

City of Jacksonville Corrections Officers Retirement Plan

Actuarial Valuation and Review as of October 1, 2024



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March 21, 2025

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

Dear Board of Trustees Members:

We are pleased to submit this Actuarial Valuation and Review as of October 1, 2024. It summarizes the actuarial data used in the valuation, analyzes the preceding year's experience, and establishes the funding requirements to the fiscal year starting October 1, 2025.

This report has been prepared in accordance with generally accepted actuarial principles and practices for the exclusive use and benefit of the Board of Trustees, based upon census information provided by the Retirement System Administrative Office and financial information provided by the City's Finance Department. That assistance is gratefully acknowledged .

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

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; changes in plan provisions or applicable law.

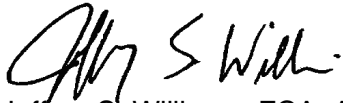
The actuarial calculations were directed under the supervision of Jeffrey S. Williams. I am a member of the American Academy of Actuaries and I meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion herein. In addition, in my opinion, the combined effect of these assumptions is expected to have no significant bias.

Segal makes no representation or warranty as to the future status of the Plan and does not guarantee any particular result. This document does not constitute legal, tax, accounting or investment advice or create or imply a fiduciary relationship. The Board is encouraged to discuss any issues raised in this report with the Plan's legal, tax and other advisors before taking, or refraining from taking, any action.

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

Sincerely,

Segal

A handwritten signature in black ink, appearing to read "Jeff S. Williams", is positioned above the printed name and title.

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

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Section 1: Actuarial Valuation Summary

Purpose and basis

This report has been prepared by Segal to present a valuation of the City of Jacksonville Corrections Officers Retirement Plan as of October 1, 2024. 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, 2024, provided by the Retirement System Administrative Office;
- The assets of the Plan as of September 30, 2024, 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, 2024 actuarial valuation is for the plan year beginning October 1, 2025.
3. The City's minimum required contribution for fiscal 2026 is \$23,016,805, an increase of \$1,035,535 from the City's minimum required contribution for fiscal 2025.
4. Actual City contributions made during the year ending September 30, 2024 of \$19,386,000 were 100.00% of the City's minimum required contribution for fiscal 2024. In the prior fiscal year, actual contributions were \$17,196,000, 100.06% 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 Corrections Officers Retirement Plan (CORP) 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 22 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 CORP payroll, including Corrections Officers 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 \$11,685,739, or 1.96% of actuarial accrued liability.
 - The actuarial gain from investment experience was \$3,904,311, or 0.66% of actuarial accrued liability.
 - The loss due to total contributions less than expected contributions was \$9,037,418, or 1.60% of actuarial accrued liability.
 - The net experience loss from all other sources was \$6,552,632, or 1.10% of the actuarial accrued liability. The primary cause of this loss was more participants entering the DROP than expected.
7. The rate of return on the market value of assets was 17.76% for the October 1, 2023 to September 30, 2024 plan year. The return on the actuarial value of assets was 7.94% for the same period due to the recognition of prior years' investment gains and losses. This resulted in an actuarial gain when measured against the assumed rate of return of 6.50%.
8. The actuarial value of assets is 94.45% 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 gain is recognized in future years, the cost of the Plan is likely to decrease unless the net gain is offset by future experience. The recognition of the market net gains of \$17,018,509 will also have an impact on the future funded ratio. If the net deferred gains were recognized immediately in the actuarial value of assets, the City's minimum contribution would decrease from 94.44% to 89.19% of projected payroll.
9. There are no changes in actuarial assumptions reflected in this valuation.
10. The surtax allocation percentage is unchanged from the prior valuation (at 6.10%). This allocation percentage is directed by the City based on its calculation of the Corrections Officers Retirement Plan's share of the City's unfunded liabilities.
11. 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, 2024 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 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.
12. The present value of the projected surtax revenue was determined and used in determination of the City's required contribution as follows:
 - a. Smoothed 2024 surtax revenue was projected to increase by 4.25% each year thereafter through 2060.
 - b. A share of 6.10% of the projected revenue for January 1, 2031 through December 31, 2060 was allocated to CORP.
 - c. The revenue allocated to CORP was discounted at the valuation discount rate of 6.50% to October 1, 2024.

Section 1: Actuarial Valuation Summary

- d. The original allocated present value amount of \$64,295,005 was amortized over a 30-year initial period (Section 3, Exhibit F), with subsequent charges amortized over new periods. The present value of projected surtax revenue as of October 1, 2024 allocated to CORP is \$158,221,025 prior to smoothing.
 - e. After the amortized value amount was adjusted for the timing of contributions and projected to October 1, 2025, 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 2025.
- 13. The present value of projected surtax revenue does not decrease the UAAL. The amortized value of the projected surtax revenue is used as an offset to the Chapter 112 contribution.
- 14. This actuarial report as of October 1, 2024 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.
- 15. 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 ones.

Changes from prior valuation

- 16. The funded ratio (the ratio of the actuarial value of assets to actuarial accrued liability) is 48.62%, compared to the prior year funded ratio of 47.85%. 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 51.48%, compared to 46.43% 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.
- 17. The unfunded actuarial accrued liability is \$306,140,587, which is an increase of \$8,507,457 since the prior valuation.

Risk

- 18. It is important to note that this actuarial valuation is based on plan assets as of September 30, 2024. 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. Segal is available to prepare projections of potential outcomes of market conditions and other demographic experience upon request.
- 19. 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

Section 1: Actuarial Valuation Summary

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:

- a. Relatively small changes in investment performance can produce large swings in the unfunded liabilities
- b. retired participants account for most of the Plan's liabilities, leaving limited options for reducing costs in the event of adverse experience.
- c. The Board has not to our knowledge performed a detailed risk assessment.

GASB

- 20. This report constitutes an actuarial valuation for the purpose of determining the actuarially determined contribution under the Plan's funding policy and measuring the progress of that funding policy. The Net Pension Liability (NPL) and Pension Expense under Governmental Accounting Standards Board (GASB) Statements No. 67 and No. 68, for inclusion in the Plan and employer's financial statements as of September 30, 2024, is included with this report.
- 21. 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, 2024 is \$289,122,078.
- 22. 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

Valuation Result	Current	Prior
Contributions for fiscal year beginning	October 1, 2025	October 1, 2024
• Florida Chapter 112 determined employer contribution	\$30,334,566	\$29,019,915
• Less amortized value of discounted value of projected surtax revenue	-7,317,761	-7,038,645
• City's required minimum contribution ¹	\$23,016,805	\$21,981,270
Actuarial accrued liability for plan year beginning	October 1, 2024	October 1, 2023
• Retired participants and beneficiaries	\$432,319,927	\$412,154,218
• Inactive vested participants	593,007	439,531
• Active participants	162,936,144	158,178,698
• Total	\$595,849,078	\$570,772,447
• Normal cost including administrative expenses for plan year beginning October 1	8,979,369	8,833,819
Assets for plan year beginning October 1		
• Market value of assets (MVA)	\$306,727,000	\$265,021,000
• Actuarial value of assets (AVA)	289,708,491	273,139,317
• Actuarial value of assets as a percentage of market value of assets	94.45%	103.06%
Funded status for plan year beginning October 1		
• Unfunded actuarial accrued liability on market value of assets	\$289,122,078	\$305,751,447
• Funded percentage on MVA basis	51.48%	46.43%
• Unfunded actuarial accrued liability on actuarial value of assets	\$306,140,587	\$297,633,130
• Funded percentage on AVA basis	48.62%	47.85%
• Effective Amortization period on an AVA basis	22	23

¹ Pursuant to State Law Chapter 2016-146 and City of Jacksonville Ordinances 2017-257-E and 2017-258-E

Section 1: Actuarial Valuation Summary

Valuation Result	Current	Prior
Key assumptions		
• Net investment return	6.50%	6.50%
• Inflation rate	2.50%	2.50%
• Payroll growth for amortization purposes	1.25%	1.25%
GASB information		
• Discount rate	6.50%	6.50%
• Total Pension Liability	\$610,927,078	\$584,290,447
• Plan Fiduciary Net Position	321,805,000	278,539,000
• Net Pension Liability	289,122,078	305,751,447
• Plan Fiduciary Net Position as a percentage of Total Pension Liability	52.67%	47.67%
Demographic data for plan year beginning October 1		
• Number of retired participants and beneficiaries	505	491
• Number of inactive vested participants	4	3
• Number of active participants	319	345
• Average compensation	\$75,458	\$71,092

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:

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

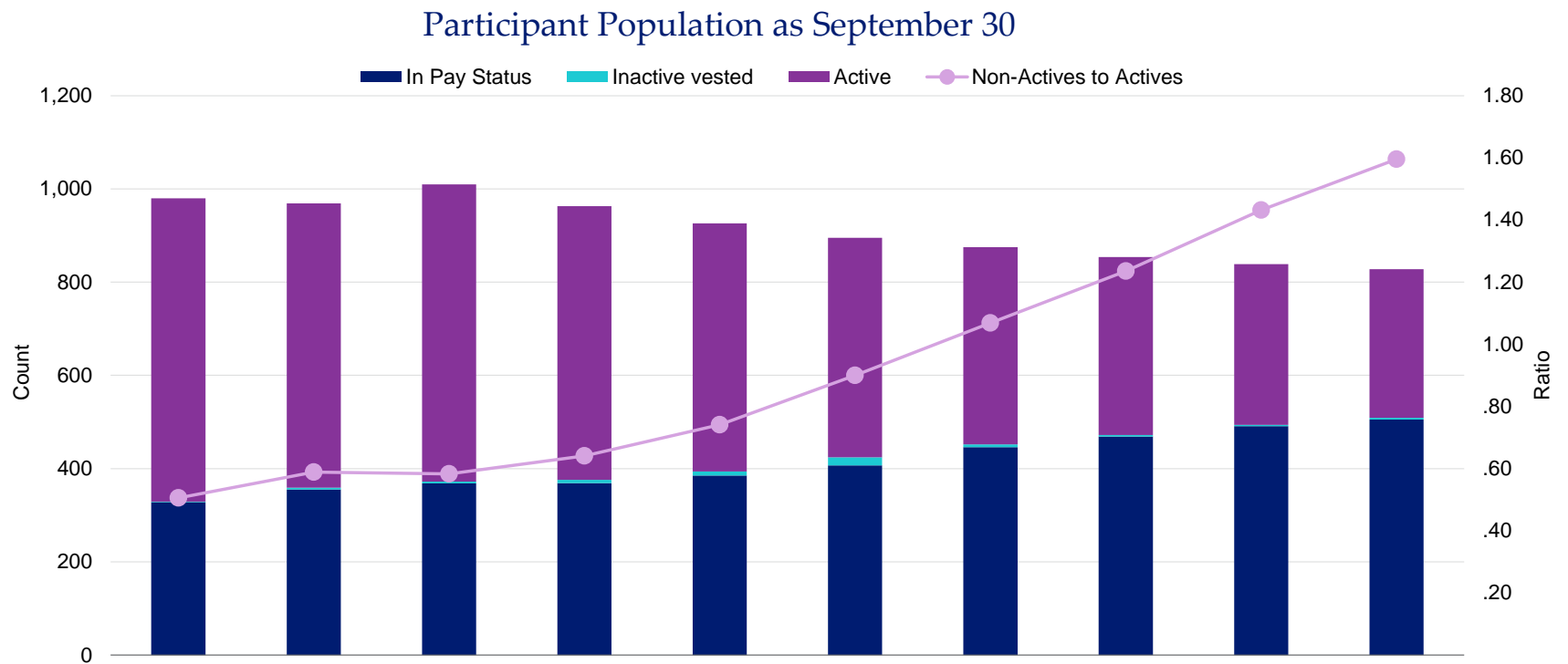
Section 1: Actuarial Valuation Summary

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 and is not acting as a fiduciary to the Plan. The valuation is based on Segal's understanding of applicable guidance in these areas and of the Plan's 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 upon delivery and review. Trustees should notify Segal immediately of any questions or concerns about the final content.

