projected earnings on plan investments	-2,020,374	-2,005,024
Expensed portion of current-period differences between actual and projected earnings on plan investments	1,360,586	-842,279
Administrative expense	24,954	18,079
Other	0	0
Recognition of beginning of year deferred outflows of resources as pension expense	972,213	1,286,063
Recognition of beginning of year deferred inflows of resources as pension expense	-765,697	-440,950
Net amortization of deferred amounts from changes in proportion and differences between employer's contributions and proportionate share of contributions	<u>-1,171,731</u>	<u>202,952</u>
Pension Expense	\$1,486,294	\$1,009,613

Section 6: GASB Results by Employer

Schedule of reconciliation of Net Pension Liability – Jacksonville Housing Authority

Reporting Date for Employer under GASB 68	September 30, 2023	September 30, 2022
Measurement Date	September 30, 2022	September 30, 2021
Beginning Net Pension Liability	\$18,621,103	\$26,345,024
Pension expense	1,486,294	1,009,613
Employer contributions	-1,149,000	-1,170,000
New net deferred inflows/outflows	6,329,314	-2,336,328
Change in allocation of prior deferred inflows/outflows	99,882	-561,819
New net deferred inflows/outflows due to change in proportion	-1,477,383	-3,617,322
Recognition of prior deferred inflows/outflows	-206,517	-845,113
Recognition of prior deferred inflows/outflows due to change in proportion	<u>1,171,731</u>	<u>-202,952</u>
Ending Net Pension Liability	\$24,875,424	\$18,621,103

Section 6: GASB Results by Employer

Schedule of Proportionate Share of the Net Pension Liability – Jacksonville Housing Authority

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 ¹	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
2017	1.8%	18,276,842	4,475,739	408.35%	66.42%
2018	1.9%	21,120,866	4,054,520	520.92%	65.23%
2019	1.8%	23,469,681	4,193,896	559.62%	60.54%
2020	1.9%	26,345,024	3,708,968	710.31%	59.16%
2021	1.5%	18,621,102	3,563,335	522.58%	65.16%
2022	1.4%	24,875,423	1,492,221	1,667.01%	50.01%

¹ Covered payroll as of the measurement date

Section 6: GASB Results by Employer

Deferred outflows of resources and deferred inflows of resources – North Florida Transportation Planning Organization

Reporting Date for Employer under GASB 68	September 30, 2023	September 30, 2022
Measurement Date	September 30, 2022	September 30, 2021
Deferred Outflows of Resources		
Changes in proportion and differences between employer's contributions and proportionate share of contributions ¹	\$129,931	\$18,584
Changes of assumptions or other inputs	104,130	82,452
Net difference between projected and actual earnings on pension plan investments	346,731	0
Difference between expected and actual experience in the Total Pension Liability	<u>58,749</u>	<u>40,270</u>
Total Deferred Outflows of Resources	\$639,541	\$141,306
Deferred Inflows of Resources		
Changes in proportion and differences between employer's contributions and proportionate share of contributions ¹	\$18,102	\$129,411
Changes of assumptions or other inputs	0	0
Net difference between projected and actual earnings on pension plan investments	0	201,782
Difference between expected and actual experience in the Total Pension Liability	<u>0</u>	<u>0</u>
Total Deferred Inflows of Resources	\$18,102	\$331,193
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:		
2023	N/A	-\$83,768
2024	\$210,079	7,657
2025	150,935	-46,825
2026	127,800	-66,950
2027	132,625	0
2028	0	0
Thereafter	0	0

¹ Calculated in accordance with Paragraphs 54 and 55 of GASB 68

Section 6: GASB Results by Employer

Pension expense – North Florida Transportation Planning Organization

Reporting Date for Employer under GASB 68	September 30, 2023	September 30, 2022
Measurement Date	September 30, 2022	September 30, 2021
Components of Pension Expense		
Service cost	\$53,045	\$48,876
Interest on the Total Pension Liability	303,779	271,685
Expensed portion of current-period changes in proportion and differences between employer's contributions and proportionate share of contributions	40,214	-9,052
Current-period benefit changes	0	4,793
Expensed portion of current-period difference between expected and actual experience in the Total Pension Liability	12,627	7,624
Expensed portion of current-period changes of assumptions or other inputs	16,193	19,740
Member contributions	-36,796	-35,044
Projected earnings on plan investments	-196,938	-159,374
Expensed portion of current-period differences between actual and projected earnings on plan investments	132,625	-66,950
Administrative expense	2,432	1,437
Other	0	0
Recognition of beginning of year deferred outflows of resources as pension expense	94,768	102,226
Recognition of beginning of year deferred inflows of resources as pension expense	-74,637	-35,050
Net amortization of deferred amounts from changes in proportion and differences between employer's contributions and proportionate share of contributions	<u>-102,017</u>	<u>-128,739</u>
Pension Expense	\$245,295	\$22,172

Section 6: GASB Results by Employer

Schedule of reconciliation of Net Pension Liability – North Florida Transportation Planning Organization

Reporting Date for Employer under GASB 68	September 30, 2023	September 30, 2022
Measurement Date	September 30, 2022	September 30, 2021
Beginning Net Pension Liability	\$1,480,139	\$1,706,483
Pension expense	245,295	22,172
Employer contributions	-112,000	-93,000
New net deferred inflows/outflows	616,957	-185,708
Change in allocation of prior deferred inflows/outflows	-8,157	-4,218
New net deferred inflows/outflows due to change in proportion	120,639	-27,153
Recognition of prior deferred inflows/outflows	-20,130	-67,176
Recognition of prior deferred inflows/outflows due to change in proportion	<u>102,017</u>	<u>128,739</u>
Ending Net Pension Liability	\$2,424,760	\$1,480,139

Schedule of Proportionate Share of the Net Pension Liability – North Florida Transportation Planning Organization

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 ¹	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
2017	0.2%	1,633,684	425,340	384.09%	66.42%
2018	0.2%	1,778,599	445,920	398.86%	65.23%
2019	0.1%	1,556,001	459,146	338.89%	60.54%
2020	0.1%	1,706,483	476,762	357.93%	59.16%
2021	0.1%	1,480,139	412,557	358.77%	65.16%
2022	0.1%	2,424,758	305,189	794.51%	50.01%

¹ Covered payroll as of the measurement date

Appendix A: Definition of Pension Terms

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

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 (APV):	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.
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

Appendix A: Definition of Pension Terms

	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 (AVA):	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 (ADC):	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: <u>Investment return</u> - the rate of investment yield that the Plan will earn over the long-term future; <u>Mortality rates</u> - the rate or probability of death at a given age for employees and retirees; <u>Retirement rates</u> - the rate or probability of retirement at a given age or service; <u>Disability rates</u> - the rate or probability of disability retirement at a given age; <u>Withdrawal rates</u> - the rate or probability at which employees of various ages are expected to leave employment for reasons other than death, disability, or retirement; <u>Salary increase rates</u> - the rates of salary increase due to inflation, real wage growth and merit and promotion increases.

Appendix A: Definition of Pension Terms

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,

Appendix A: Definition of Pension Terms

	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.
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.