

Jacksonville Police and Fire Pension Fund

ACTUARIAL VALUATION REPORT AS OF
OCTOBER 1, 2020

ANNUAL EMPLOYER CONTRIBUTION FOR THE FISCAL YEAR
ENDING SEPTEMBER 30, 2022





April 12, 2021

Board of Trustees
Jacksonville Police and Fire Pension Fund
Jacksonville, Florida

Re: Jacksonville Police and Fire Pension Fund Actuarial Valuation as of October 1, 2020 and Actuarial Disclosures

Dear Trustees:

The results of the October 1, 2020 Annual Actuarial Valuation of the Jacksonville Police and Fire Pension Fund are presented in this report.

The computed contribution rates shown on page 1 may be considered as a minimum contribution rate that complies with the Board's funding policy. Users of this report should be aware that contributions made at that rate do not guarantee benefit security. Given the importance of benefit security to any retirement system, we suggest that contributions to the Fund in excess of those presented in this report be considered.

The contribution rate in this report is determined using the actuarial assumptions and methods disclosed in Section B of this report. This report does not include a robust assessment of the risks of future experience not meeting the actuarial assumptions, as the assessment of these risks was outside the scope of this assignment. We encourage a review and assessment of investment and other significant risks that may have a material effect on the Fund's financial condition.

This report was prepared at the request of the Board and is intended for use by the Retirement System and those designated or approved by the Board. This report may be provided to parties other than the Fund only in its entirety and only with the permission of the Board. GRS is not responsible for unauthorized use of this report.

The purposes of the valuation are to measure the System's funding progress, to determine the employer contribution rate for the fiscal year ending September 30, 2022, and to determine the actuarial information for Governmental Accounting Standards Board (GASB) Statement No. 67. This report should not be relied on for any purpose other than the purposes described herein. Determinations of financial results associated with the benefits described in this report, for purposes other than those identified above may be significantly different.

The findings in this report are based on data through July 1, 2020 and financial information through September 30, 2020. Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or

demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the Fund's funded status); and changes in plan provisions or applicable law. The scope of an actuarial valuation does not include an analysis of the potential range of such future measurements.

This valuation assumed the continuing ability of the plan sponsor to make the contributions necessary to fund this plan. A determination regarding whether or not the plan sponsor is actually able to do so is outside our scope of expertise and was not performed.

The actuarial information for GASB Statement No. 67 is intended to assist in preparation of the financial statements of the Plan. Financial statements are the responsibility of management, subject to the auditor's review. Please let us know if the auditor recommends any changes. Our calculation of the Net Pension Liability associated with the benefits described in this report was performed for the purpose of satisfying the requirements of GASB Statement No. 67. The Net Pension Liability is not an appropriate measure for measuring the sufficiency of plan assets to cover the estimated cost of settling the employer's benefit obligation. The Net Pension Liability is not an appropriate measure for assessing the need for or amount of future employer contributions. A calculation of the plan's liability for purposes other than satisfying the requirements of GASB Statement No. 67 may produce significantly different results.

The valuation was based upon information furnished by the Executive Director concerning Retirement Plan benefits, financial transactions, plan provisions and active members, terminated members, retirees and beneficiaries. We checked for internal and year-to-year consistency, but did not otherwise audit the data. We are not responsible for the accuracy or completeness of the information provided by the Executive Director.

In addition, this report was prepared using certain assumptions and methods approved by the Board and prescribed by the Florida Statutes as described in the section of this report entitled Actuarial Assumptions and Cost Methods. The prescribed assumptions are the assumed mortality rates detailed in the Actuarial Assumptions and Cost Methods section in accordance with Florida House Bill 1309 (codified in Chapter 2015-157). The prescribed methods include the use of an initial 30-year amortization period for amortizing the unfunded liability as required under Florida Statute 112.64(6)(a), the recognition of the present value of future Pension Liability Surtax proceeds as required by Florida Statute 112.64(6), and the use of a payroll growth assumption to amortize the unfunded liability as required under Florida Statute 112.64(6)(b). Additional information and disclosures regarding these prescribed methods can be found on pages 5 and 6 of this actuarial valuation report.

This report was prepared using ProVal's valuation model, a software product of Winklevoss Technologies. We are relying on the ProVal model. We performed tests of the ProVal model with this assignment and made a reasonable attempt to understand the developer's intended purpose of, general



operation of, major sensitivities and dependencies within, and key strengths and limitations of the ProVal model. In our professional judgment, the ProVal valuation model has the capability to provide results that are consistent with the purposes of the valuation and has no material limitations or known weaknesses.

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

Peter N. Strong and Jeffrey Amrose are members of the American Academy of Actuaries. These actuaries meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained herein. The signing actuaries are independent of the plan sponsor.

This actuarial valuation and/or cost determination was prepared and completed by us or under our direct supervision, and we acknowledge responsibility for the results. To the best of our knowledge, the results are complete and accurate. In our opinion, the techniques and assumptions used are reasonable, meet the requirements and intent of Part VII, Chapter 112, Florida Statutes, and are based on generally accepted actuarial principles and practices, with some exceptions noted on pages 5 and 6 under the section entitled "Disclosures Regarding the Pension Liability Surtax and Florida Statute 112.64(6)." There is no benefit or expense to be provided by the plan and/or paid from the Fund'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.

Gabriel, Roeder, Smith & Company will be pleased to review this valuation report with the Board of Trustees and to answer any questions pertaining to the valuation.

Respectfully submitted,

GABRIEL, ROEDER, SMITH AND COMPANY



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TABLE OF CONTENTS

<u>Section</u>	<u>Title</u>	<u>Page</u>
A	Discussion of Valuation Results	
	1. Discussion of Valuation Results	1
	2. Risks Associated with the Measuring the Accrued Liability and Actuarially Determined Contribution	7
	3. Original versus Current Projection of Pension Liability Surtax	10
B	Valuation Results	
	1. Participant Data	11
	2. Actuarially Determined Contribution	12
	3. Actuarial Value of Benefits and Assets	13
	4. Calculation of Employer Normal Cost	14
	5. Pension Liability Surtax Estimates	15
	6. Unfunded Actuarial Accrued Liability	16
	7. Actuarial Gains and Losses	18
	8. Recent History of Valuation Results	23
	9. Recent History of Required and Actual Contributions	24
	10. Actuarial Assumptions and Cost Method	25
	11. Glossary of Terms	32
C	Pension Fund Information	
	1. Statement of Plan Assets at Market Value	35
	2. Reconciliation of Plan Assets	36
	3. Reserve Account Balances	37
	4. Actuarial Value of Assets	39
	5. Investment Rate of Return	40
D	Financial Accounting Information	
	1. FASB No. 35	41
	2. GASB No. 67	42
E	Projection of Assets, Liabilities and Contribution Requirements	
	1. 41-Year Projections	56
F	Miscellaneous Information	
	1. Reconciliation of Membership Data	60
	2. Age/Service/Salary Distributions	61
G	Summary of Plan Provisions	63

SECTION A

DISCUSSION OF VALUATION RESULTS

DISCUSSION OF VALUATION RESULTS

Closed Plan

In reviewing this Report, it is important for the reader to keep in mind that this Fund has been closed to new members since October 1, 2017. One consequence of this closure is that the annual payment on the unfunded accrued liability will tend to increase as a percentage of covered payroll over time, as such payroll decreases from year to year. Starting with the fiscal year ending September 30, 2018, it is our understanding that the Plan sponsor has been and will continue to be contributing the dollar amount of the calculated required employer contribution.

Comparison of Required Employer Contributions

The required employer contribution developed in this year's valuation is compared below to the last valuation.

	For FYE 9/30/22 Based on 10/1/2020 Valuation (if contributed on 12/1/2021)	For FYE 9/30/21 Based on 10/1/2019 Valuation (if contributed on 12/1/2020)
Required Employer Contribution* As % of Contribution Year Payroll	\$ 157,352,434 88.23 %	\$ 148,475,947 83.27 %

*This does not reflect the potential use of reserves that have been allocated to the City that may be used to offset the City's required contribution amount. Approximately \$16.3 million in reserves are available for use by the City as of October 1, 2020.

Payment of Required Contribution

The required employer contributions developed in this valuation have been calculated as though the payment is contributed on December 1.

The actual employer (City) contributions for the year ending September 30, 2020 were \$140,292,637, which includes the use of \$16,964,149 from the City's Contribution Reserve Account. The required employer contributions for the year ending September 30, 2020 were \$140,292,637.

Revisions in Benefits

There have been no changes in benefits since the previous valuation.

Revisions in Funding Policy

There have been no changes in funding policy since the previous valuation.



Revisions in Actuarial Assumptions and Methods

The amortization period for new amortization bases is reduced from 28 years to 27 years this year, and it will continue to be reduced by one year each year until reaching 15 years.

Florida Statutes Chapter 112.63(1)(f) mandates the use of the mortality tables used in either of the two most recently published actuarial valuation reports of the Florida Retirement System (FRS). The FRS updated its mortality assumption in the July 1, 2019 Actuarial Valuation. The previous FRS mortality tables for Special Risk Class members were the RP 2000 Combined Healthy Participant Mortality Table (for pre-retirement mortality) and the RP 2000 Mortality Table for Annuitants (for postretirement mortality), with mortality improvements projected to all future years after 2000 using Scale BB. For males, the base mortality rates included a 90% blue collar adjustment and a 10% white collar adjustment. For females, the base mortality rates included a 100% white collar adjustment. The current FRS mortality table for Special Risk Class members is the Pub-2010 Headcount-Weighted Mortality Tables for Safety Participants, with ages set forward 1 year and mortality improvements projected to all future years after 2010 using scale MP-2018. For males, the mortality tables are based on the Below-Median versions of the given table.

Based on the Assumption Study and Experience Review for the Six Years Ended September 30, 2020, dated October 22, 2020, the following assumption changes are adopted:

- Changes in the salary increase rate assumptions from uniform rates (3.5% per year) to a table of rates that vary by the completed years of service (varying from 2.75% to 11.50%);
- Changes in the assumed rates of retirement reflecting actual experience observed over the six-year period ending September 30, 2020;
- Changes in the assumed rates of separation from active membership (withdrawal) reflecting actual experience observed over the six-year period ending September 30, 2020;
- Changes in the assumed rates of disability reflecting actual experience observed over the six-year period ending September 30, 2020; and,
- A change in the assumed survivor rates and survivor age differences including:
 - For all retirees (current and future), assume a 65% probability that the 75% survivor benefit will be paid after the death of the retiree (a change from the prior assumption that 75% of future retirees, who are currently active, would be married and that survivor benefits for current retirees would only be paid to survivors of retirees with a “married” marital tax status, which is about 50% of current retirees);
 - For active member death-in-service benefits, assume 50% of active member deaths will have a surviving spouse and an additional 20% of active member deaths will have an eligible orphaned child (a change from the prior assumption that 75% of active members were assumed to have survivor benefits with no explicit assumption for orphaned children); and
 - For all active and retired members, assume male members are 5 years older than their surviving spouse and female members are 5 years younger than their surviving spouse (a change from the prior assumption of a 3-year age difference).