Section 2: Actuarial Valuation Results

Participant information



Legend	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
In Pay Status ¹	328	355	368	369	385	407	446	469	491	505
Inactive Vested ²	1	4	4	7	9	17	6	3	3	4
Active	651	610	638	587	532	471	423	382	345	319
Ratio	0.51	0.59	0.58	0.64	0.74	0.90	1.07	1.24	1.43	1.60

¹ Includes DROP participants

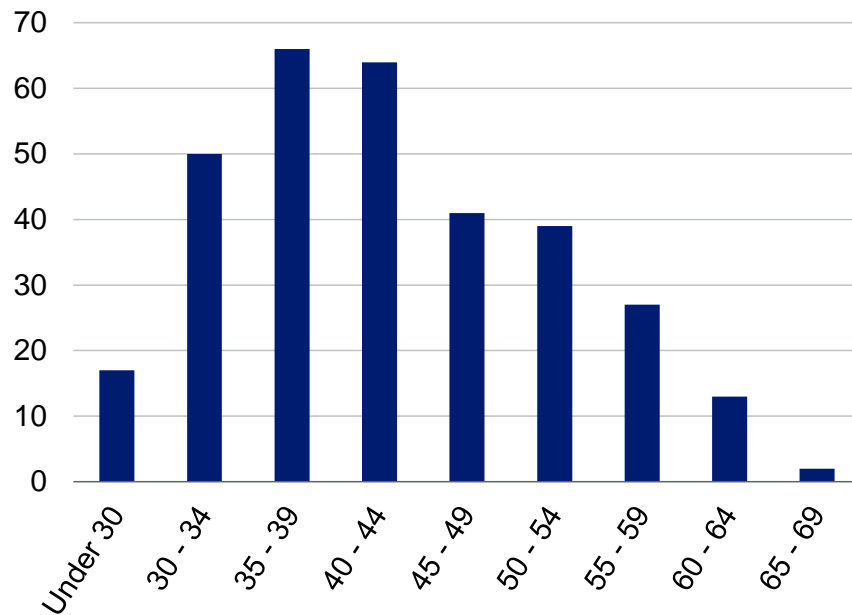
² Excludes terminated participants due a refund of employee contributions.

Section 2: Actuarial Valuation Results

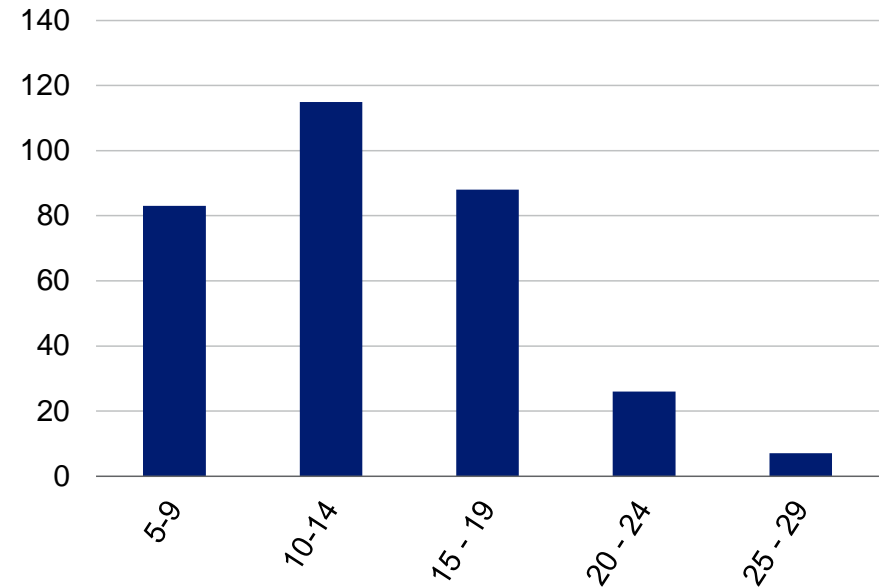
Active participants

As of September 30,	2024	2023	Change
Active participants	319	345	-7.5%
Average age	43.1	42.3	0.8
Average years of service	14.2	13.3	0.9
Average compensation	\$75,458	\$71,092	6.1%

Distribution of Active Participants as of September 30, 2024
Actives by Age



Actives by Years of Service



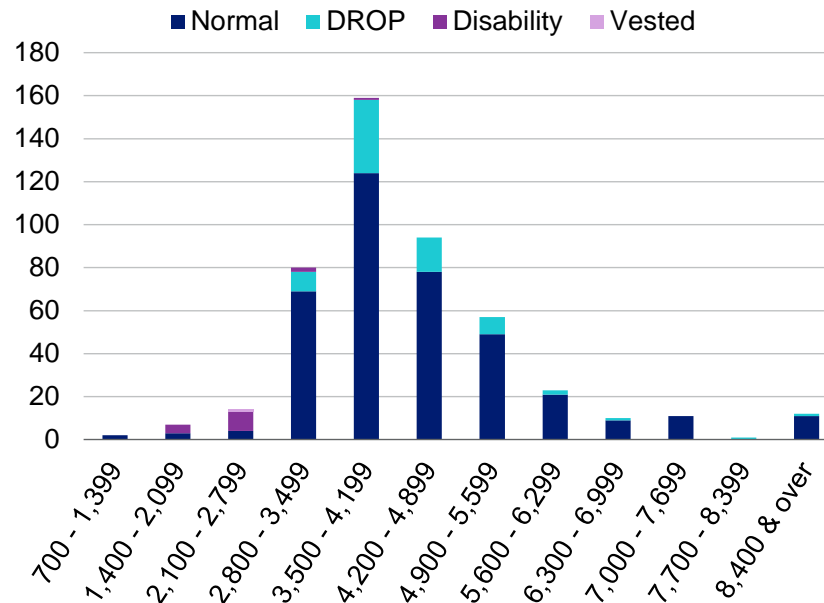
Section 2: Actuarial Valuation Results

Retired participants and beneficiaries

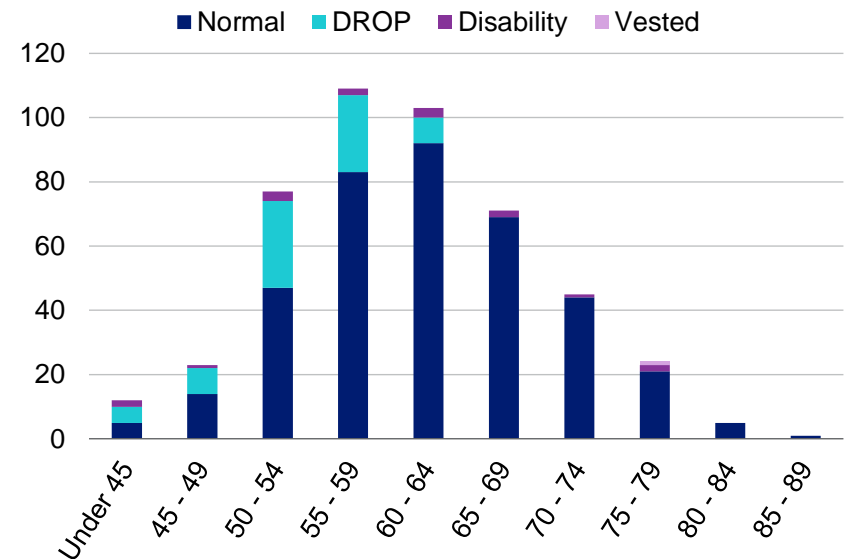
As of September 30,	2024	2023	Change
Retired participants	470	456	3.1%
Beneficiaries	35	35	0.0%
Average age	61.1	60.3	0.8
Average regular benefit amount	\$4,316	\$4,195	2.9%

Distribution of Retired Participants and Beneficiaries as of September 30, 2024

By Type and Monthly Amount



By Type and Age



Section 2: Actuarial Valuation Results

Actuarial value of assets

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, 2024

Step	Original Amount ¹	Percent Deferred ²	Unrecognized Amount ³	Amount
1. Market value of assets, September 30, 2024				\$306,727,000
2. Calculation of unrecognized return				
a. Year ended September 30, 2024	\$29,568,827	80%	\$23,655,062	
b. Year ended September 30, 2023	16,846,955	60%	10,108,173	
c. Year ended September 30, 2022	-64,741,818	40%	-25,896,728	
d. Year ended September 30, 2021	45,760,012	20%	9,152,002	
e. Year ended September 30, 2020	-5,273,967	0%	0	
f. Total unrecognized return				\$17,018,509
3. Preliminary actuarial value: (1) - (2f)				289,708,491
4. Adjustment to be within 20% corridor				0
5. Final actuarial value of assets as of September 30, 2024: (3) + (4)				\$289,708,491
6. Actuarial value as a percentage of market value: (5) ÷ (1)				94.5%
7. Amount deferred for future recognition: (1) - (5)				\$17,018,509

¹ Total return minus expected return on a market value basis.

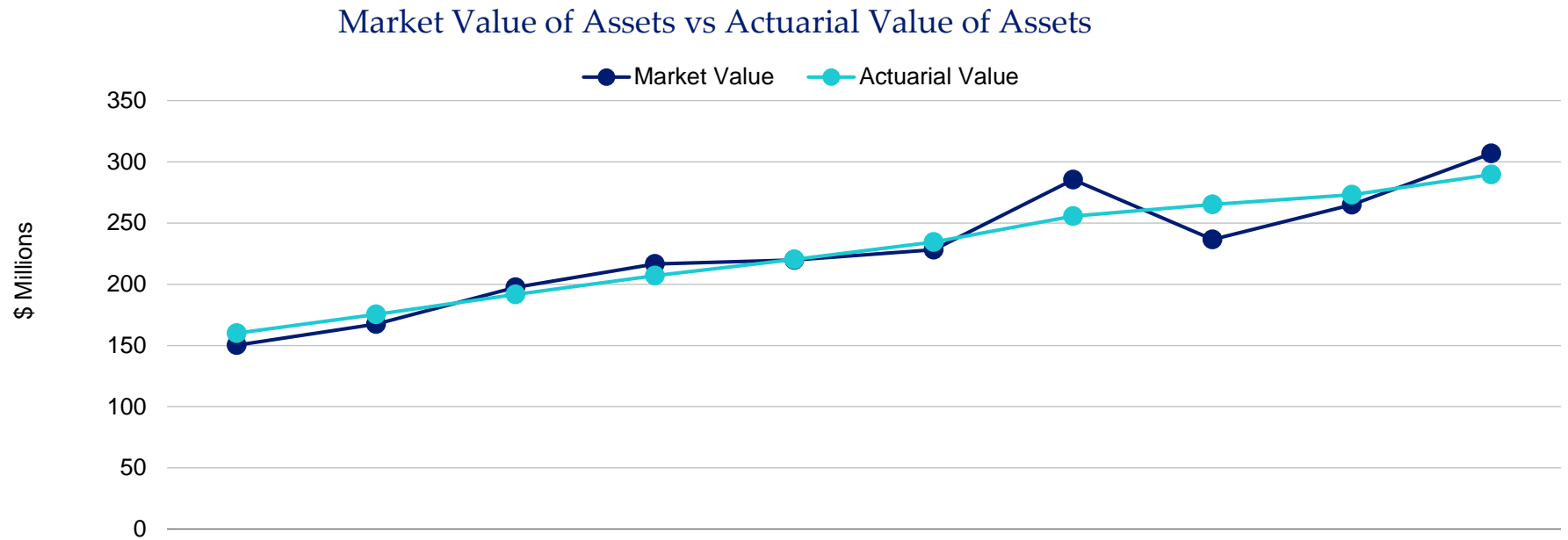
² Percent deferred applies to the current valuation year.

³ Recognition at 20% per year over five years. Deferred return as of September 30, 2024 recognized in each of the next four years:

a. Amount recognized on September 30, 2025	\$5,486,795
b. Amount recognized on September 30, 2026	-3,665,208
c. Amount recognized on September 30, 2027	9,283,157
d. Amount recognized on September 30, 2028	5,913,765

Section 2: Actuarial Valuation Results

Asset history for years ended September 30



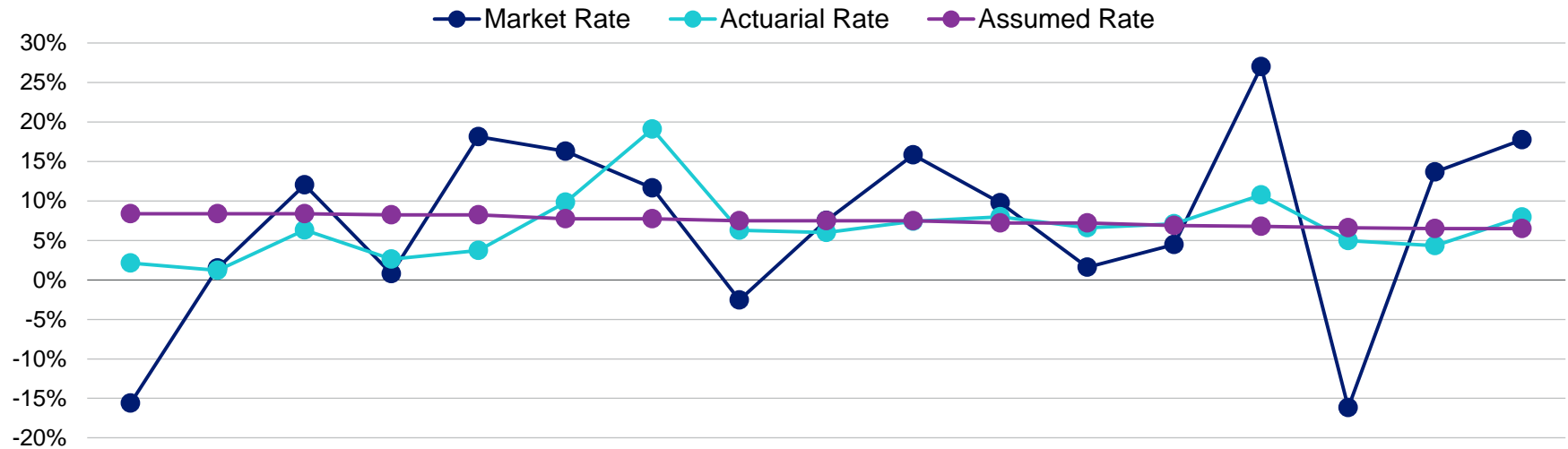
Legend	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Actuarial value ¹	\$159.91	\$175.33	\$191.74	\$207.09	\$220.33	\$234.51	\$255.56	\$265.25	\$273.14	\$289.71
Market value ¹	150.22	167.39	197.38	216.67	219.75	228.17	285.35	236.47	265.02	306.73
Ratio (AVA/MVA)	1.06	1.05	0.97	0.96	1.00	1.03	0.90	1.12	1.03	0.95

¹ In \$ millions

Section 2: Actuarial Valuation Results

Historical investment returns

Market and Actuarial Rates of Return versus Assumed Rate for Years Ended September 30



Legend	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Market rate	-15.61%	1.49%	12.03%	0.79%	18.14%	16.29%	11.66%	-2.54%	7.55%	15.83%	9.76%	1.62%	4.49%	27.03%	-16.18%	13.68%	17.76%
Actuarial rate	2.14%	1.23%	6.33%	2.65%	3.73%	9.82%	19.12%	6.28%	6.02%	7.44%	8.00%	6.60%	7.10%	10.75%	4.97%	4.34%	7.94%
Assumed rate	8.40%	8.40%	8.40%	8.25%	8.25%	7.75%	7.75%	7.50%	7.50%	7.50%	7.20%	7.20%	6.90%	6.80%	6.63%	6.50%	6.50%

Average Rates of Return	Market Value	Actuarial Value
Most recent five-year average return:	8.46%	6.95%
Most recent ten-year average return:	7.62%	6.93%
Most recent 15-year average return:	8.47%	7.30%

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, 2024

Assumption	Amount
1. Gain from investments ¹	\$3,904,311
2. Loss from administrative expenses	-38,760
3. Loss from contributions	-9,037,418
4. Loss from other experience	-6,513,872
5. Net experience gain/(loss): 1 + 2 + 3 + 4	-\$11,685,739

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, 2024*

Investment	YE 2024 Market Value	YE 2024 Actuarial Value
1. Net investment income	\$46,635,000	\$21,498,174
2. Average value of assets	262,556,500	270,674,817
3. Rate of return: 1 ÷ 2	17.76%	7.94%
4. Assumed rate of return	6.50%	6.50%
5. Expected investment income: 2 x 4	\$17,066,173	\$17,593,863
6. Net investment gain/(loss): 1 – 5	\$29,568,827	\$3,904,311

Section 2: Actuarial Valuation Results

Non-investment experience

Contributions

Total City and employee contributions for the year ended September 30, 2024 totaled \$22,240,000, compared to the projected total contribution amount of \$29,983,523. This resulted in a loss of \$9,037,418 for the year, when adjusted for timing.

Administrative expenses

Administrative expenses for the year ended September 30, 2024 totaled \$138,000, as compared to the assumption of \$97,000. This resulted in an experience loss of \$38,760 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, 2024 amounted to \$6,513,872, which is 1.1% of the actuarial accrued liability. The primary cause of this loss was more participants entering the DROP than expected.

Section 2: Actuarial Valuation Results

Actuarial assumptions

There are no assumption changes reflected in this report.

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, 2024

Unfunded Actuarial Accrued Liability	Amount
1. Unfunded actuarial accrued liability at beginning of year	\$297,633,130
2. Employer normal cost at beginning of year	6,555,286
3. Actuarial determined contribution at beginning of year	-28,661,645
4. Interest on 1, 2 & 3	18,928,077
5. Expected unfunded actuarial accrued liability	\$294,454,848
6. Changes due to:	
a. Net experience loss	11,685,739
7. Unfunded actuarial accrued liability at end of year	\$306,140,587

Section 2: Actuarial Valuation Results

Florida 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, 2024 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. The contribution calculated as of October 1, 2024 is then projected to the following fiscal year and will be paid in the plan year beginning October 1, 2025.

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

	2025	% of Projected Payroll	2024	% of Projected Payroll
	Amount		Amount	
1. Total normal cost	\$8,841,369	36.28%	\$8,736,819	35.18%
2. Administrative expenses	138,000	0.56%	97,000	0.40%
3. Expected employee contributions	-2,271,444	-9.32%	-2,278,533	-9.18%
4. Employer normal cost: (1) + (2) + (3)	\$6,707,925	27.52%	\$6,555,286	26.40%
5. Actuarial accrued liability	\$595,849,078		\$570,772,447	
6. Actuarial value of assets	289,708,491		273,139,317	
7. Unfunded actuarial accrued liability: (5) - (6)	\$306,140,587		\$297,633,130	
8. Payment on projected unfunded actuarial accrued liability	22,252,148	91.30%	21,149,704	85.17%
9. Florida Chapter 112 determined employer contribution: (4) + (8) ¹	\$30,334,566	124.47%	\$29,019,915	116.86%
10. Amortized value of discounted value of projected surtax revenue ^{1, 2}	7,317,761	30.03%	7,038,645	28.34%
11. City's minimum required contribution: (9) - (10)²	\$23,016,805	94.44%	\$21,981,270	88.52%
12. Projected payroll	\$24,371,864		\$24,833,316	