The net effect of the above demographic assumption changes (including the mortality assumption change) caused the required City contribution for FY 2022 to decrease by \$486,388.

The assumed investment return assumption has been reduced by 0.1% from 7.0% per annum to



6.9% per annum, compounded annually and net of investment expenses. This assumption change alone caused the required City contribution for FY 2022 to increase by \$3,590,077.

The net impact of all of the above assumption changes caused the required City contribution for FY 2022 to increase by \$3,103,689.

Actuarial Experience

There were net actuarial experience losses totaling approximately \$84.6 million during the past year, which means that actual experience was less favorable than expected.

The majority of the experience loss was due to changes in the projected Pension Liability Surtax proceeds (of approximately \$73.8 million). This was primarily caused by a 2.15% decrease in actual surtax revenue from FY 2019 to FY 2020 (approximately \$59.2 million of the \$73.8 million). The surtax revenue is assumed to increase by 4.25% per year. In addition, the pro rata share of the Proceeds decreased since the previous valuation. The allocation percentage is updated each year by the City based on the relative unfunded actuarial liabilities for all of the City's pension plans. Based on each pension plans' respective October 1, 2019 actuarial valuation, the pro rata share of the Proceeds for the Jacksonville Police and Pension Fund is 58.3% as of October 1, 2020. In the previous valuation, the pro rata share of the Proceeds was 59.26%. This change caused the remaining \$14.6 million experience loss due to changes in the projected Pension Liability Surtax proceeds. Overall changes in the projected Pension Liability Surtax caused the required City contribution to increase by \$5,241,655.

Investment experience (on the Actuarial Value of Assets) resulted in an experience loss (net of reserves) of about \$7.5 million. The investment return on the smoothed Actuarial Value of Assets was 6.50% compared to the assumed annual investment return of 7.0%. (The net money-weighted investment return on the Market Value of Assets was 7.98%, as reported by the Plan's investment consultant.) Investment gains and losses are spread over a five-year smoothing period, with gains and losses from prior years being smoothed into the current year. The smoothed investment gains from the current year and from FY 2018 only partially offset the large investment loss from FY 2019.

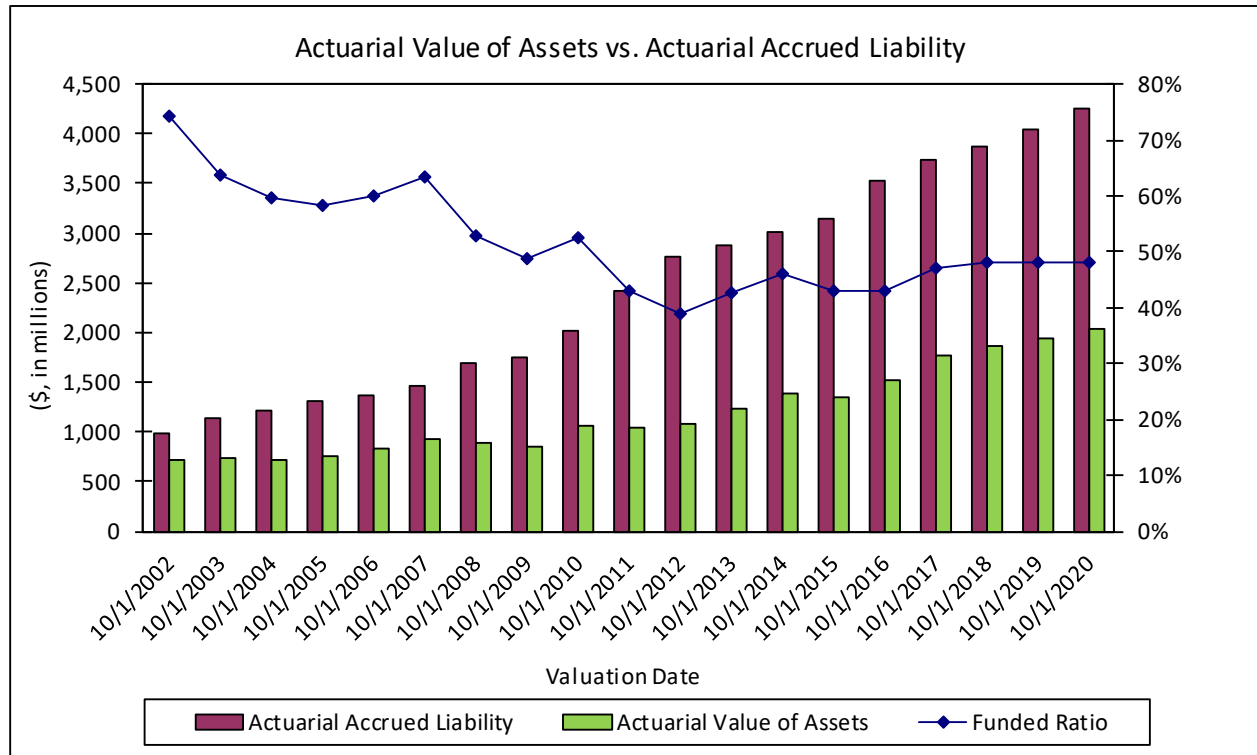
Overall demographic experience resulted in a net experience loss of about \$3.3 million. There were demographic experience losses due to turnover experience being lower than expected (11 actual employment terminations versus 24 expected), lower inactive mortality experience than expected (40 actual retiree deaths versus 50 expected), more surviving spouses than expected (25 actual versus 15 expected among the 40 retiree deaths) with surviving spouses being younger than expected (average age difference was 5 years actual versus 3 years expected), and data adjustments (from service purchases and rehires). There were also some offsetting demographic experience gains due to retirement experience being lower than expected (56 actual retirements versus 92 expected) and slightly lower salary increases than expected (3.4% actual versus 3.5% assumed).

Overall, the net actuarial experience loss caused the required City contribution to increase by \$6,006,562.



Funded Ratio

The funded ratio is equal to the actuarial value of assets divided by the actuarial accrued (past service) liability. This year's funded ratio is 47.98% compared to 48.23% last year. Prior to reflecting the assumption changes, the funded ratio would have been 48.63%. Below is a historical comparison of the total actuarial value of assets versus the total actuarial accrued liability:



Analysis of Employer Contribution

The components of change in the required City contribution are as follows:

Required Contribution Payable December 1, 2020	\$ 148,475,947
Experience (Gains) or Losses	
Investment Experience	530,236
Change in Projected Pension Liability Surtax Experience	5,241,655
Other Sources Experience	234,671
Revision in Assumptions	3,103,689
Amortization Payment on UAAL	889,538
Change in Net Employer Normal Cost	69,272
Administrative/Investment Expenses	(1,379,389)
Court Fines	186,815
Benefit Changes	0
Required Contribution Payable December 1, 2021	\$ 157,352,434



The change in the contribution rate attributed to the Amortization Payment on the UAAL was caused by the 1.25% payroll growth rate used in the UAAL amortization (UAAL payments are scheduled to increase by 1.25% per year) and the contribution lag (the contribution rate determined in the October 1, 2018 actuarial valuation was contributed during the fiscal year ending September 30, 2020, and this contribution rate was lower than the contribution rate calculated as of October 1, 2019).

Required Contributions in Later Years

It is important to keep in mind that under the asset smoothing method, gains and losses are recognized over five years. As of September 30, 2020, the actuarial value of assets exceeded the market value by \$20,984,140. This difference will be gradually recognized in the absence of offsetting gains. In turn, the computed employer contribution rate is expected to increase by approximately \$1.5 million.

Relationship to Market Value

If Market Value had been the basis for the valuation, the required City contribution would have been \$158,828,673 and the funded ratio would have been 47.49%. In the absence of other gains and losses or other changes, the City contribution rate is expected to increase towards this level over the next few years.

Disclosures Regarding the Pension Liability Surtax and Florida Statute 112.64(6)

The annual pension liability surtax revenue is projected to increase 4.25% annually from calendar year 2020 to calendar year 2060. This assumption was set by the City of Jacksonville. Assumptions regarding future growth in municipal sales tax revenues fall outside of our area of expertise. Since municipal finance projections fall outside of our area of expertise, we are unable to assess the reasonableness of the City's 4.25% annual surtax growth assumption. However, it should be noted that actual surtax revenue growth over the past four years has fallen behind this assumption (at 3.13% per year).

Ordinance 2017-257 implemented changes required to reflect the present value of the City of Jacksonville's pension liability surtax, in accordance with Florida Statute 112.64(6). Reflecting the pension liability surtax offsets the Fund's current UAAL by the present value of a future revenue stream (generated by the pension liability surtax) to be received by the Fund in calendar years 2031 through 2060. This delays the Fund's projected full funding date until almost the fiscal year 2060 and results in annual contributions to the Fund in fiscal years 2018 through 2030 which are significantly lower than the recommended contribution levels would be to ensure the Fund accumulates adequate assets to make all benefit payments (in the absence of the pension liability surtax). The maintenance of a minimum liquidity ratio (defined as the market value of assets divided by the annual benefit payments), as described in Ordinance 2017-259, will likely help prevent an insolvency in the event the Fund incurs adverse experience, but this is dependent upon the minimum liquidity ratio being adhered to. A full analysis of the impact of the liquidity ratio was outside of the scope of this assignment.

We are unable to assess the risk that the timing and/or amount of future pension liability surtax proceeds may significantly deviate from the projections (due to legal challenges, economic hardships, or any other reason). Any such deviations could have a significant impact on the required contribution amount shown herein and on the future solvency risk that the Fund's future assets may be insufficient to cover all future benefit payments.



The long-term payroll growth assumption for purposes of amortizing the UAAL and projecting the contribution amount to the contribution year (the year beginning one year after the valuation date) is 1.25%. For a closed pension fund, it is our recommendation to use a 0% payroll growth assumption. Based on our understanding, Florida Statute 112.64(6)(b) requires the future payroll of police officers and firefighters expected to be hired after October 1, 2017 (who will not become members of the Fund) to be included when setting this assumption. This is a prescribed method under Florida Statutes for setting this assumption which deviates from our recommended practice for closed pension funds. The 1.25% assumption was set based on the projected 10-year compound average payroll growth rate through 2021. Please refer to our experience study report on the payroll growth assumption dated April 4, 2017 for additional information and background on this assumption.

In conjunction with offsetting the UAAL by the present value of the pension liability surtax, Florida Statute 112.64(6)(a) requires the use of an initial 30-year amortization period for amortizing the UAAL. It is important to note that the average expected future service of current active members is 8.86 years, which is far less than the required initial 30-year amortization period. Though required, a long amortization period carries more risk, especially in a closed plan, and the funded status could deteriorate in the short run. Furthermore, amortizing the UAAL over an initial period of 30 years (currently 27 years) is likely to transfer costs to future taxpayers, which would deviate from language in Florida Statute 112.61 which says *“Accordingly, except as herein provided, it is the intent of this act to prohibit the use of any procedure, methodology, or assumptions the effect of which is to transfer to future taxpayers any portion of the costs which may reasonably have been expected to be paid by the current taxpayers.”* When combined with advance recognition of the pension liability surtax, it is our opinion that current costs are likely to be transferred to future taxpayers under this arrangement.