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

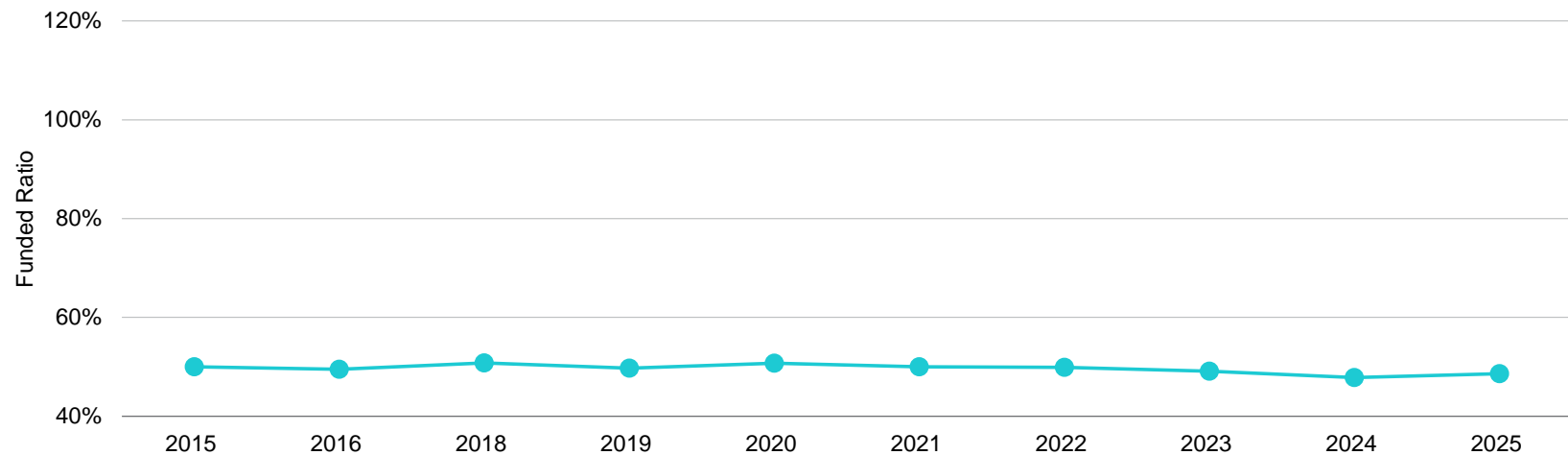
Reconciliation of City's Minimum Required Contribution
from October 1, 2024 to October 1, 2025

Step	Amount
1. City's minimum required contribution as of October 1, 2024	\$21,981,270
2. Effect of expected change in amortization payment due to payroll growth	188,936
3. Effect of change in administrative expense assumption	42,946
4. Effect of investment gain	-293,297
5. Effect of other gains and losses on accrued liability	1,171,146
6. Net effect of other changes, including composition and number of participants	-74,196
7. Total change	\$1,035,535
8. City's minimum required contribution as of October 1, 2025	\$23,016,805

Section 2: Actuarial Valuation Results

Schedule of funding progress through September 30, 2024

Actuarial Valuation Date of October 1	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)
2015	\$159,914,247	\$319,655,728	\$159,741,481	50.03%	\$28,091,083	568.66%
2016	175,333,405	354,234,673	178,901,268	49.50%	26,585,054	672.94%
2017	191,740,583	377,380,082	185,639,499	50.81%	27,548,015	673.88%
2018	207,089,881	416,673,228	209,583,347	49.70%	28,164,021	744.15%
2019	220,334,774	434,176,844	213,842,070	50.75%	28,726,006	744.42%
2020	234,514,215	468,831,017	234,316,802	50.02%	28,268,208	828.91%
2021	255,558,542	503,742,335	248,183,793	50.73%	25,903,031	958.13%
2022	265,245,309	540,178,805	274,933,496	49.10%	25,260,815	1,088.38%
2023	273,139,317	570,772,447	297,633,130	47.85%	24,526,732	1,213.51%
2024	289,708,491	595,849,078	306,140,587	48.62%	24,070,977	1,271.82%



Section 2: Actuarial Valuation Results

History of employer contributions

History of Employer Contributions: 2017 – 2026

Fiscal Year Ended September 30	City's Minimum Required	Actual Employer Contribution	Percent Contributed
2017	\$19,155,820	\$19,162,000	100.03%
2018	13,973,105	13,973,000	100.00%
2019	14,497,788	14,498,000	100.00%
2020	15,042,623	15,058,000	100.10%
2021	15,044,530	15,061,000	100.11%
2022	17,592,399	17,610,000	100.10%
2023	17,185,973	17,196,000	100.06%
2024	19,385,644	19,386,000	100.00%
2025	21,981,270	- -	- -
2026	23,016,805	- -	- -

Section 2: Actuarial Valuation Results

Low-Default-Risk Obligation Measure (LDROM)

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

The LDROM is a calculation assuming a plan’s assets are invested in an all-bond portfolio, generally lowering expected long-term investment returns. The discount rate selected and used for this purpose is the Bond Buyer General Obligation 20-year Municipal Bond Index Rate, published at the end of each week. The last published rate in December of the measurement period, by The Bond Buyer (www.bondbuyer.com), is 3.81% for use effective September 30, 2024. This is the rate used to determine the discount rate for valuing reported public pension plan liabilities in accordance with Governmental Accounting Standards when plan assets are projected to be insufficient to make projected benefit payments, and the 20-year period reasonably approximates the duration of plan liabilities. The LDROM is not used to determine a plan’s funded status or Actuarially Determined Contribution (Florida Chapter 112 determined employer contribution). The plan’s expected return on assets, currently 6.50%, is used for these calculations.

As of September 30, 2024, the LDROM for the system is \$880,414,536. The difference between the plan’s AAL of \$595,849,078 and the LDROM can be thought of as the increase in the AAL if the entire portfolio were invested in low-default-risk securities. Alternatively, this difference could also be viewed as representing the expected savings from investing in the plan’s diversified portfolio compared to investing only in low-default-risk securities.

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

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.

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.

- Economic and Other Related Risks. Potential implications for the Plan due to the following economic effects (that were not reflected as of the valuation date) include:

- Volatile financial markets and investment returns lower than assumed
- High inflationary environment impacting salary increases and COLAs

- Investment Risk (the risk that returns will be different than expected)

If the actual return on market value for the prior plan year were 1% different (either higher or lower), the unfunded actuarial liability would change by 0.86%, or \$2,625,565, disregarding the asset smoothing method.

Since the Plan's assets are much larger than contributions, investment performance may create volatility in the actuarially determined contribution requirements. For example, for the prior plan year, if the actual return on market value were 1% different, the actuarially determined contribution would increase or decrease by \$188,299, disregarding the effects of the 5-year phase-in of investment gains and losses.

The market value rate of return over the last 17 years has ranged from a low of -16.18% to a high of 27.03%.

- 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.

- 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 22 years, meaning that the current contribution level, with amortization payments growing 1.25%, would be adequate to be expected to reduce the unfunded liability to zero over 22 years. Under the City's current policy of paying the City's required contribution, over the

Section 2: Actuarial Valuation Results

immediate term, the unfunded liability will remain relatively stable 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 expected. By comparison, the surtax revenue is assumed to grow 4.25% per year.

- 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.
- There are external factors including legislative or financial reporting changes that could impact the Plan's funding and disclosure requirements. While we do not assume any changes in such external factors, it is important to understand that they could have significant consequences for the Plan.
- Actual Experience Over the Last Ten Years

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

- The non-investment gain(loss) for a year has ranged from a loss of \$10,056,085 to a gain of \$1,978,720.

Plan Year Ended	Market Value Gain/(Loss)	All Other Gains and (Losses)
2015	-\$15,203,738	-\$3,362,440
2016	-2,401,011	529,028
2017	14,071,137	1,978,720
2018	5,056,884	-1,546,971
2019	-12,089,300	-5,808,796
2020	-5,273,967	-10,056,085
2021	45,760,012	-5,207,826
2022	-64,741,818	-9,570,213
2023	16,846,955	-9,563,522
2024	29,568,827	-6,041,210

- The funded percentage on the actuarial value of assets has ranged from a low of 47.9% to a high of 50.8% since 2015.

Section 2: Actuarial Valuation Results

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 non-active to active participant ratio of 1.60.
- For the prior year, benefits and administrative expenses paid were \$4,929,000 more than contributions received. Plans with high levels of negative cash flows may have a need for a larger allocation to income generating assets, which can create a drag on investment return.

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

Type	2024	2023
Actuarial accrued liability (AAL)		
Active member contributions	\$20,659,768	\$20,027,503
Retirees and beneficiaries	432,319,927	412,154,218
Active and inactive members (employer-financed)	142,869,383	138,590,726
Total	\$595,849,078	\$570,772,447
Actuarial value of assets	289,708,491	273,139,317
Cumulative portion of AAL covered		
Active member contributions	100.00%	100.00%
Retirees and beneficiaries	62.23%	61.41%
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

Description	Year Ended September 30, 2024	Year Ended September 30, 2023
Liabilities		
Present value of benefits for retired participants and beneficiaries	\$432,319,927	\$412,154,218
Present value of benefits for inactive vested participants	593,007	439,531
Present value of benefits for active participants	228,986,833	229,675,571
Total liabilities	\$661,899,767	\$642,269,320
Current and future assets		
Total valuation value of assets	\$289,708,491	\$273,139,317
Present value of future contributions by members	16,795,748	18,355,208
Present value of future employer contributions for:		
• Entry age cost	49,254,941	53,141,665
• Unfunded actuarial accrued liability	306,140,587	297,633,130
Total of current and future assets	\$661,899,767	\$642,269,320

Section 3: Supplemental Information

Exhibit A: Table of plan demographics

Category	Year Ended September 30, 2024	Year Ended September 30, 2023	Change From Prior Year
Active participants in valuation:			
• Number	319	345	-7.5%
• Average age	43.1	42.3	0.8
• Average years of service	14.2	13.3	0.9
• Covered payroll	\$24,070,977	\$24,526,732	-1.9%
• Average payroll	\$75,458	\$71,092	6.1%
• Employee contribution balances	20,659,768	20,027,503	3.2%
• Total active vested participants	319	345	-7.5%
Inactive participants	4	3	33.3%
Retired participants:			
• Number in pay status	382	372	3.2%
• Average age	62.0	61.4	0.6
• Average monthly benefit ¹	\$4,475	\$4,325	3.5%
Disabled participants:			
• Number in pay status	16	16	0.0%
• Average age	59.1	58.1	1.0
• Average monthly benefit ¹	\$2,530	\$2,456	3.0%
DROP participants not yet in pay status:			
• Number in pay status	72	68	5.9%
• Average age	53.6	52.9	0.7
• Average monthly benefit ¹	\$4,291	\$4,294	-0.1%

¹Does not include supplemental benefit amounts

Section 3: Supplemental Information

Category	Year Ended September 30, 2024	Year Ended September 30, 2023	Change From Prior Year
Beneficiaries:			
• Number in pay status	35	35	0.0%
• Average age	61.5	63.4	-1.9
• Average monthly benefit	\$3,450	\$3,218	7.2%

Section 3: Supplemental Information

Exhibit B: Participants in active service as of September 30, 2024 by age, years of service, and average compensation

Age	Years of Service					
	Total	5-9	10-14	15 - 19	20 - 24	25 - 29
Under 30	17	17	—	—	—	—
	\$61,441	\$61,441	—	—	—	—
30 - 34	50	32	18	—	—	—
	66,827	62,432	\$74,641	—	—	—
35 - 39	66	17	30	18	1	—
	74,036	63,218	75,987	\$80,949	\$74,976	—
40 - 44	64	7	22	28	6	1
	81,091	65,249	78,471	85,257	88,250	\$90,024
45 - 49	41	5	9	16	9	2
	82,801	61,545	74,489	76,140	101,603	142,011
50 - 54	39	1	17	11	7	3
	77,019	62,148	72,467	79,012	85,707	80,192
55 - 59	27	3	13	7	3	1
	77,375	61,144	71,399	80,628	84,708	158,979
60 - 64	13	1	5	7	—	—
	75,399	62,148	73,363	78,746	—	—
65 - 69	2	—	1	1	—	—
	70,536	—	69,024	72,048	—	—
Total	319	83	115	88	26	7
	\$75,458	\$62,521	\$74,921	\$80,901	\$91,269	\$110,514

Section 3: Supplemental Information

Exhibit C: Reconciliation of participant data

	Active Participants	Inactive Vested Participants	DROP Participants	Disabled	Retired Participants	Beneficiaries	Total
Number as of October 1, 2023	345	3	68	16	372	35	839
New participants	0	N/A	0	N/A	N/A	N/A	0
Terminations — with vested rights	-1	1	0	0	0	0	0
Terminations — without vested rights	0	N/A	0	N/A	N/A	N/A	0
Retirements	-4	0	-10	N/A	14	N/A	0
New DROP participants	-15	0	15	0	0	0	0
New disabilities	0	0	0	0	N/A	N/A	0
Return to work	0	0	0	0	0	N/A	0
Deceased	0	0	0	0	-4	0	-4
New beneficiary	0	0	0	0	0	2	2
Lump sum cash-outs	-8	0	0	0	0	0	-8
Rehire	0	0	0	N/A	0	N/A	0
Certain period expired	N/A	N/A	0	0	0	-2	-2
Data adjustments	2	0	-1	0	0	0	1
Active participants no longer accruing benefits	0	0	0	N/A	N/A	N/A	0
Net transfers (to)/from General	0	0	0	0	0	0	0
Number as of October 1, 2024	319	4	72	16	382	35	828

Section 3: Supplemental Information

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

Year Ended September 30, 2024 versus Year Ended September 30, 2023

Item	Income and Expenses	Assets as of YE 2024	Income and Expenses	Assets as of YE 2023
Net assets at market value at the beginning of the year		\$265,021,000		\$236,467,000
Contribution and other income:				
• Employer contributions	\$19,386,000		\$17,196,000	
• Employee contributions	2,854,000		3,333,000	
• Total contribution income		\$22,240,000		\$20,529,000
Investment income:				
• Interest, dividends and other income	\$2,713,000		\$2,414,000	
• Realized appreciation	30,593,000		19,450,000	
• Unrealized appreciation	15,388,000		12,205,000	
• Less investment fees	-2,059,000		-1,967,000	
• Net investment income		\$46,635,000		\$32,102,000
• Total income available for benefits		\$68,875,000		\$52,631,000
Less benefit payments and administrative expenses:				
• Administrative expenses	-\$138,000		-\$97,000	
• Benefit payments	-22,549,000		-21,049,000	
• DROP credits	-3,774,000		-3,351,000	
• Refunds	-2,922,000		-2,605,000	
• DROP withdrawals	2,760,000		2,230,000	
• DROP interest/adjustment	-546,000		795,000	
• Net benefit payments and administrative expenses		-\$27,169,000		-\$24,077,000
Change in market value of assets		\$41,706,000		\$28,554,000
Net assets at market value at the end of the year		\$306,727,000		\$265,021,000

Section 3: Supplemental Information

Exhibit E: Summary statement of plan assets

Year Ended September 30, 2024 versus Year Ended September 30, 2023

Item	Investments	Assets as of YE 2024	Investments	Assets as of YE 2023
Cash and accounts receivable				
• Cash equivalents		\$3,415,000		\$4,271,000
• Total accounts receivable		73,000		63,000
Investments:				
• Equities	\$181,017,000		\$152,605,000	
• Fixed Income	63,500,000		51,800,000	
• Real Estate	50,800,000		54,800,000	
• Other Assets	23,000,000		15,000,000	
• Total investments at market value		\$318,317,000		\$274,205,000
Total assets		\$321,805,000		\$278,539,000
Accounts payable				
• Total accounts payable		-\$15,078,000		-\$13,518,000
Net assets at market value		\$306,727,000		\$265,021,000
Net assets at actuarial value		\$289,708,491		\$273,139,317

Section 3: Supplemental Information

Exhibit F: Development of the fund through September 30, 2024

Year Ended September 30	Employer Contributions	Employee Contributions	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
2015	\$17,832,000	\$2,466,000	-\$3,849,000	\$73,000	\$14,874,000	\$150,223,000	\$159,914,247	106.5%
2016	18,864,000	2,410,000	11,548,000	75,000	15,583,000	167,387,000	175,333,405	104.7%
2017	19,162,000	2,500,000	26,747,000	75,000	18,338,000	197,383,000	191,740,583	97.1%
2018	13,973,000	3,151,000	19,269,000	128,000	16,981,000	216,667,000	207,089,881	95.6%
2019	14,498,000	3,225,000	3,496,000	158,000	17,974,000	219,754,000	220,334,774	100.3%
2020	15,058,000	3,401,000	9,840,000	153,000	19,728,000	228,172,000	234,514,215	102.8%
2021	15,061,000	3,341,000	61,141,000	160,000	22,204,000	285,351,000	255,558,542	89.6%
2022	17,610,000	3,153,000	-45,935,000	159,000	23,553,000	236,467,000	265,245,309	112.2%
2023	17,196,000	3,333,000	32,102,000	97,000	23,980,000	265,021,000	273,139,317	103.1%
2024	19,386,000	2,854,000	46,635,000	138,000	27,031,000	306,727,000	289,708,491	94.5%

¹ On a market basis, net of investment fees

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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	\$178,901,268	\$12,571,464	22.00	\$171,157,137
Experience loss	10/01/2017	30	-2,816,018	-194,999	23.00	-2,718,984
Change in assumptions	10/01/2017	30	-283,924	-19,661	23.00	-274,141
Plan amendment	10/01/2017	30	9,863,395	683,004	23.00	9,523,521
Experience loss	10/01/2018	29	5,111,441	354,157	23.00	4,938,215
Change in assumptions	10/01/2018	29	19,111,594	1,324,186	23.00	18,463,895
Experience loss	10/01/2019	28	12,171,775	845,047	23.00	11,782,981
Change in assumptions	10/01/2019	28	-7,304,312	-507,115	23.00	-7,070,995
Experience loss	10/01/2020	27	15,277,628	1,064,196	23.00	14,838,709
Change in assumptions	10/01/2020	27	6,108,635	425,510	23.00	5,933,135
Experience loss	10/01/2021	26	3,753,461	262,693	23.00	3,662,889
Change in assumptions	10/01/2021	26	11,440,746	800,703	23.00	11,164,675
Experience loss	10/01/2022	25	19,787,855	1,393,871	23.00	19,435,565
Change in assumptions	10/01/2022	25	8,804,784	620,216	23.00	8,648,029
Experience loss	10/01/2023	24	24,110,512	1,712,367	23.00	23,876,539
Change in assumptions	10/01/2023	24	1,104,396	78,436	23.00	1,093,678
Experience loss	10/01/2024	23	11,685,739	838,073	23.00	11,685,739
Total				\$22,252,148		\$306,140,587

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	-\$64,295,005	-4,518,036	22	-61,511,856
Surtax offset gain	10/01/2017	30	-1,534,336	-106,247	23	-1,481,464
Allocation change	10/01/2017	30	4,705,811	325,860	23	4,543,657
Discount rate change	10/01/2017	30	-3,286,369	-227,569	23	-3,173,126
Surtax offset gain	10/01/2018	29	-1,420,046	-98,391	23	-1,371,921
Allocation change	10/01/2018	29	-1,349,426	-93,498	23	-1,303,694
Discount rate change	10/01/2018	29	-3,713,867	-257,323	23	-3,588,004
Surtax offset gain	10/01/2019	28	-348,544	-24,198	23	-337,411
Allocation change	10/01/2019	28	-7,142,670	-495,892	23	-6,914,517
Discount rate change	10/01/2019	28	-2,159,598	-149,934	23	-2,090,616
Surtax offset loss	10/01/2020	27	6,298,215	438,716	23	6,117,271
Allocation change	10/01/2020	27	3,119,832	217,319	23	3,030,200
Discount rate change	10/01/2020	27	-2,063,845	-143,761	23	-2,004,550
Surtax offset gain	10/01/2021	26	-9,862,882	-690,273	23	-9,624,886
Allocation change	10/01/2021	26	-4,296,673	-300,711	23	-4,192,992
Discount rate change	10/01/2021	26	-4,356,487	-304,897	23	-4,251,362
Surtax offset gain	10/01/2022	25	-6,174,896	-434,964	23	-6,064,962
Allocation change	10/01/2022	25	2,166,398	152,603	23	2,127,828
Discount rate change	10/01/2022	25	-3,393,985	-239,075	23	-3,333,561
Surtax smoothing	10/01/2022	25	4,985,065	351,152	23	4,896,314
Surtax offset gain	10/01/2023	24	-2,880,697	-204,592	23	-2,852,742
Surtax offset gain	10/01/2024	23	-2,544,337	-182,474	23	-2,544,337
Total				-\$6,986,185		-\$95,926,731

¹ Level percentage of payroll; per Part VII, Chapter 112.64(5)(b) of Florida Statutes, outstanding balances were amortized using a 1.25% payroll growth rate for October 1, 2024 valuation.