Conclusion

It is important to note that the Fund’s assets are insufficient to cover the actuarial liabilities for inactive members. As of October 1, 2020 the market value of assets, net of reserves, is approximately \$2.02 billion, and the actuarial liability for current inactive members is approximately \$3.14 billion. Given the low funded ratio and the fact that the pension liability surtax revenues will not be received until more than 10 years from now, it is advisable to consider making contributions to the Fund in excess of the minimum required contribution shown in this report.

In consideration of Actuarial Standard of Practice No. 51 regarding the assessment of risks, which is addressed on the next three pages, we recommend a numerical risk assessment to be conducted at least once every 3 to 5 years.

The remainder of this Report includes detailed actuarial valuation results, information relating to the pension fund, financial accounting information, miscellaneous employee data and summaries of Plan provisions.



RISKS ASSOCIATED WITH THE MEASURING THE ACCRUED LIABILITY AND ACTUARIALLY DETERMINED CONTRIBUTION

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

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

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

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

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

The computed contribution rate shown on page 1 may be considered as a minimum contribution rate that complies with the Board's funding policy. The timely receipt of the actuarially determined contributions is critical to support the financial health of the plan. Users of this report should be aware that contributions made at the actuarially determined rate do not necessarily guarantee benefit security.



PLAN MATURITY MEASURES

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

	<u>2020</u>	<u>2019</u>
Ratio of the net market value of assets to payroll	11.60	10.91
Ratio of actuarial accrued liability to payroll	24.42	23.18
Ratio of actives to retirees and beneficiaries	0.73	0.76
Ratio of net cash flow to market value of assets (net of reserves)	(1.7%)	(1.9%)
Duration of the actuarial accrued liability	14.54	14.52

RATIO OF MARKET VALUE OF ASSETS TO PAYROLL

The relationship between assets and payroll is a useful indicator of the potential volatility of contributions. For example, if the market value of assets is 2.0 times the payroll, a return on assets 5% different than assumed would equal 10% of payroll. A higher (lower) or increasing (decreasing) level of this maturity measure generally indicates a higher (lower) or increasing (decreasing) volatility in plan sponsor contributions as a percentage of payroll. We note that this ratio for the Jacksonville Police and Fire Pension Fund (11.60) is higher than it is for most other plans we work with, which means the required contributions as a percentage of payroll are more volatile than most other plans.

RATIO OF ACTUARIAL ACCRUED LIABILITY TO PAYROLL

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

The ratio of liability to payroll may also be used as a measure of sensitivity of the liability itself. For example, if the actuarial accrued liability is 2.5 times the payroll, a change in liability 2% other than assumed would equal 5% of payroll. A higher (lower) or increasing (decreasing) level of this maturity measure generally indicates a higher (lower) or increasing (decreasing) volatility in liability (and also plan sponsor contributions) as a percentage of payroll. We note that this ratio for the Jacksonville Police and Fire Pension Fund (24.42) is significantly higher than it is for most of the plans we work with, which means the changes in liability and required contributions are more volatile than most other plans.

RATIO OF ACTIVES TO RETIREES AND BENEFICIARIES

A young plan with many active members and few retirees will have a high ratio of active to retirees. A mature open plan may have close to the same number of actives to retirees resulting in a ratio near 1.0. A super-mature or closed plan may have significantly more retirees than actives resulting in a ratio below 1.0. This ratio for the Jacksonville Police and Fire Pension Fund (0.73) is less than 1.0, indicating it is super-mature. The fact that the Fund is closed has not had much impact on this ratio yet.



RATIO OF NET CASH FLOW TO MARKET VALUE OF ASSETS

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

DURATION OF ACTUARIAL ACCRUED LIABILITY

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

ADDITIONAL RISK ASSESSMENT

Additional risk assessment is outside the scope of the annual actuarial valuation. Additional assessment may include scenario tests, sensitivity tests, stochastic modeling, stress tests, and a comparison of the present value of accrued benefits at low-risk discount rates with the actuarial accrued liability. In consideration of the size of the Jacksonville Police and Fire Pension Fund and the long-term manner in which it is being funded (in part by pension liability surtax proceeds through 2060), we recommend a numerical risk assessment be conducted at least once every 3 to 5 years.

ORIGINAL VERSUS CURRENT PROJECTION OF PENSION LIABILITY SURTAX

PENSION LIABILITY SURTAX ESTIMATES 4.25% GROWTH						
Fiscal Year	Original Projection of Pension Liability Surtax			Current Projection of Pension Liability Surtax		
	Projected Total 1/2-Penny Sales Tax*	Projected Pension Liability Surtax	63% of Revenue for Police and Fire Pension Fund	Projected Total 1/2-Penny Sales Tax*	Projected Pension Liability Surtax	58.3% of Revenue for Police and Fire Pension Fund
2016	\$ 82,875,723			\$ 82,875,723		
2017	<i>86,397,941</i>			86,148,000		
2018	<i>90,069,854</i>			91,529,277		
2019	<i>93,897,823</i>			95,804,756		
2020	<i>97,888,480</i>			93,742,144		
⋮	⋮			⋮		
⋮	⋮			⋮		
2031	<i>154,727,777</i>	\$ 116,045,832	\$ 73,108,874	<i>148,173,856</i>	\$ 111,130,392	\$ 64,789,018
2032	<i>161,303,707</i>	161,303,707	101,621,335	<i>154,471,245</i>	154,471,245	90,056,736
2033	<i>168,159,115</i>	168,159,115	105,940,242	<i>161,036,273</i>	161,036,273	93,884,147
⋮	⋮	⋮	⋮	⋮	⋮	⋮
⋮	⋮	⋮	⋮	⋮	⋮	⋮
2059	<i>496,247,197</i>	496,247,197	312,635,734	<i>475,227,281</i>	475,227,281	277,057,505
2060	<i>517,337,703</i>	517,337,703	325,922,753	<i>495,424,441</i>	495,424,441	288,832,449
2061	<i>539,324,556</i>	134,831,139	84,943,617	<i>516,479,980</i>	129,119,995	75,276,957
Total Proceeds from 1/1/31-12/31/60:		\$ 9,105,159,243	\$ 5,736,250,323		\$ 8,758,102,976	\$ 5,105,974,035
Net Present Value** of Proceeds as of 10/1/20:		\$ 1,618,876,410	\$ 1,019,892,139		\$ 1,559,514,060	\$ 909,196,697
<i>Change in Total Proceeds from Original to Current Projection:</i>					<i>\$ (347,056,267)</i>	<i>\$ (630,276,288)</i>
<i>Change in Net Present Value of Proceeds from Original to Current Projection:</i>					<i>\$ (59,362,350)</i>	<i>\$ (110,695,442)</i>

*Numbers in **bold** are actual numbers; numbers in *italics* are projected.

** The Present Value of the Original Projection of Pension Liability Surtax has been adjusted using 6.90% interest rate.

The actual surtax revenue has increased by an average of 3.13% per year from FY 2016 to FY 2020, which is trending lower than the 4.25% assumption. Also, the percentage of the Pension Liability Surtax (PLS) allocated to the Police and Fire Fund (versus the City's other two pension plans) has declined from 63.0% (initially) to 58.3% (currently). The impact of these two variables on the required City contribution and the percentage of the Actuarial Accrued Liability (AAL) covered by the sum of current assets and the present value of the PLS proceeds are shown below:

	If Original Projection Held (4.25%/yr Growth; 63.0% Allocation)	Reflecting Actual Surtax Growth (≈ 3.13%/yr); Original 63.0% Allocation	Reflecting Actual Surtax Growth (≈ 3.13%/yr); Actual 58.3% Allocation
Required City Contribution Payable			
December 1, 2021	\$ 149,564,981	\$ 152,195,960	\$ 157,352,434
<i>Impact of Change on Valuation Results</i>	<i>\$ 7,787,453</i>	<i>\$ 5,156,474</i>	<i>N/A</i>
Percentage of AAL covered by Assets and PLS	71.96 %	71.08 %	69.36 %
<i>Impact of Change on Valuation Results</i>	<i>(2.60) %</i>	<i>(1.72) %</i>	<i>N/A</i>



SECTION B

VALUATION RESULTS

PARTICIPANT DATA¹		
	October 1, 2020	October 1, 2019
ACTIVE MEMBERS		
Number	2,236	2,301
Annual Payroll	\$ 174,616,271	\$ 174,694,254
Average Annual Payroll	\$ 78,093	\$ 75,921
Average Age	41.0	40.3
Average Past Service	12.5	11.7
Average Age at Hire	28.5	28.6
RETIREES, BENEFICIARIES & DROP		
Number	3,021	2,997
Annual Benefits ²	\$ 179,768,850	\$ 172,934,409
Average Annual Benefit ²	\$ 59,506	\$ 57,703
Average Age	65.1	64.7
DISABILITY RETIREES		
Number	46	48
Annual Benefits	\$ 1,972,096	\$ 2,011,248
Average Annual Benefit	\$ 42,872	\$ 41,901
Average Age	63.3	62.5
TERMINATED VESTED MEMBERS		
Number	83	82
Annual Benefits	\$ 1,435,275	\$ 1,377,864
Average Annual Benefit	\$ 17,292	\$ 16,803
Average Age	44.1	43.1

¹Participant data is collected as of July 1.

²Not including distributions or installment payments from DROP accounts.

ACTUARIALLY DETERMINED CONTRIBUTION (ADC)			
A. Valuation Date	October 1, 2020 <i>After Assumption Changes</i>	October 1, 2020 <i>Before Changes</i>	October 1, 2019
B. ADC to Be Paid During Fiscal Year Ending	9/30/2022	9/30/2022	9/30/2021
C. Assumed Date of Employer Contributions	12/1/2021	12/1/2021	12/1/2020
D. Expected Covered Payroll for the Year Beginning on the Valuation Date	\$ 174,185,559	\$ 173,997,301	\$ 174,124,935
E. Annual Payment to Amortize Unfunded Actuarial Liability	90,939,160	89,231,150	82,496,560
F. Employer Normal Cost	63,271,186	61,924,248	63,203,681
G. ADC if Paid on the Valuation Date: E + F	154,210,346	151,155,398	145,700,241
H. Contributions from Court Fines	519,212	519,212	701,652
I. City Contribution: G - H as % of Covered Payroll	153,691,134 88.23 %	150,636,186 86.57 %	144,998,589 83.27 %
J. Actuarially Determined Contribution (ADC) in Contribution Year*	157,352,434	154,248,745	148,475,947

* = City Contribution (item I.) x (1+payroll growth of 1.25%) x (1+interest rate) ^ (2/12)