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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 \$275,000 for 2024 and \$280,000 for 2025. 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 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*	\$27,869,052	0.75%	N/A	N/A
2010	32,329,400	16.88%	2.45%	5.28%
2011	31,832,037	-1.54%	3.09%	5.80%
2012	28,944,158	-9.07%	0.78%	6.15%
2013	27,871,010	-3.71%	3.03%	1.72%
2014	27,373,702	-1.78%	3.89%	1.70%
2015	28,091,083	2.62%	3.08%	1.66%
2016	26,585,054	-5.36%	2.63%	4.26%
2017	27,548,015	3.62%	4.03%	8.21%
2018	28,164,021	2.24%	10.21%	8.31%
2019	28,726,006	2.00%	12.46%	8.34%
2020	28,268,208	-1.59%	12.06%	3.98%
2021	25,903,031	-8.37%	3.06%	3.84%
2022	25,260,815	-2.48%	8.64%	3.69%
2023	24,526,732	-2.91%	8.86%	3.51%
2024	24,070,977	-1.86%	6.37%	5.51%

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 -1.28% per year. Additional analysis of bargained pay increases applicable for the next year and pay of DC plan participants was used to support a payroll increase assumption of 1.25%.

*Prior 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
2013	2011	39.11%	\$32,946,158	\$12,884,770	--	\$10,742,000
2014	2012	49.93%	29,812,483	14,884,963	--	13,522,000
2015	2013	62.81%	28,049,384	17,618,896	--	17,832,000
2016	2014	68.64%	27,480,459	18,863,935	--	18,864,000
2017	2015	67.73%	28,282,102	19,155,820	--	19,162,000
2018	2016	69.26%	26,917,306	18,643,233	\$13,973,105	13,973,000
2019	2017	68.63%	27,892,365	19,141,501	14,497,788	14,498,000
2020	2018	70.53%	28,516,071	20,111,161	15,042,623	15,058,000
2021	2019	71.56%	29,085,081	20,812,130	15,044,530	15,061,000
2022	2020	79.84%	28,621,561	22,851,586	17,592,399	17,610,000
2023	2021	90.55%	26,226,819	23,748,105	17,185,973	17,196,000
2024	2022	102.16%	25,576,575	26,128,351	19,385,644	19,386,000
2025	2023	116.86%	24,833,316	29,019,915	21,981,270	--
2026	2024	124.47%	24,371,864	30,334,566	23,016,805	--

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 Comparative Summary of Principal Valuation Results

	Year Ended September 30, 2024	Year Ended September 30, 2023
Participant data		
Active members	319	345
Total annual payroll	\$24,070,977	\$24,526,732
Retired members and beneficiaries	437	423
Total annualized benefit	\$23,055,523	\$21,130,232
Terminated vested members	4	3
Total annualized benefit	\$63,084	\$44,563
DROP participants	72	68
Total annualized benefit	\$3,836,080	\$3,503,954
Actuarial value of assets	\$289,708,491	\$273,139,317
Present value of all future expected benefit payments:		
Active members:		
Retirement benefits	\$201,771,762	\$202,560,907
Vesting benefits	1,347,401	1,530,843
Disability benefits	3,929,173	4,189,909
Death benefits	1,278,729	1,366,409
Return of contributions	<u>20,659,768</u>	<u>20,027,503</u>
Total	\$228,986,833	\$229,675,571
Terminated vested members	593,007	439,531
Retired members and beneficiaries	358,232,406	341,339,414
DROP participants	<u>74,087,521</u>	<u>70,814,803</u>
Total	\$661,899,767	\$642,269,319

Section 3: Supplemental Information

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

	Year Ended September 30, 2024	Year Ended September 30, 2023
Unfunded actuarial accrued liability	\$306,140,587	\$297,633,130
Actuarial present value of accrued benefits		
Vested accrued benefits		
Active members	\$122,085,397	\$116,602,159
Inactive members	593,007	439,531
Retirees and beneficiaries	358,232,406	341,339,414
DROP participants	74,087,521	70,814,803
Nonvested active members	<u>0</u>	<u>0</u>
Total	\$554,998,331	\$529,195,907
Pension cost		
Normal cost, including administrative expenses	\$8,979,369	\$8,833,819
Expected employee contributions	-2,271,444	-2,278,533
Level % of payroll payment to amortize unfunded actuarial accrued liability	22,252,148	21,149,704
Discounted and amortized value of allocated surtax revenue	-6,986,185	-6,719,716
Timing adjustment	<u>758,759</u>	<u>724,622</u>
Total minimum annual cost payable monthly at valuation date	22,732,647	\$21,709,896
Total employer cost projected to budget year	23,016,805	21,981,270
Projected payroll	24,371,864	24,833,316
As % of projected payroll	94.44%	88.52%
Present value of active members' future salaries at attained age	\$167,957,476	\$183,552,079
Present value of expected future employee contributions	16,795,748	18,355,208

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
Actuarial present value of accumulated benefits as of October 1, 2023	\$529,195,907
Benefits accumulated, net experience gain or loss, changes in data	19,314,368
Benefits paid	-27,031,000
Interest	33,519,226
Changes in assumptions	0
Plan changes	0
Net increase	25,802,594
Actuarial present value of accumulated benefits as of October 1, 2024	\$554,998,501

Section 3: Supplemental Information

Exhibit M: Supplementary State of Florida information Reconciliation of DROP accounts

Nearest Age	Total Actives*	Eligible for Normal**	Number Retiring	Number Entering DROP
Under 40	140	1	0	0
40	17	1	1	0
41	10	1	0	0
42	13	3	1	0
43	16	6	0	2
44	12	2	0	0
45	13	2	0	0
46	9	3	0	0
47	9	3	0	0
48	8	3	0	0
49	4	3	0	1
50	9	6	0	1
51	8	4	0	2
52	7	2	1	0
53	14	5	0	2
54	9	4	0	2
55	11	2	1	1
56	7	1	0	0
57	2	0	0	0
58	6	3	0	3
59	5	1	0	0
60	4	0	0	0
61	4	0	0	0
62	1	0	0	0
63	4	1	0	1
64	1	0	0	0
65 & over	2	2	0	0
Total	345	59	4	15

*Number of active participants from prior valuation

**Number of active participants either eligible to retire as of October 1, 2023 or who became eligible during the plan year ended September 30, 2024

Section 3: Supplemental Information

Exhibit N: Actuarial Projections through Fiscal 2062

City of Jacksonville Corrections Officers 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
2024	\$595,849,078	\$289,708,491	\$306,140,587	48.62%	2025	\$0	0.0%	\$21,981,270	100.0%	\$21,981,270
2025	614,837,869	310,868,318	303,969,551	50.56%	2026	0	0.0%	23,016,805	100.0%	23,016,805
2026	633,778,008	323,773,427	310,004,581	51.09%	2027	0	0.0%	22,619,951	100.0%	22,619,951
2027	652,265,429	348,612,992	303,652,437	53.45%	2028	0	0.0%	23,043,654	100.0%	23,043,654
2028	669,956,135	369,821,424	300,134,711	55.20%	2029	0	0.0%	22,131,069	100.0%	22,131,069
2029	686,977,256	383,599,228	303,378,028	55.84%	2030	0	0.0%	21,553,731	100.0%	21,553,731
2030	703,079,785	395,842,700	307,237,085	56.30%	2031	8,124,038	27.4%	21,556,990	72.6%	29,681,028
2031	717,031,854	414,422,529	302,609,325	57.80%	2032	11,292,413	34.5%	21,411,718	65.5%	32,704,131
2032	728,897,561	435,184,697	293,712,864	59.70%	2033	11,772,341	36.2%	20,781,900	63.8%	32,554,241
2033	739,360,869	455,383,916	283,976,953	61.59%	2034	12,272,665	37.4%	20,573,594	62.6%	32,846,259
2034	748,219,257	475,246,614	272,972,643	63.52%	2035	12,794,254	38.5%	20,447,442	61.5%	33,241,696
2035	755,267,997	494,876,497	260,391,500	65.52%	2036	13,338,010	39.8%	20,207,757	60.2%	33,545,767
2036	760,188,354	513,953,980	246,234,374	67.61%	2037	13,904,875	41.0%	19,979,359	59.0%	33,884,234
2037	762,727,381	532,503,250	230,224,131	69.82%	2038	14,495,832	42.5%	19,618,049	57.5%	34,113,881
2038	762,217,985	549,824,930	212,393,055	72.13%	2039	15,111,905	43.9%	19,298,625	56.1%	34,410,530
2039	759,272,714	567,042,604	192,230,110	74.68%	2040	15,754,161	45.8%	18,666,962	54.2%	34,421,123
2040	754,799,223	584,335,664	170,463,559	77.42%	2041	16,423,713	46.9%	18,606,798	53.1%	35,030,511
2041	748,900,752	602,426,332	146,474,420	80.44%	2042	17,121,721	47.9%	18,650,056	52.1%	35,771,777
2042	741,566,050	621,582,064	119,983,986	83.82%	2043	17,849,394	48.8%	18,697,900	51.2%	36,547,294
2043	732,743,165	641,946,461	90,796,704	87.61%	2044	18,607,993	49.8%	18,750,827	50.2%	37,358,820
2044	722,550,052	663,867,827	58,682,225	91.88%	2045	19,398,833	50.8%	18,789,136	49.2%	38,187,969
2045	711,068,705	687,571,486	23,497,219	96.70%	2046	20,223,283	51.7%	18,893,655	48.3%	39,116,938
2046	698,529,769	713,598,417	(15,068,648)	102.16%	2047	0	0.0%	18,993,546	100.0%	18,993,546
2047	685,207,591	720,612,768	(35,405,177)	105.17%	2048	0	0.0%	8,100,332	100.0%	8,100,332
2048	671,214,665	717,024,658	(45,809,993)	106.82%	2049	0	0.0%	255,075	100.0%	255,075
2049	656,609,722	705,394,113	(48,784,391)	107.43%	2050	0	0.0%	261,452	100.0%	261,452
2050	641,455,453	693,407,497	(51,952,044)	108.10%	2051	0	0.0%	267,988	100.0%	267,988
2051	625,819,013	681,144,525	(55,325,512)	108.84%	2052	0	0.0%	274,687	100.0%	274,687
2052	609,769,163	668,687,331	(58,918,168)	109.66%	2053	0	0.0%	281,555	100.0%	281,555
2053	593,376,384	656,120,644	(62,744,260)	110.57%	2054	0	0.0%	288,593	100.0%	288,593
2054	576,711,664	643,530,622	(66,818,958)	111.59%	2055	0	0.0%	295,808	100.0%	295,808
2055	559,848,604	631,007,023	(71,158,419)	112.71%	2056	0	0.0%	303,203	100.0%	303,203
2056	542,860,074	618,639,926	(75,779,852)	113.96%	2057	0	0.0%	310,784	100.0%	310,784
2057	525,818,668	606,520,249	(80,701,581)	115.35%	2058	0	0.0%	318,554	100.0%	318,554
2058	508,797,518	594,740,640	(85,943,122)	116.89%	2059	0	0.0%	326,518	100.0%	326,518
2059	491,869,192	583,394,456	(91,525,264)	118.61%	2060	0	0.0%	334,681	100.0%	334,681
2060	475,103,564	572,573,704	(97,470,140)	120.52%	2061	0	0.0%	343,048	100.0%	343,048
2061	458,568,204	562,369,530	(103,801,326)	122.64%	2062	0	0.0%	351,625	100.0%	351,625
2062	442,327,528	552,871,458	(110,543,930)	124.99%	2063	0	0.0%	360,415	100.0%	360,415
					2064	0	0.0%	369,425	100.0%	369,425
Total:						\$238,485,431	33.1%	\$481,314,537	66.9%	\$719,799,968
Total Present Value at 6.50%:						\$90,836,362	27.3%	\$241,293,332	72.7%	\$332,129,694

Assumptions

Investment Return Assumption	6.50% per year
Actuarial Value of Assets	5-year smoothed market value
Payroll Growth Assumption	1.25% per year
Pension Liability Surtax Proceeds	6.10%, 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 1: Actuarial assumptions, methods and models

Rationale for assumptions

The information and analysis used in selecting each demographic assumption that has a significant effect on this actuarial valuation is shown in the Experience Study Report for the five-year period ended September 30, 2022.