ACTUARIAL VALUE OF BENEFITS AND ASSETS			
A. Valuation Date	October 1, 2020 <i>After Assumption Changes</i>	October 1, 2020 <i>Before Changes</i>	October 1, 2019
B. Actuarial Present Value of All Projected Benefits for			
1. Active Members			
a. Service Retirement Benefits	\$ 1,590,209,562	1,593,082,758	\$ 1,541,568,972
b. Vesting Benefits	54,786,043	31,357,557	32,124,302
c. Disability Benefits	19,644,291	26,090,324	26,549,450
d. Preretirement Death Benefits	9,919,581	16,182,639	16,586,522
e. Return of Member Contributions	670,505	775,054	877,311
f. Total	<u>1,675,229,982</u>	<u>1,667,488,332</u>	<u>1,617,706,557</u>
2. Inactive Members			
a. Service Retirees	2,512,290,468	2,413,457,485	2,299,596,668
b. DROP Retirees	370,825,433	363,825,454	409,446,434
c. Disability Retirees	30,134,014	27,806,630	28,434,818
d. Beneficiaries	208,871,260	222,209,044	207,605,486
e. Terminated Vested Members	21,753,741	21,042,162	19,131,781
f. Total	<u>3,143,874,916</u>	<u>3,048,340,775</u>	<u>2,964,215,187</u>
3. Total for All Members	4,819,104,898	4,715,829,107	4,581,921,744
C. Actuarial Accrued (Past Service) Liability			
1. Active Members	1,109,650,498	1,149,159,421	1,072,709,930
2. Inactive Members	3,143,874,916	3,048,340,775	2,964,215,187
3. Total for All Members	<u>4,253,525,414</u>	<u>4,197,500,196</u>	<u>4,036,925,117</u>
D. Actuarial Value of Accumulated Plan Benefits per FASB No. 35	4,082,580,032	4,006,046,619	3,805,435,833
E. Plan Assets			
1. Gross Market Value of Assets	2,054,799,648	2,054,799,648	1,958,615,310
2. Reserve Accounts, including Share Plan	(30,657,546)	(30,657,546)	(54,902,408)
3. Sr. Staff Plan Assets	(4,077,179)	(4,077,179)	(4,359,959)
4. Net Market Value of Assets	<u>2,020,064,923</u>	<u>2,020,064,923</u>	<u>1,899,352,943</u>
5. Actuarial Value of Assets	2,041,049,063	2,041,049,063	1,946,967,113
F. Total Unfunded Actuarial Accrued Liability: C3 - E5	2,212,476,351	2,156,451,133	2,089,958,004
G. Net Present Value of Total Pension Liability Surtax Proceeds According to Pro Rata Share	909,196,697	889,556,058	900,348,997
H. Net Unfunded Actuarial Accrued Liability: F - G	1,303,279,654	1,266,895,075	1,189,609,007
I. Actuarial Present Value of Projected Covered Payroll	1,371,738,900	1,302,231,230	1,366,185,181
J. Funded Ratio: E5 / C3	47.98%	48.63%	48.23%
K. Percent of Actuarial Accrued Liability Covered by Assets and Total Pension Liability Surtax Proceeds: (G + E5) / C3	69.36%	69.82%	70.53%
L. Liquidity Ratio			
1. DROP Balance as of Valuation Date	366,880,377	366,880,377	357,699,120
2. Net Market Value (Net of DROP): E4 - L1	1,653,184,546	1,653,184,546	1,541,653,823
3. Annual Benefit Payments in Pay Status	181,740,946	181,740,946	174,945,657
4. Ratio: L2 : L3	9.10 : 1	9.10 : 1	8.81 : 1



CALCULATION OF EMPLOYER NORMAL COST

A. Valuation Date	October 1, 2020 <i>After Assumption Changes</i>	October 1, 2020 <i>Before Changes</i>	October 1, 2019
B. Expected Covered Payroll for the Year Beginning on the Valuation Date	\$ 174,185,559	\$ 173,997,301	\$ 174,124,935
C. Normal Cost (Individual Entry Age) for			
1. Service Retirement Benefits	64,087,839	63,112,098	63,159,812
2. Vesting Benefits	4,832,866	3,309,375	3,280,083
3. Disability Benefits	1,439,433	1,964,046	1,974,214
4. Preretirement Death Benefits	937,929	1,465,665	1,472,823
5. Return of Member Contributions	149,975	231,094	223,000
6. Total for Future Benefits	<u>71,448,042</u>	<u>70,082,278</u>	<u>70,109,932</u>
7. Assumed Amount for Expenses	<u>9,781,386</u>	<u>9,781,386</u>	<u>11,128,468</u>
8. Total Normal Cost	81,229,428	79,863,664	81,238,400
D. Expected Member (including DROP) Contribution	17,958,242	17,939,416	18,034,719
E. Employer Normal Cost: C8 - D	63,271,186	61,924,248	63,203,681
F. Employer Normal Cost as a % of Covered Payroll: E / B	36.32%	35.59%	36.30%



**PENSION LIABILITY SURTAX ESTIMATES
4.25% GROWTH**

<u>Fiscal Year</u>	<u>Projected Total 1/2-Penny Sales Tax</u>	<u>Projected Pension Liability Surtax</u>	<u>58.3% of Revenue for Police and Fire Pension Fund</u>
2020	\$ 93,742,144		
2021	97,726,185		
2022	101,879,548		
2023	106,209,429		
2024	110,723,330		
2025	115,429,071		
2026	120,334,807		
2027	125,449,036		
2028	130,780,620		
2029	136,338,796		
2030	142,133,195		
2031	148,173,856	\$ 111,130,392	\$ 64,789,018
2032	154,471,245	154,471,245	90,056,736
2033	161,036,273	161,036,273	93,884,147
2034	167,880,314	167,880,314	97,874,223
2035	175,015,227	175,015,227	102,033,878
2036	182,453,375	182,453,375	106,370,317
2037	190,207,643	190,207,643	110,891,056
2038	198,291,468	198,291,468	115,603,926
2039	206,718,855	206,718,855	120,517,093
2040	215,504,407	215,504,407	125,639,069
2041	224,663,344	224,663,344	130,978,730
2042	234,211,536	234,211,536	136,545,326
2043	244,165,526	244,165,526	142,348,502
2044	254,542,561	254,542,561	148,398,313
2045	265,360,620	265,360,620	154,705,241
2046	276,638,446	276,638,446	161,280,214
2047	288,395,580	288,395,580	168,134,623
2048	300,652,393	300,652,393	175,280,345
2049	313,430,119	313,430,119	182,729,760
2050	326,750,899	326,750,899	190,495,774
2051	340,637,813	340,637,813	198,591,845
2052	355,114,920	355,114,920	207,031,998
2053	370,207,304	370,207,304	215,830,858
2054	385,941,114	385,941,114	225,003,669
2055	402,343,611	402,343,611	234,566,325
2056	419,443,215	419,443,215	244,535,394
2057	437,269,551	437,269,551	254,928,149
2058	455,853,507	455,853,507	265,762,595
2059	475,227,281	475,227,281	277,057,505
2060	495,424,441	495,424,441	288,832,449
2061	516,479,980	129,119,995	75,276,957
Total Proceeds from 2031-2061:		\$ 8,758,102,976	\$ 5,105,974,035
Net Present Value of Proceeds as of 10/1/20:			
Before Changes (at 7% interest):		\$ 1,525,825,142	\$ 889,556,058
After Changes (at 6.9% interest):		\$ 1,559,514,060	\$ 909,196,697



LIQUIDATION OF THE UNFUNDED ACTUARIAL ACCRUED LIABILITY

Before Changes

UAAL AMORTIZATION PERIOD AND PAYMENTS						
Original UAAL				Current UAAL*		
Date Established	Type of Amortization Base	Amortization Period (Years)	Amount	Years Remaining	Amount	Payment
10/1/2016	Fresh Start	30	\$ 1,243,587,908	26	\$ 1,184,787,848	\$ 83,537,392
10/1/2017	Experience (Gain)/Loss	30	(102,449,877)	27	(101,833,989)	(7,061,718)
10/1/2017	Assumption Changes	30	67,640,845	27	67,234,216	4,662,383
10/1/2018	Experience (Gain)/Loss	30	(19,072,874)	27	(19,004,915)	(1,317,903)
10/1/2018	Method Change	29	15,507,222	27	15,451,967	1,071,523
10/1/2019	Experience (Gain)/Loss	28	33,690,255	27	33,522,920	2,324,660
10/1/2019	Benefit Change	28	2,158,327	27	2,147,607	148,927
10/1/2020	Experience (Gain)/Loss	27	<u>84,589,421</u>	27	<u>84,589,421</u>	<u>5,865,886</u>
			1,325,651,227		1,266,895,075	89,231,150

After Assumption Changes

UAAL AMORTIZATION PERIOD AND PAYMENTS						
Original UAAL				Current UAAL*		
Date Established	Type of Amortization Base	Amortization Period (Years)	Amount	Years Remaining	Amount	Payment
10/1/2016	Fresh Start	30	\$ 1,243,587,908	26	\$ 1,184,787,848	\$ 82,797,192
10/1/2017	Experience (Gain)/Loss	30	(102,449,877)	27	(101,833,989)	(6,997,354)
10/1/2017	Assumption Changes	30	67,640,845	27	67,234,216	4,619,888
10/1/2018	Experience (Gain)/Loss	30	(19,072,874)	27	(19,004,915)	(1,305,891)
10/1/2018	Method Change	29	15,507,222	27	15,451,967	1,061,756
10/1/2019	Experience (Gain)/Loss	28	33,690,255	27	33,522,920	2,303,472
10/1/2019	Benefit Change	28	2,158,327	27	2,147,607	147,569
10/1/2020	Experience (Gain)/Loss	27	84,589,421	27	84,589,421	5,812,422
10/1/2020	Assumption Changes	27	<u>36,384,579</u>	27	<u>36,384,579</u>	<u>2,500,106</u>
			1,362,035,806		1,303,279,654	90,939,160

*Reflects an offset equal to the net present value of the total pension liability surtax proceeds based on a pro rata share of 58.3%.



Amortization Schedule

The UAAL is being amortized as a level percent of pay over the number of years remaining in each amortization period. The following schedule illustrates the expected amortization of the UAAL:

Amortization Schedule	
Year	Expected UAAL*
2020	\$ 1,303,279,654
2021	1,295,991,980
2022	1,286,986,292
2023	1,276,128,845
2024	1,263,276,488
2025	1,248,276,008
2030	1,134,892,072
2035	937,663,362
2040	620,890,924
2045	134,578,725
2047	-

*Reflects an offset equal to the net present value of the total pension liability surtax proceeds based on a pro rata share of 58.3%.

ACTUARIAL GAINS AND LOSSES

The assumptions used to anticipate mortality, employment turnover, investment income, expenses, salary increases, and other factors have been based on long range trends and expectations. Actual experience can vary from these expectations. The variance is measured by the gain and loss for the period involved. If significant long term experience reveals consistent deviation from what has been expected and that deviation is expected to continue, the assumptions should be modified. The net actuarial gain (loss) for the past year is computed as follows:

1. UAAL at 10/1/2019	\$ 1,189,609,007
2. 2019-20 Total Normal Cost for Benefits (BOY)	70,109,932
3. 2019-20 Contributions (net of Administrative Expenses)	157,787,141
4. Interest at the Assumed Rate on:	
a. 1 and 2 for one year	88,180,326
b. 3 from dates paid	<u>7,806,470</u>
c. a - b	80,373,856
5. Expected UAAL at 10/1/2020 (before changes): 1 + 2 - 3 + 4c	1,182,305,654
6. Actual UAAL at 10/1/2020 (before changes):	1,266,895,075
7. Net Actuarial Gain/(Loss):	(84,589,421)
8. Gain/(Loss) Due to Investments (net of reserves):	(7,467,220)
9. Gain/(Loss) Due to Changes in Projected Pension Liability Surtax Proceeds:	(73,817,369)
10. Gain/(Loss) Due to Other Sources:	(3,304,832)

The annual experience gains/(losses) in previous years have been as follows:

Year Ending	Experience Gain / (Loss)
9/30/2013	\$ 86,047,514
9/30/2014	34,912,618
9/30/2015	(182,600,912)
9/30/2016	45,616,836
9/30/2017	102,449,877
9/30/2018	19,072,874
9/30/2019	(33,690,255)
9/30/2020	(84,589,421)

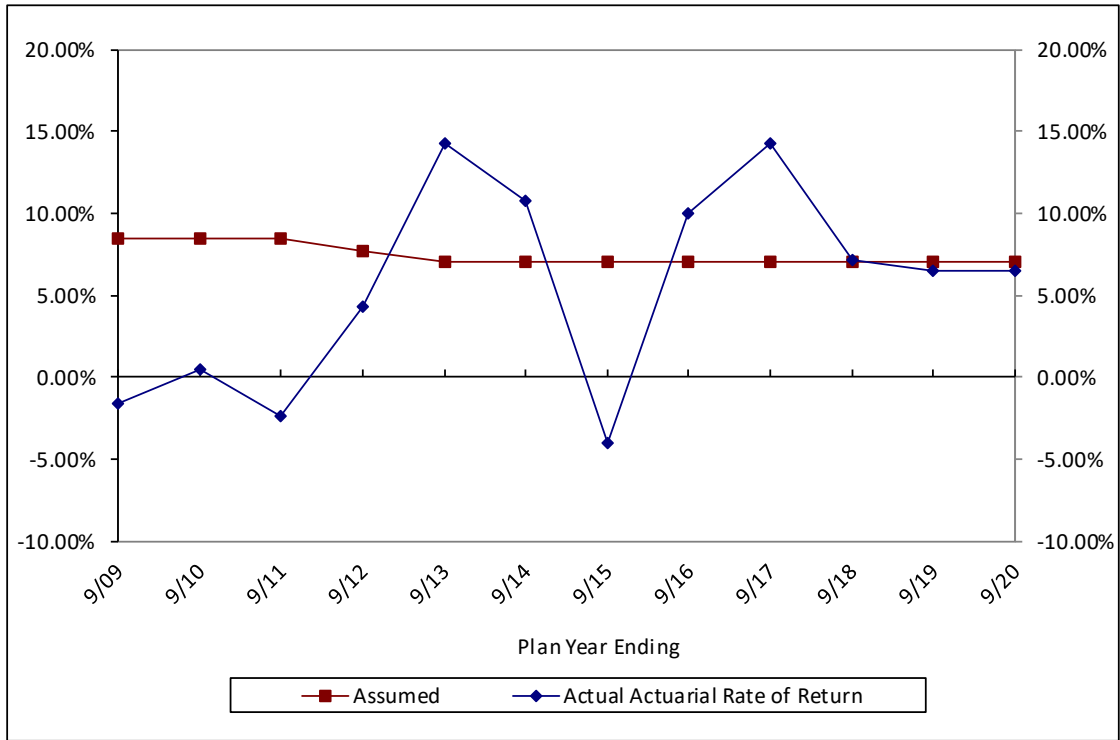
The fund earnings and salary increase assumptions have considerable impact on the cost of the plan so it is important that they are in line with the actual experience. The following table shows the actual fund earnings and salary increase rates compared to the assumed rates for the last few years:

Period Ending	Investment Return		Salary Increases	
	Actual	Assumed	Actual*	Assumed*
9/30/2009	(1.63) %	8.50 %	7.0 %	5.5 %
9/30/2010	0.44	8.50	3.0	5.5
9/30/2011	(2.41)	8.50	2.5	5.5
9/30/2012	4.34	7.75	0.4	5.0
9/30/2013	14.29	7.00	2.9	4.0
9/30/2014	10.73	7.00	3.0	4.0
9/30/2015	(4.00)	7.00	3.8	3.5
9/30/2016	10.00	7.00	2.2	3.5
9/30/2017	14.27	7.00	12.1	10.0
9/30/2018	7.20	7.00	10.4	10.0
9/30/2019	6.46	7.00	11.6	10.5
9/30/2020	6.50	7.00	3.4	3.5
Average	5.34 %	7.44 %	5.1 %	5.8 %

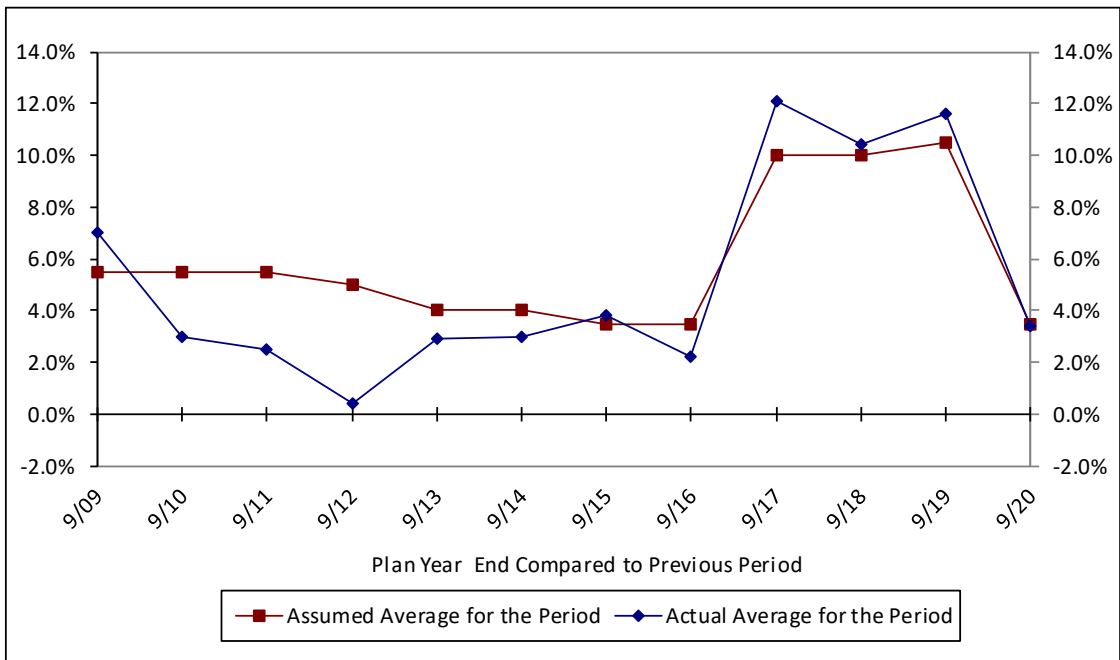
*Actual and assumed rates are based on average compound increases for the period

The actual investment return rates shown above are based on the actuarial value of assets. The actual salary increase rates shown above are the increases received by those active members who were included in the actuarial valuations both at the beginning and end of each period.

History of Investment Return Based on Actuarial Value of Assets



History of Salary Increases



**Number Added To and Removed from Active Participation
Actual (A) Compared to Expected (E)**

Year Ended	Number Added During Year		Service & DROP Retirement		Disability Retirement		Died In Service		Terminations				Active Members End of Year
	A	E	A	E	A	E	A	E	Vested	Other	Totals		
	A	E	A	E	A	E	A	E	A	A	A	E	
9/30/2017	231	163	110	107	2	3	4	3	16	31	47	25	2,362
9/30/2018	132	28	68	79	0	3	3	3	18	21	39	27	2,384
9/30/2019	0	0	50	87	2	3	2	3	16	13	29	27	2,301
9/30/2020	0	0	56	92	0	3	1	3	6 *	2	8	24	2,236
4-Yr Total	363	191	284	365	4	12	10	12	56	67	123	103	

*Adjusted to reflect rehired vested terminated members.

Note: Participant data is collected as of July 1. The plan was closed to new members as of October 1, 2017.

RECENT HISTORY OF VALUATION RESULTS

Valuation Date	Number of		Covered Annual Payroll	Actuarial Accrued Liability (AAL)	Actuarial Value of Assets	Funded Ratio	Unfunded AAL (UAAL)	UAAL as a % of Covered Payroll
	Active Members	Inactive Members						
10/1/2000	2,049	1,797	\$ 97,207	\$ 939,802	\$ 814,889	86.7 %	\$ 124,913	128.5 %
10/1/2001	2,037	1,883	96,199	927,625	790,823	85.3	136,802	142.2
10/1/2002	2,068	1,975	101,698	977,779	725,416	74.2	252,363	248.1
10/1/2003	2,182	1,994	109,637	1,146,459	732,526	63.9	413,933	377.6
10/1/2004	2,347	2,019	118,510	1,222,355	727,955	59.6	494,400	417.2
10/1/2005	2,450	2,046	130,392	1,314,424	765,180	58.2	549,244	421.2
10/1/2006	2,509	2,068	134,694	1,376,659	827,338	60.1	549,321	407.8
10/1/2007	2,541	2,117	143,006	1,464,508	930,454	63.5	534,054	373.4
10/1/2008	2,534	2,164	148,277	1,692,975	894,903	52.9	798,072	538.2
10/1/2009	2,583	2,278	155,558	1,753,946	855,997	48.8	897,949	577.2
10/1/2010	2,620	2,353	158,047	2,024,453	1,060,406	52.4	964,047	610.0
10/1/2011	2,451	2,481	148,968	2,427,198	1,039,894	42.8	1,387,304	931.3
10/1/2012	2,213	2,647	133,611	2,762,977	1,078,907	39.0	1,684,070	1,260.4
10/1/2013	2,150	2,725	130,972	2,876,606	1,228,131	42.7	1,648,475	1,258.6
10/1/2014	2,237	2,801	134,521	2,983,906	1,389,748	46.6	1,594,158	1,185.1
10/1/2015	2,202	2,906	132,735	3,142,228	1,354,405	43.1	1,787,823	1,346.9
10/1/2016	2,294	2,963	135,600	3,518,252	1,513,398	43.0	2,004,853	1,478.5
10/1/2017	2,362	3,055	149,490	3,736,610	1,765,159	47.2	1,971,451	1,318.8
10/1/2018	2,384	3,092	162,004	3,880,073	1,865,496	48.1	2,014,577	1,243.5
10/1/2019	2,301	3,127	174,125	4,036,925	1,946,967	48.2	2,089,958	1,200.3
10/1/2020	2,236	3,150	174,186	4,253,525	2,041,049	48.0	2,212,476	1,270.2

Note: Dollar amounts are in thousands.