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

Salary increases include an assumed inflation rate of 2.50%

Service	Rate (%)
0	10.00
1 – 2	8.00
3 – 10	7.00
11 - 15	6.00
16+	3.50

Payroll growth

1.25% 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%.

Section 4: Actuarial Valuation Basis

Mortality rates

Healthy pre-retirement: FRS pre-retirement mortality tables for special risk personnel, set forward 2 years, projected generationally from 2010 with Scale MP2018

Healthy post-retirement: FRS healthy post-retirement mortality tables for special risk personnel, set forward 2 years, projected generationally from 2010 with Scale MP2018

Disabled: FRS disabled mortality tables for personnel other than special risk, with no set forward, projected generationally from 2010 with Scale MP2018

The FRS tables for special risk 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 special risk personnel reasonably reflect the disabled annuitant mortality experience as of the measurement date.

Annuitant mortality rates

Age	Rate (%) [*]			
	Healthy		Disabled	
	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

Rate (%)

Age	Rate (%)			
	Mortality ¹		Disability ²	
	Male	Female	Male	Female
20	0.05	0.04	0.03	0.03
25	0.06	0.05	0.04	0.04
30	0.07	0.05	0.05	0.05
35	0.08	0.06	0.08	0.08
40	0.10	0.08	0.12	0.12
45	0.14	0.11	0.18	0.18
50	0.21	0.17	0.30	0.30
55	0.32	0.25	0.47	0.47
60	0.50	0.40	0.75	0.75
65	0.87	0.69	0.00	0.00

Retirement rates

Age/Service	Retirement Probability (%)
Under 20	0
20	65
21	35
22	20
23 - 25	15
26 - 27	20
28+	100

100% retirement assumed at age 65 with 5 years of service; for ages less than 65, retirement rate assumptions are based on service

Section 4: Actuarial Valuation Basis

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 rates for inactive vested participants

65

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

Smoothed revenue of \$127,283,574 for fiscal 2024 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 actual revenue. This method is applied prospectively to revenue growth occurring during fiscal 2022 and later.

Actual revenue for fiscal 2024 was \$131,031,172.

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

6.10%. This percentage is determined by the City; last year's percentage was 6.10%.

Administrative Expenses

Previous year's actual expenses; \$138,000 for October 1, 2024.

Section 4: Actuarial Valuation Basis

Family Composition

60% of participants are assumed to be married. None are assumed to have dependent children. Females are assumed to be three years younger than their spouses.

Actuarial value of assets

Market value of assets 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

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

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

Section 4: Actuarial Valuation Basis

Exhibit 2: Summary of plan provisions

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

Plan year

October 1 through September 30

Plan status

Closed to new entrants

Normal retirement

Age Requirement	Age 65 with five years of Credited Service or any age with 20 years of Credited Service.
Regular Benefit Amount	3.0% of Final Monthly Compensation times years of Credited Service for the first 20 years plus 2.0% of Final Monthly Compensation times years of Credited Service for years in excess of 20. However, the benefit may not exceed 80% of Final Monthly Compensation.
Supplemental Benefit Amount	Monthly benefit of \$5 times years of Credited Service, not less than \$25 per month or more than \$150 per month.
Minimum Benefit Amount	\$77.96 per whole year of Credited Service, not to exceed 30. Minimum accrual rate increases 4% each October 1st.

Early retirement

None

Section 4: Actuarial Valuation Basis

Service-Incurred Disability

Age Requirement	None
Service Requirement	None
Regular Benefit Amount	50% of the average salary earned in the last three years immediately preceding disability retirement.
Supplemental Benefit Amount	Monthly benefit of \$5 times years of Credited Service, not less than \$25 per month or more than \$150 per month.
Minimum Benefit Amount	\$77.96 per whole year of Credited Service, not to exceed 30. Minimum accrual rate increases 4% each October 1st.

Non-Service Incurred Disability

Age Requirement	None
Service Requirement	5 years of Credited Service
Regular Benefit Amount	25% percent of the average salary earned in the last three years immediately preceding disability retirement. For each year of service in excess of 5 years, the benefit shall be increased 2.5%, to a maximum of 50%.
Supplemental Benefit Amount	Monthly benefit of \$5 times years of Credited Service, not less than \$25 per month or more than \$150 per month.
Minimum Benefit Amount	\$77.96 per whole year of Credited Service, not to exceed 30. Minimum accrual rate increases 4% each October 1st.

Vesting

Age Requirement	None
Service Requirement	5 years of Credited Service
Regular Benefit Amount	Accrued Normal Retirement Benefit payable at age 65.
Supplemental Benefit Amount	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.
Minimum Benefit Amount	\$77.96 per whole year of Credited Service, not to exceed 30. Minimum accrual rate increases 4% each October 1st.

Section 4: Actuarial Valuation Basis

Spouse's pre-retirement death benefit [(applicable only if elected by employee)]

Age Requirement	None
Service Requirement	None
Regular Benefit Amount	If the Member is eligible for retirement, the surviving spouse is entitled to 75% of the member's accrued retirement 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 Normal Retirement at current salary, using a 2% annual accrual rate.
Supplemental Benefit Amount	Monthly benefit of \$5 times years of Member's Credited Service, not less than \$25 per month or more than \$150 per month.
Minimum Benefit Amount	75% of \$77.96 per whole year of Member's Credited Service, not to exceed 30. Minimum accrual rate increases 4% each October 1st.

Spouse's post-retirement death benefit(s)

Regular Benefit Amount	Surviving spouse is entitled to 75% of the Member's regular benefit.
Supplemental Benefit Amount	Surviving spouse is entitled to 100% of the Member's supplemental benefit.
Minimum Benefit Amount	75% of the Member's Minimum Benefit Amount at retirement.

Member

All City Corrections Officers hired prior to October 1, 2017.

Member Contributions

10% of Earnable Compensation, additional 2% of Earnable Compensation during DROP participation.

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.

Section 4: Actuarial Valuation Basis

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 adjustments (COLAs)

On the December 1st after the initial benefit commencement date, and on each December 1st thereafter, the regular benefit is increased by 3%.

DROP

Members with 20 or more years of service may elect to defer receipt of their retirement benefits while continuing employment with the City for up to 5 years. Upon the effective date of participating in the DROP, a member's years of service and Final Monthly Compensation become frozen for purposes of determining pension benefits. Additional service beyond the date of DROP participation no longer accrues any additional benefits under the Retirement System. Benefits that would have been payable are accumulated at interest to date of termination and paid or rolled over in a single sum, and payments are made directly to the Member thereafter based on the accrued retirement benefit at the DROP start date. COLA increases start at termination of employment rather than at the start of the DROP

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 September 30, 2024, pension plan membership consisted of the following:

Membership	Amount
Retired participants or beneficiaries currently receiving benefits	505
Inactive participants with a vested right to a deferred or immediate benefit	4
Active members	319
Total	828

Section 5: GASB Information

Exhibit 1: Net Pension Liability

Components of the Net Pension Liability	Current	Prior
Reporting date for employer under GASB 68	September 30, 2025	September 30, 2024
Measurement date and reporting date for the Plan under GASB 67	September 30, 2024	September 30, 2023
Total Pension Liability	\$610,927,078	\$584,290,447
Plan Fiduciary Net Position	321,805,000	278,539,000
Net Pension Liability	289,122,078	305,751,447
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	52.67%	47.67%

The Net Pension Liability (NPL) for the plan was measured as of September 30, 2024 and 2023. 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, 2024 and 2023, 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, 2024 and October 1, 2023, respectively.

Actuarial assumptions. The Total Pension Liability (TPL) as of September 30, 2024, which was determined based on the results of an actuarial valuation as of October 1, 2024, used the following actuarial assumptions, applied to all periods included in the measurement:

Assumption Type	Assumption
Wage inflation	2.50%
Salary increases	3.50% - 10.00%, of which 2.50% is the Plan's long-term payroll inflation assumption
Net investment rate of return	6.50%, net of pension plan investment expense, including inflation
Other assumptions	See the October 1, 2024 actuarial 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, 2017 through September 30, 2022.

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

Section 5: GASB Information

Determination of discount rate and investment rates of return

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

Asset Class	Target Allocation	Long-Term Expected Real Rate of Return ¹
Domestic equity	30.00%	6.10%
International equity	23.00%	6.20%
Fixed income	20.00%	1.90%
Real estate	15.00%	3.50%
Private equity	6.00%	9.65%
Private credit	6.00%	6.10%
Total	100.00%	

Discount rate. The discount rate used to measure the Total Pension Liability (TPL) was 6.50% as of September 30, 2024 and September 30, 2023. 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, 2024 and September 30, 2023.

¹ Geometric real rates of return are net of inflation.

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 (NPL) of the CORP as of September 30, 2024, 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.