RECENT HISTORY OF REQUIRED AND ACTUAL CITY CONTRIBUTIONS							
Valuation Date	End of Year To Which Valuation Applies	Required Contributions		Actual Contributions			
		Amount	% of Payroll	City Contributions	Alotted from Reserves*	Total	% of Payroll
10/1/2003	9/30/2005	\$ 35,929	27.55 %	\$ 27,176	\$ 8,753	\$ 35,929	27.55 %
10/1/2003	9/30/2006	38,230	28.38	36,124	2,106	38,230	28.38
10/1/2003	9/30/2007	39,850	27.87	44,208	(4,358)	39,850	27.87
10/1/2006	9/30/2008	48,807	32.92	48,364	443	48,807	32.92
10/1/2006	9/30/2009	50,564	32.51	50,235	329	50,564	32.51
10/1/2008	9/30/2010	77,182	48.83	82,197	(5,015)	77,182	48.83
10/1/2008	9/30/2011	77,065	51.73	75,903	1,162	77,065	51.73
10/1/2008	9/30/2012	73,729	55.18	70,599	3,130	73,729	55.18
10/1/2011	9/30/2013	99,997	76.35	122,580	(22,583)	99,997	76.35
10/1/2012	9/30/2014	142,433	105.88	149,159	(6,726)	142,433	105.88
10/1/2013	9/30/2015	153,604	115.72	153,936	(332)	153,604	115.72
10/1/2014	9/30/2016	149,499	110.70	149,499	0	149,499	110.70
10/1/2015	9/30/2017	167,788	119.60	167,788	0	167,788	119.60
10/1/2016	9/30/2018	135,648	90.74	115,691	20,000	135,691	90.77
10/1/2017	9/30/2019	135,264	88.36	110,528	24,736	135,264	83.49
10/1/2018	9/30/2020	140,293	84.57	123,329	16,964	140,293	80.57
10/1/2019	9/30/2021	148,476	83.27	---	---	---	---
10/1/2020	9/30/2022	157,352	88.23	---	---	---	---

Note: Dollar amounts are in thousands.

*Actual contributions include the use of funds from the City Contribution reserve (or the City Budget Stabilization Account (CBSA) prior to fiscal year ending Spetember 30, 2016).



ACTUARIAL ASSUMPTIONS AND COST METHOD

Valuation Methods

Actuarial Cost Method - Normal cost and the allocation of benefit values between service rendered before and after the valuation date were determined using an **Individual Entry-Age Actuarial Cost Method** having the following characteristics:

- (i) the annual normal cost for each individual active member, payable from the date of employment to the dates of expected retirement, is sufficient to accumulate the value of the member's benefit at the time of retirement;
- (ii) each annual normal cost is a constant percentage of the member's year by year projected covered pay.

Actuarial gains/(losses), as they occur, reduce (increase) the Unfunded Actuarial Accrued Liability.

Financing of Unfunded Actuarial Accrued Liabilities - Unfunded Actuarial Accrued Liabilities were amortized as a level (principal & interest combined) percent of payroll over a prescribed period of up to 27 years. *The maximum prescribed period was 28 years in the prior valuation.* This period will be reduced by 1 year in each future year until it reaches 15 years. The assumed payroll growth rate is 1.25%.

Actuarial Value of Assets - The Actuarial Value of Assets phase in the difference between the expected actuarial value and actual market value of assets at the rate of 20% per year. The Actuarial Value of Assets will be further adjusted to the extent necessary to fall within the corridor whose lower limit is 80% of the Market Value of plan assets and whose upper limit is 120% of the Market Value of plan assets. During periods when investment performance exceeds the assumed rate, Actuarial Value of Assets will tend to be less than Market Value. During periods when investment performance is less than assumed rate, Actuarial Value of Assets will tend to be greater than Market Value.

Valuation Assumptions

The actuarial assumptions used in the valuation are shown in this Section.

Economic Assumptions

The **investment return rate** assumed in the valuation is 6.90% per year, compounded annually (net after investment expenses). *This rate was 7.00% in the previous valuation.*

The **inflation rate** assumed in this valuation was 2.25% per year. *This rate was 2.50% in the previous valuation.*

The assumed **real rate of return** over inflation is defined to be the portion of total investment return that is more than the assumed inflation rate. Considering other economic assumptions, the 6.90% investment return rate translates to an assumed real rate of return over inflation of 4.65%.



The **rates of salary increase** used are in accordance with the following tables below and are based on the Experience Study dated October 22, 2020. *The old assumption table was used in the previous valuation.* Part of the assumption is for merit and/or seniority service increase, and 2.25% recognizes inflation. This assumption is used to project a member's current salary to the salaries upon which benefits will be based.

New Assumption Table

Years of Service	% Increase in Salary		
	Merit and Seniority	Inflation	Total Increase
3	9.25%	2.25%	11.50%
4	7.50%	2.25%	9.75%
5	4.25%	2.25%	6.50%
6 - 7	2.75%	2.25%	5.00%
8 - 10	2.00%	2.25%	4.25%
11 - 14	1.40%	2.25%	3.65%
15 - 18	1.10%	2.25%	3.35%
19 & Over	0.50%	2.25%	2.75%

Old Assumption Table

Age	% Increase in Salary
ALL	3.50%

Note the plan is closed to new entrants effective October 1, 2017. As of October 1, 2020, active members have a minimum of 3 years of service.

Demographic Assumptions

The **mortality table** is the PUB-2010 Headcount Weighted Safety Healthy Employee Mortality Table (for pre-retirement mortality) and the PUB-2010 Headcount Weighted Safety Healthy Retiree Mortality Table (for postretirement mortality), with separate rates for males and females and ages set forward one year, with mortality improvements projected to all future years after 2010 using Scale MP-2018. For males, the base mortality rates for both pre-retirement and postretirement mortality are based on the Below Median Healthy tables. These are the same rates currently in use for Special Risk class members of the Florida Retirement System (FRS), as mandated by Chapter 112.63, Florida Statutes.

FRS Healthy Post-Retirement Mortality for Special Risk Class Members

Sample Attained Ages in 2020	Probability of Dying Next Year		Future Life Expectancy (years)	
	Men	Women	Men	Women
50	0.42 %	0.20 %	32.40	36.24
55	0.56	0.36	27.63	31.21
60	0.93	0.61	23.05	26.43
65	1.32	0.92	18.80	21.93
70	2.09	1.45	14.80	17.68
75	3.56	2.44	11.21	13.75
80	6.35	4.19	8.14	10.30

This assumption is used to measure the probabilities of each benefit payment being made after retirement.



FRS Healthy Pre-Retirement Mortality for Special Risk Class Members

Sample Attained Ages in 2020	Probability of Dying Next Year		Future Life Expectancy (years)	
	Men	Women	Men	Women
	50	0.17 %	0.11 %	35.58
55	0.26	0.16	30.50	34.36
60	0.43	0.22	25.55	29.30
65	0.69	0.30	20.80	24.29
70	1.18	0.55	16.28	19.39
75	2.09	1.08	12.05	14.69
80	6.35	4.19	8.14	10.30

This assumption is used to measure the probabilities of active members dying prior to retirement.

For disabled retirees, the mortality table is 80% of the PUB-2010 Headcount Weighted General Disabled Retiree Mortality Table, and 20% of the PUB-2010 Headcount Weighted Safety Disabled Retiree Mortality Table, both with separate rates for males and females, with no provision being made for future mortality improvements. These are the same rates currently in use for Special Risk class members of the Florida Retirement System (FRS), as mandated by Chapter 112.63, Florida Statutes.

FRS Disabled Mortality for Special Risk Class Members

Sample Attained Ages in 2020	Probability of Dying Next Year		Future Life Expectancy (years)	
	Men	Women	Men	Women
	50	1.45 %	1.25 %	24.04
55	1.91	1.50	20.88	23.54
60	2.37	1.81	17.92	20.32
65	3.00	2.22	15.07	17.17
70	3.91	2.90	12.39	14.10
75	5.30	4.13	9.87	11.22
80	7.66	6.21	7.60	8.67

In the previous valuation, this assumption was the RP-2000 Combined Healthy Participant Mortality Table (for pre-retirement mortality) and the RP- 2000 Mortality Table for Annuitants (for postretirement mortality), with mortality improvements projected to all future years after 2000 using Scale BB. For males, the base mortality rates included a 90% blue collar adjustment and a 10% white collar adjustment. For females, the base mortality rates included a 100% white collar adjustment. For disabled retirees, the mortality table was 60% of the RP-2000 Combined Mortality Table for Disabled Annuitants with ages set back 4 years for males and set forward 2 years for females, and 40% of the RP- 2000 Annuitant Mortality Table with a white collar adjustment with no age setback, both with no provision being made for future mortality improvements.

The ***rates of retirement*** used to measure the probability of eligible members retiring during the next year were as follows and are based on the Experience Study dated October 22, 2020. *The old assumption table was used in the previous valuation.*

<u>New Assumption Table</u>			<u>Old Assumption Table</u>		
Service	Age	Service Retirement	Age	Service	Service Retirement
20	Under 50	45.0%	60 & Under	20	40.0%
	50 - 54	55.0		21 - 29	30.0
	55 - 59	60.0		30	100.0
	60 & Over	100.0	61	20 & Over	100.0
21	Under 50	25.0			
	50 -59	30.0			
	60 & Over	50.0			
22 - 23	Under 50	15.0			
	50 -59	30.0			
	60 & Over	50.0			
24 - 28	Under 60	25.0			
	60 & Over	50.0			
29	Any Age	50.0			
30 & Over	Any Age	100.0			

Rates of separation from active membership were as shown below (rates do not apply to members eligible to retire and do not include separation on account of death or disability) and are based on the Experience Study dated October 22, 2020. *The old assumption table was used in the previous valuation.* This assumption measures the probabilities of members separating from employment for reasons other than death, disability or retirement.

<u>New Assumption Table</u>		<u>Old Assumption Table</u>	
Sample Ages	% of Active Members Separating Within Next Year	Sample Ages	% of Active Members Separating Within Next Year
20	1.6%	20	3.6%
25	1.6	25	3.6
30	1.6	30	1.8
35	1.2	35	0.9
40	0.9	40	0.9
45	0.9	45	0.0
50	0.9		
55	0.5		



Rates of disability among active members are shown below and are based on the Experience Study dated October 22, 2020. *The old assumption table was used in the previous valuation.*

New Assumption Table

% Becoming Disabled Within Next Year

<u>Sample Ages</u>	<u>Male/Female</u>
20	0.025%
25	0.025
30	0.025
35	0.034
40	0.042
45	0.084
50	0.185
55	0.378
60	0.756
64	0.470

Old Assumption Table

% Becoming Disabled Within Next Year

<u>Sample Ages</u>	<u>Male/Female</u>
20	0.036%
25	0.036
30	0.036
35	0.048
40	0.060
45	0.120
50	0.264
55	0.540
60	1.080
64	0.672



Miscellaneous and Technical Assumptions

<i>Administrative & Investment Expenses</i>	Annual administrative and investment expenses are assumed to be equal to the prior year's expenses. Assumed administrative and investment expenses are added to the Normal Cost.
<i>Benefit Service</i>	Exact fractional service is used to determine the amount of benefit payable. Actual credited service as of the July 1 st prior to the valuation date is used in the valuation.
<i>Decrement Operation</i>	Disability and mortality decrements operate during retirement eligibility.
<i>Decrement Relativity</i>	Decrement rates are used without adjustment for multiple decrement table effects.
<i>Decrement Timing</i>	Decrements of all types are assumed to occur at the beginning of the year.
<i>DROP Load</i>	Explicit valuation of the liabilities and costs associated with the actual DROP interest crediting rate using procedures described in the DROP Interest Study dated September 28, 2017.
<i>DROP Participation</i>	For purposes of the explicit valuation of the DROP Load, active members who choose to retire are assumed to elect to enter the DROP (as a Phase I member) 96% of the time (versus separating from employment). Members whose DROP entry dates are less than 18 months prior to the valuation date are assumed to remain employed (as a Phase I member) for an average total active DROP participation period of 4 years and 7 months. Phase I members whose DROP entry dates are 18 or more months prior to the valuation date are assumed to remain employed (as a Phase I member) for the 5-year maximum DROP participation period. At the end of the DROP participation period, Phase I members are assumed to elect a bi-weekly distribution (as a Phase II member) 95% of the time (versus electing a lump sum) over an assumed distribution period of 30 years.
<i>Eligibility Testing</i>	Eligibility for benefits is determined based upon the age nearest birthday and service nearest whole year on the date the decrement is assumed to occur.
<i>Forfeitures</i>	No vested terminated refunds or disability recoveries are assumed to occur.