Item	1% Decrease (5.50%)	Current Discount Rate (6.50%)	1% Increase (7.50%)
Net Pension Liability	\$375,087,305	\$289,122,078	\$219,591,068

Section 5: GASB Information

Exhibit 2: Schedule of changes in Net Pension Liability

Components of the Net Pension Liability	Current	Prior
Reporting and Measurement Dates		
Reporting date for employer under GASB 68	September 30, 2025	September 30, 2024
Measurement date and reporting date for the Plan under GASB 67	September 30, 2024	September 30, 2023
Total Pension Liability		
Service cost	\$8,736,819	\$8,023,179
Interest	37,718,965	35,721,919
Change of benefit terms	0	0
Differences between expected and actual experience	5,651,847	9,723,148
Changes of assumptions	0	1,104,396
Benefit payments, including refunds of member contributions	-25,471,000	-23,654,000
Net change in Total Pension Liability	\$26,636,631	\$30,918,642
Total Pension Liability — beginning	584,290,447	553,371,805
Total Pension Liability — ending	\$610,927,078	\$584,290,447
Plan Fiduciary Net Position		
Contributions — employer	\$19,386,000	\$17,196,000
Contributions — employee	2,854,000	3,333,000
Net investment income	46,635,000	32,101,000
Benefit payments, including refunds of member contributions	-25,471,000	-23,654,000
Administrative expense	-138,000	-97,000
Other	0	0
Net change in Plan Fiduciary Net Position	\$43,266,000	\$28,879,000
Plan Fiduciary Net Position — beginning	278,539,000	249,660,000
Plan Fiduciary Net Position — ending	\$321,805,000	\$278,539,000

Section 5: GASB Information

Components of the Net Pension Liability	Current	Prior
Net Pension Liability		
Net Pension Liability – ending	\$289,122,078	\$305,751,447
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	52.67%	47.67%
Covered payroll ¹	\$24,070,977	\$24,526,732
Plan Net Pension Liability as percentage of covered payroll	1,201.12%	1,246.60%

Notes to Schedule:

- **Benefit changes:** *No benefit changes have been reflected in the past two fiscal years.*
- **Change of Assumptions:** *As of September 30, 2023, the rates of withdrawal and retirement were updated, as well as the salary scale*

¹ Covered payroll represents compensation earnable and pensionable compensation. Only compensation earnable and pensionable compensation that would possibly go into the determination of the retirement benefits are included.

Section 5: GASB Information

Exhibit 3: Schedule of employer contributions

Year Ended September 30	Actuarially Determined Contributions	Contributions in Relation to the Actuarially Determined Contributions	Contribution Deficiency (Excess)	Covered Payroll ¹	Contributions as a Percentage of Covered Payroll ²
2015	\$17,618,896	\$17,832,000	-\$213,104	\$28,091,083	63.48%
2016	18,863,935	18,864,000	-65	26,585,054	70.96%
2017	19,155,820	19,162,000	-6,180	27,548,015	69.56%
2018	18,643,233	13,973,000	4,670,233	28,164,021	49.61%
2019	19,141,501	14,498,000	4,643,501	28,726,006	50.47%
2020	20,111,161	15,058,000	5,053,161	28,268,208	53.27%
2021	20,812,130	15,061,000	5,751,130	25,903,031	58.14%
2022	22,727,069	17,610,000	5,117,069	25,260,815	69.71%
2023	23,748,105	17,196,000	6,552,105	24,526,732	70.11%
2024	26,128,351	19,386,000	6,742,351	24,070,977	80.54%

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

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 1.25% annual increases. The Fund’s payroll inflation assumption was 2.50% as of October 1, 2022. 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 1.25%

Remaining amortization period.

As of October 1, 2022 the effective amortization period is 24 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.

Investment rate of return

6.50%, net of pension plan investment expense, including inflation.

Section 5: GASB Information

Inflation rate

2.50%

Projected salary increases

2.80% - 7.50%, of which 2.50% is the Plan's long-term payroll inflation assumption.

Cost of living adjustments

Plan provisions contain a 3.00% COLA

Other information

Same as those used in the October 1, 2022 funding actuarial valuation.

Section 5: GASB Information

Exhibit 4: Pension expense

Components of pension expense	Current	Prior
Reporting date for employer under GASB 68	September 30, 2025	September 30, 2025
Measurement date	September 30, 2024	September 30, 2024
Service cost	\$8,736,819	\$8,023,179
Interest	37,718,965	35,721,919
Current-period benefit changes	0	0
Expensed portion of current-period difference between expected and actual experience in the Total Pension Liability	1,883,949	2,430,787
Expensed portion of current-period changes of assumptions	0	276,099
Member contributions	-2,854,000	-3,333,000
Projected earnings on pension plan investments	-17,995,543	-16,433,246
Expensed portion of current-period differences between actual and projected earnings on pension plan investments	-5,727,893	-3,133,550
Administrative expense	138,000	97,000
Other	0	0
Recognition of beginning of year deferred outflows of resources as pension expense	28,125,817	33,406,138
Recognition of beginning of year deferred inflows of resources as pension expense	-12,121,467	-10,742,277
Pension expense	\$37,904,647	\$46,313,049

Section 5: GASB Information

Deferred outflows of resources and deferred inflows of resources

Deferred Outflows and Inflows	Current	Prior
Reporting and measurement dates		
Reporting date for employer under GASB 68	September 30, 2025	September 30, 2024
Measurement date	September 30, 2024	September 30, 2023
Deferred outflows of resources		
Changes of assumptions	\$5,041,543	\$11,028,714
Net difference between projected and actual earnings on pension plan investments	0	10,053,331
Difference between expected and actual experience in the Total Pension Liability	12,009,819	16,046,102
Total deferred outflows of resources	\$17,051,362	\$37,128,147
Deferred inflows of resources		
Changes of assumptions	0	0
Net difference between projected and actual earnings on pension plan investments	15,071,231	0
Difference between expected and actual experience in the Total Pension Liability	0	0
Total deferred inflows of resources	\$15,071,231	\$0
Deferred outflows of resources and deferred inflows of resources related to pension will be recognized as follows:		
Reporting date for employer under GASB 68 year ended September 30:		
2025	N/A	\$16,004,350
2026	\$7,725,620	11,569,562
2027	8,843,844	12,687,786
2028	-8,861,442	-3,133,551
2029	-5,727,891	0
2030	0	0
Thereafter	0	0

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)	2024	2025	2026	2027	2028	2029	2030	Thereafter
2018	-\$2,054,491	7.00	-\$293,499	\$0	\$0	\$0	\$0	\$0	\$0	\$0
2019	17,044,608	6.00	2,840,768	0	0	0	0	0	0	0
2020	5,491,767	5.00	1,098,353	0	0	0	0	0	0	0
2021	9,965,234	5.00	1,993,047	1,993,047	0	0	0	0	0	0
2022	5,071,327	5.00	1,014,265	1,014,265	1,014,265	0	0	0	0	0
2023	9,464,327	4.00	2,366,082	2,366,082	2,366,082	0	0	0	0	0
2024	9,723,148	4.00	2,430,787	2,430,787	2,430,787	2,430,787	0	0	0	0
2025	5,651,847	3.00	N/A	1,883,949	1,883,949	1,883,949	0	0	0	0
Total¹			N/A	\$9,688,130	\$7,695,083	\$4,314,736	\$0	\$0	\$0	\$0

¹ Net increase (decrease) in pension expense

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)	2024	2025	2026	2027	2028	2029	2030	Thereafter
2018	\$9,950,689	7.00	\$1,421,527	\$0	\$0	\$0	\$0	\$0	\$0	\$0
2019	718,682	6.00	119,780	0	0	0	0	0	0	0
2020	-7,304,312	5.00	-1,460,862	0	0	0	0	0	0	0
2021	6,108,635	5.00	1,221,727	1,221,727	0	0	0	0	0	0
2022	11,440,746	5.00	2,288,149	2,288,149	2,288,149	0	0	0	0	0
2023	8,804,784	4.00	2,201,196	2,201,196	2,201,196	0	0	0	0	0
2024	1,104,396	4.00	276,099	276,099	276,099	276,099	0	0	0	0
2025	0	3.00	N/A	0	0	0	0	0	0	0
Total¹			N/A	\$5,987,171	\$4,765,444	\$276,099	\$0	\$0	\$0	\$0

¹ Net increase (decrease) in pension expense

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)	2024	2025	2026	2027	2028	2029	2030	Thereafter
2020	\$12,533,895	5.00	\$2,506,779	\$0	\$0	\$0	\$0	\$0	\$0	\$0
2021	6,100,070	5.00	1,220,014	1,220,014	0	0	0	0	0	0
2022	-44,939,578	5.00	-8,987,916	-8,987,916	-8,987,916	0	0	0	0	0
2023	65,572,256	5.00	13,114,451	13,114,451	13,114,451	13,114,451	0	0	0	0
2024	-15,667,754	5.00	-3,133,550	-3,133,551	-3,133,551	-3,133,551	-3,133,551	0	0	0
2025	-28,639,457	5.00	N/A	-5,727,893	-5,727,891	-5,727,891	-5,727,891	-5,727,891	0	0
Total¹			N/A	-\$3,514,895	-\$4,734,907	\$4,253,009	-\$8,861,442	-\$5,727,891	\$0	\$0

¹ Net increase (decrease) in pension expense

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	2024	2025	2026	2027	2028	2029	2030	Thereafter
2018	-\$5,219,891	\$1,128,028	\$0	\$0	\$0	\$0	\$0	\$0	\$0
2019	13,730,318	2,960,548	0	0	0	0	0	0	0
2020	10,721,350	2,144,270	0	0	0	0	0	0	0
2021	22,173,939	4,434,788	4,434,788	0	0	0	0	0	0
2022	-28,427,505	-5,685,502	-5,685,502	-5,685,502	0	0	0	0	0
2023	83,841,367	17,681,729	17,681,729	17,681,729	13,114,451	0	0	0	0
2024	-4,840,210	-426,664	-426,665	-426,665	-426,665	-3,133,551	0	0	0
2025	-22,987,610	N/A	-3,843,944	-3,843,942	-3,843,942	-5,727,891	-5,727,891	0	0
Total¹		N/A	\$12,160,406	\$7,725,620	\$8,843,844	-\$8,861,442	-\$5,727,891	\$0	\$0

¹ Net increase (decrease) in pension expense

Section 5: GASB Information

Schedule of reconciliation of Net Pension Liability

Item	Current	Prior
Reporting and measurement dates		
Reporting date for employer under GASB 68	September 30, 2025	September 30, 2024
Measurement date	September 30, 2024	September 30, 2023
Net Pension Liability		
Beginning Net Pension Liability	\$305,751,447	\$303,711,805
Pension expense	37,904,647	46,313,049
Employer contributions	-19,386,000	-17,196,000
New net deferred inflows/outflows	-19,143,666	-4,413,546
Recognition of prior deferred inflows/outflows	-16,004,350	-22,663,861
Ending Net Pension Liability	\$289,122,078	\$305,751,447

Appendix A: Definition of Pension Terms

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

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

Appendix A: Definition of Pension Terms

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

Appendix A: Definition of Pension Terms

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

Appendix A: Definition of Pension Terms

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