Incidence of Contributions

Member contributions are assumed to be received continuously throughout the year based upon the member contribution rate. Employer contributions are assumed to be received in full on December 1st and are assumed to be equal to the dollar amount shown.

Marriage and Survivor Assumption

For death-in-service, 50% of active member deaths are assumed to have a surviving spouse and an additional 20% of active member deaths are assumed to have an eligible orphaned child. Orphaned children of active members are assumed to be paid for a period of 10 years. For all retirees (current and future), 65% of males and 65% of females are assumed to be married and a 75% survivor benefit will be paid after the death of the retiree. Male members are assumed to be 5 years older than their surviving spouse and female members are assumed to be 5 years younger than their surviving spouse. *In the previous valuation, this assumption was 75% of males and 75% of females are assumed to be married (for active members only), the client-provided marital tax status was used for current retirees (which indicated that approximately 50% of retirees were married); and male members were assumed to be 3 years older than their surviving spouse and female members were assumed to be 3 years younger than their surviving spouse.*

Normal Form of Benefit

A 75% joint and contingent life annuity is the normal form of benefit.

Pension Liability Surtax

58.3% of the total proceeds from the City of Jacksonville’s pension liability is assumed to be allocated to the Jacksonville Police and Fire Pension Fund beginning with fiscal year 2031. Sales tax revenue is projected to increase by 4.25% annually. In the previous valuation, the pro rata share of the total proceeds was 59.26%. This allocation percentage is updated each year by the City based on the relative unfunded actuarial liabilities for all three of the City’s pension plans.

Pay Increase Timing

Reported pays were assumed to be the pays for the current year beginning on the valuation date. Future pay increases are assumed to occur at the end of the year.

Service Credit Accruals

It is assumed that members accrue one year of service credit per year.



GLOSSARY

<i>Actuarial Accrued Liability (AAL)</i>	The difference between the Actuarial Present Value of Future Benefits, and the Actuarial Present Value of Future Normal Costs.
<i>Actuarial Assumptions</i>	Assumptions about future plan experience that affect costs or liabilities, such as: mortality, withdrawal, disablement, and retirement; future increases in salary; future rates of investment earnings; future investment and administrative expenses; characteristics of members not specified in the data, such as marital status; characteristics of future members; future elections made by members; and other items.
<i>Actuarial Cost Method</i>	A procedure for allocating the Actuarial Present Value of Future Benefits between the Actuarial Present Value of Future Normal Costs and the Actuarial Accrued Liability.
<i>Actuarial Equivalent</i>	Of equal Actuarial Present Value, determined as of a given date and based on a given set of Actuarial Assumptions.
<i>Actuarial Present Value (APV)</i>	The amount of funds required to provide a payment or series of payments in the future. It is determined by discounting the future payments with an assumed interest rate and with the assumed probability each payment will be made.
<i>Actuarial Present Value of Future Benefits (APVFB)</i>	The Actuarial Present Value of amounts which are expected to be paid at various future times to active members, retired members, beneficiaries receiving benefits, and inactive, nonretired members entitled to either a refund or a future retirement benefit. Expressed another way, it is the value that would have to be invested on the valuation date so that the amount invested plus investment earnings would provide sufficient assets to pay all projected benefits and expenses when due.
<i>Actuarial Valuation</i>	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.
<i>Actuarial Value of Assets</i>	The value of the assets as of a given date, used by the actuary for valuation purposes. This may be the market or fair value of plan assets or a smoothed value in order to reduce the year-to-year volatility of calculated results, such as the funded ratio and the actuarially determined contribution (ADC).

<i>Actuarially Determined Contribution (ADC)</i>	The employer's periodic required contributions, expressed as a dollar amount or a percentage of covered plan compensation, determined under GASB. The ADC consists of the Employer Normal Cost and Amortization Payment.
<i>Amortization Method</i>	A method for determining the Amortization Payment. The most common methods used are level dollar and level percentage of payroll. Under the Level Dollar method, the Amortization Payment is one of a stream of payments, all equal, whose Actuarial Present Value is equal to the UAAL. Under the Level Percentage of Pay method, the Amortization Payment is one of a stream of increasing payments, whose Actuarial Present Value is equal to the UAAL. Under the Level Percentage of Pay method, the stream of payments increases at the rate at which total covered payroll of all active members is assumed to increase.
<i>Amortization Payment</i>	That portion of the plan contribution or ADC which is designed to pay interest on and to amortize the Unfunded Actuarial Accrued Liability.
<i>Amortization Period</i>	The period used in calculating the Amortization Payment.
<i>Closed Amortization Period</i>	A specific number of years that is reduced by one each year, and declines to zero with the passage of time. For example, if the amortization period is initially set at 30 years, it is 29 years at the end of one year, 28 years at the end of two years, etc.
<i>Employer Normal Cost</i>	The portion of the Normal Cost to be paid by the employer. This is equal to the Normal Cost less expected member contributions.
<i>Equivalent Single Amortization Period</i>	For plans that do not establish separate amortization bases (separate components of the UAAL), this is the same as the Amortization Period. For plans that do establish separate amortization bases, this is the period over which the UAAL would be amortized if all amortization bases were combined upon the current UAAL payment.
<i>Experience Gain/Loss</i>	A measure of the difference between actual experience and that expected based upon a set of Actuarial Assumptions, during the period between two actuarial valuations. To the extent that actual experience differs from that assumed, Unfunded Actuarial Accrued Liabilities emerge which may be larger or smaller than projected. Gains are due to favorable experience, e.g., the assets earn more than projected, salaries do not increase as fast as assumed, members retire later than assumed, etc. Favorable experience means actual results produce actuarial liabilities not as large as projected by the actuarial assumptions. On the other hand, losses are the result of unfavorable experience, i.e., actual results that produce Unfunded Actuarial Accrued Liabilities which are larger than projected.

<i>Funded Ratio</i>	The ratio of the Actuarial Value of Assets to the Actuarial Accrued Liability.
<i>GASB</i>	Governmental Accounting Standards Board.
<i>Normal Cost</i>	The annual cost assigned, under the Actuarial Cost Method, to the current plan year.
<i>Unfunded Actuarial Accrued Liability</i>	The difference between the Actuarial Accrued Liability and Actuarial Value of Assets.
<i>Valuation Date</i>	The date as of which the Actuarial Present Value of Future Benefits are determined. The benefits expected to be paid in the future are discounted to this date.

SECTION C

PENSION FUND INFORMATION

Statement of Total Plan Assets at Market Value

Item	September 30	
	2020	2019
A. Cash and Short-Term Investments (Operating Cash)	\$ 26,165,409	\$ 30,642,509
B. Receivables:		
1. Accounts Receivable	\$ 81,351	\$ 98,062
2. Interest and Dividends	1,740,703	1,847,118
3. Employer Contribution	-	572,645 *
4. Employee Contribution	-	66,892 *
5. Prepaid Items and Recoverable Taxes	81,675	81,675
6. Securities Lending Collateral	73,125,949	83,045,776
7. Deferred Outflows	112,110	112,110
8. Total Receivables	<u>\$ 75,141,788</u>	<u>\$ 85,824,278</u>
C. Property, Plant and Equipment		
1. Furniture and Equipment	\$ 311,510	\$ 311,510
2. Accumulated Depreciation	(311,510)	(311,510)
3. Net Total	<u>\$ 0</u>	<u>\$ 0</u>
D. Investments		
1. Cash and Cash Equivalents	\$ 35,162,208	\$ 20,479,854
2. Domestic and International Equities	1,479,431,529	1,360,928,794
3. Fixed Income Securities	234,788,619	236,075,803
4. Real Estate	286,385,219	315,801,145
5. Total Investments	<u>\$ 2,035,767,575</u>	<u>\$ 1,933,285,596</u>
E. Liabilities		
1. Accounts Payable	\$ (9,034,186)	\$ (7,969,464)
2. Other Post Employment Benefits	-	-
3. Securities Lending Collateral	(73,125,949)	(83,045,776)
4. Other Liabilities and Deferred Inflows	(114,989)	(121,833)
5. Total Liabilities	<u>\$ (82,275,124)</u>	<u>\$ (91,137,073)</u>
F. Total Market Value of Assets	\$ 2,054,799,648	\$ 1,958,615,310
G. Allocation of Investments		
1. Cash and Cash Equivalents	1.7%	1.1%
2. Domestic and International Equities	72.7%	70.4%
3. Fixed Income Securities	11.5%	12.2%
4. Real Estate	14.1%	16.3%
5. Total Investments	<u>100.0%</u>	<u>100.0%</u>

*For 2019, amounts include a \$481,338 Employer Contribution Receivable and a \$66,892 Employee Contribution Receivable due to the DOJ-COJ Settlement.



Reconciliation of Plan Assets

Item	September 30	
	2020	2019
A. Market Value of Assets at Beginning of Year	\$ 1,958,615,310	\$ 2,007,821,890 *
B. Revenues and Expenditures		
1. Contributions		
a. Member Contributions	\$ 17,804,102	\$ 16,843,692 **
b. Plan Member Buybacks and Pension Transfers	1,231,331	969,067
c. Employer Contributions	123,328,488	111,009,056 **
d. State Contributions	13,888,871	12,756,091
e. Court Fines and Penalties	519,212	701,652
f. Supplemental Payment	-	-
g. Miscellaneous	124,613 **	645,526
h. Total	<u>\$ 156,896,617</u>	<u>\$ 142,925,084</u>
2. Investment Income		
a. Parking and Rental Revenue	\$ 669,949	\$ 736,736
b. Securities Lending Net Revenue	293,538	240,321
c. Investment Income and Realized Gains	94,992,081	102,693,015
d. Unrealized Gains/(Losses)	71,400,766	(40,399,542)
e. Investment Expenses	<u>(7,596,632)</u>	<u>(9,011,875)</u>
f. Net Investment Income	\$ 159,759,702	\$ 54,258,655
3. Benefits and Refunds		
a. Regular Monthly Benefits	\$ (152,063,748)	\$ (154,062,890)
b. Refunds	(715,829)	(732,596)
c. DROP Payments	(40,336,197)	(34,329,716)
d. Reserve Distributions	<u>(25,171,453)</u>	<u>(55,730,720)</u>
e. Total	\$ (218,287,227)	\$ (244,855,922)
4. Administrative and Miscellaneous Expenses		
a. Total Administrative Expenses	\$ (2,184,754)	\$ (2,116,593)
b. Miscellaneous - Other Employee Pension Expense	-	582,196
c. Total	<u>\$ (2,184,754)</u>	<u>\$ (1,534,397)</u>
C. Market Value of Assets at End of Year	\$ 2,054,799,648	\$ 1,958,615,310

*Reflects (\$2) adjustment to match financial statements as of September 30, 2019.

** For 2019, amounts include a \$481,338 Employer Contribution Receivable and a \$66,892 Employee Contribution Receivable due to the DOJ-COJ Settlement (a total of \$548,230). For 2020, this amount reflects a reversal of the total \$548,230 contribution that was actually paid and included in Miscellaneous contributions in FY 2019.



RESERVE ACCOUNT BALANCES AS OF SEPTEMBER 30, 2020

	City of Jacksonville Contribution <u>Reserve</u>	Pending Share Plan Contribution ¹	Balance to be Allocated to Police Officers and Firefighters	<u>TOTALS</u>
Account Value, 10/1/2019	\$ 30,794,748	\$ 3,696,757	\$ 12,756,091	\$ 47,247,596
Disbursement of FY 2017 Share Plan to Unions paid May 30, 2019		(3,696,757)		(3,696,757)
Adjusted Account Value, 10/1/2019	\$ 30,794,748	\$ 0	\$ 12,756,091	\$ 43,550,839
Disbursement of FY 2019 Chapter Funds to Unions paid October 1, 2019			(10,388,390)	(10,388,390)
Annual Retiree Bonus paid December 13, 2019			(2,355,204)	(2,355,204)
Annual Earnings (7.98%)	2,457,421		40,153	2,497,574
Allocated Towards Required City Contribution	(16,964,149)			(16,964,149)
Receipt of FY 2020 Chapter Funds			13,888,871	13,888,871
Partial Disbursement of FY 2020 Chapter Funds			(11,409,136)	(11,409,136)
Account Value, 9/30/2020	\$ 16,288,020	\$ 0	\$ 2,532,385	\$ 18,820,405

¹ Note: The FY 2017 Share Plan Disbursement reflects interest for FY 2019. Total FY 2017 Share Plan Disbursement was \$3,369,647.24 on May 30, 2019.



RECONCILIATION OF SHARE PLAN	
Account Value, 9/30/2019	\$ 7,654,812
FY 2017 Share Plan Contribution	+ <u>3,696,757</u> ¹
Adjusted Account Value, 9/30/2019	\$ 11,351,569
Contributions credited to accounts	+ 0
Investment Earnings credited (7.98%)	+ 890,027 ²
Payments from accounts	- <u>404,455</u>
Account Value, 9/30/2020	11,837,141

RECONCILIATION OF SENIOR STAFF RETIREMENT PLAN	
Account Value, 9/30/2019	\$ 4,359,959
Contributions credited to accounts	+ 0
Investment Earnings credited (7.98%)	+ 331,488 ²
Payments from accounts	- <u>614,268</u>
Account Value, 9/30/2020	4,077,179

- ¹ The FY 2017 Share Plan Contribution reflects interest for FY 2019. Total FY 2017 Share Plan Contribution was \$3,369,647.24 on May 30, 2019.
- ² 7.98% applied to beginning-of-year account value; mid-July timing for the lump sum retroactive underpayment for members in the Senior Staff Retirement Plan; and mid-year timing assumed on regular payments from accounts during the year.

Actuarial Value of Assets

Valuation Date - September 30	2019	2020	2021	2022	2023	2024
A. Actuarial Value of Assets Beginning of Year	\$ 1,992,314,668	\$ 2,006,229,480	\$ -	\$ -	\$ -	\$ -
B. Market Value End of Year	1,958,615,310	2,054,799,648	-	-	-	-
C. Market Value Beginning of Year	2,007,821,890	1,958,615,310	-	-	-	-
D. Non-Investment/Administrative Net Cash Flow	(103,465,235)	(63,575,364)	-	-	-	-
E. Investment Income						
E1. Actual Market Total: B-C-D	54,258,655	159,759,702	-	-	-	-
E2. Assumed Rate of Return	7.00%	7.00%	-	-	-	-
E3. Assumed Amount of Return ¹	128,314,387	140,140,089	-	-	-	-
E4. Amount Subject to Phase-In: E1-E3	(74,055,732)	19,619,613	-	-	-	-
F. Phase-In Recognition of Investment Income						
F1. Current Year: 0.2 x E4	(14,811,146)	3,923,923	-	-	-	-
F2. First Prior Year	3,876,806	(14,811,146)	3,923,923	-	-	-
F3. Second Prior Year	-	3,876,806	(14,811,146)	3,923,923	-	-
F4. Third Prior Year	-	-	3,876,806	(14,811,146)	3,923,923	-
F5. Fourth Prior Year	-	-	-	3,876,804	(14,811,148)	3,923,921
F6. Total Phase-Ins	(10,934,340)	(7,010,417)	(7,010,417)	(7,010,419)	(10,887,225)	3,923,921
G. Actuarial Value of Assets End of Year						
G1. Preliminary Actuarial Value of Assets End of Year	\$ 2,006,229,480	\$ 2,075,783,788	\$ -	\$ -	\$ -	\$ -
G2. Upper Corridor Limit: 120%*B	2,350,338,372	2,465,759,578	-	-	-	-
G3. Lower Corridor Limit: 80%*B	1,556,892,248	1,643,839,718	-	-	-	-
G4. Funding Value End of Year	2,006,229,480	2,075,783,788	-	-	-	-
G5. Less: Reserve Accounts, including Share Plan	(54,902,408)	(30,657,546)	-	-	-	-
G6. Less: Sr. Staff Plan Assets	(4,359,959)	(4,077,179)	-	-	-	-
G7. Final Funding Value End of Year	1,946,967,113	2,041,049,063	-	-	-	-
G8. Final Market Value End of Year	1,899,352,943	2,020,064,923	-	-	-	-
H. Difference between Market & Actuarial Value of Assets	(47,614,170)	(20,984,140)	-	-	-	-
I. Actuarial Rate of Return (net money-weighted)¹	6.46%	6.50%	0.00%	0.00%	0.00%	0.00%
J. Market Value Rate of Return (net money-weighted)	2.96%	7.98%	0.00%	0.00%	0.00%	0.00%
K. Ratio of Actuarial Value of Assets to Market Value	102.43%	101.02%	0.00%	0.00%	0.00%	0.00%

¹Derived based on the net money-weighted rate of return on the market value of assets provided by the Plan's investment consultant, which was 7.98% as of September 30, 2020.



Period Ending	Net Investment Rate of Return	
	Total Market Value	Total Actuarial Value
9/30/2008	(13.1) %	N/A
9/30/2009	(1.7)	(1.6) %
9/30/2010	8.5	0.4
9/30/2011	0.1	(2.4)
9/30/2012	18.3	4.3
9/30/2013	14.3	14.3 *
9/30/2014	10.7	10.7 *
9/30/2015	(4.0)	(4.0) *
9/30/2016	10.0	10.0 *
9/30/2017	14.3	14.3 *
9/30/2018	8.0	7.2 **
9/30/2019	3.0	6.5 **
9/30/2020	8.0	6.5 **
Average Returns:		
Last 3 Years	6.3 %	6.7 %
Last 5 Years	8.6 %	8.9 %
Last 10 Years	8.1 %	6.6 %
All Years Shown Above	5.5 %	5.3 %

*For YE 9/30/2013 to YE 9/30/2017 the Actuarial Value is equal to the Market Value.

**Beginning 9/30/2018 the Actuarial Value of Assets uses a five-year smoothing method.

The above rates are based on the retirement system's financial information reported to the actuary. They may differ from figures that the investment consultant reports, in part because of differences in the handling of administrative and investment expenses, and in part because of differences in the handling of cash flows.

SECTION D

FINANCIAL ACCOUNTING INFORMATION

FASB NO. 35 INFORMATION		
A. Valuation Date	October 1, 2020	October 1, 2019
B. Actuarial Present Value of Accumulated Plan Benefits		
1. Vested Benefits		
a. Members Currently Receiving Payments	\$ 3,122,121,175	\$ 2,945,083,406
b. Terminated Vested Members	21,753,741	19,131,781
c. Other Members	908,886,043	814,186,486
d. Total	<u>4,052,760,959</u>	<u>3,778,401,673</u>
2. Non-Vested Benefits	29,819,073	27,034,160
3. Total Actuarial Present Value of Accumulated Plan Benefits: 1d + 2	4,082,580,032	3,805,435,833
4. Accumulated Contributions of Active Members	125,887,582	114,154,202
C. Changes in the Actuarial Present Value of Accumulated Plan Benefits		
1. Total Value at Beginning of Year	3,805,435,833	3,624,155,961
2. Increase (Decrease) During the Period Attributable to:		
a. Plan Amendments	0	2,706,557
b. Change in Actuarial Assumptions	76,533,413	0
c. Latest Member Data, Benefits Accumulated and Decrease in the Discount Period	393,726,560	367,698,517
d. Benefits Paid (Net of Reserves)	<u>(193,115,774)</u>	<u>(189,125,202)</u>
e. Net Increase	277,144,199	181,279,872
3. Total Value at End of Period	4,082,580,032	3,805,435,833
D. Net Market Value of Assets	2,020,064,923	1,899,352,943
E. Funded Ratio Using Net Market Value: D / C3	49.5%	49.9%
F. Actuarial Assumptions - See page entitled Actuarial Assumptions and Methods		

SUMMARY OF DISCLOSURES

GASB Statement No. 67

Actuarial Valuation Date September 30, 2020
 Pension Plan's Fiscal Year Ending Date (Asset Measurement Date & Reporting Date) September 30, 2020

Membership

Number of	
- Retirees and Beneficiaries	3,067
- Inactive, Nonretired Members	83
- Active Members	2,236
- Total	5,386
Covered Payroll	\$ 174,185,559

Net Pension Liability

Total Pension Liability	\$ 4,253,525,414
Total Plan Fiduciary Net Position	2,020,064,923
City's Net Pension Liability	\$ 2,233,460,491
Plan Fiduciary Net Position as a Percentage of Total Pension Liability	47.49%
Net Pension Liability as a Percentage of Covered Payroll	1,282.23%

Development of the Single Discount Rate

Single Discount Rate	6.90%
Long-Term Expected Rate of Return	6.90%
Long-Term Municipal Bond Rate*	2.41%
Last year ending September 30 in the 2021 to 2120 projection period for which projected benefit payments are fully funded	2120

* Source: Fidelity General Obligation AA rate as of September 30, 2020. This is the rate for Fixed Income Market Data/Yield Curve/Data Municipal bonds with 20 years to maturity that include only federally tax-exempt municipal bonds as reported in Fidelity Investments' "20-Year Municipal GO AA Index." In describing this index, Fidelity notes that the municipal curves are constructed using option adjusted analytics of a diverse population of over 10,000 tax exempt securities.



SCHEDULE OF CHANGES IN THE EMPLOYER'S NET PENSION LIABILITY AND RELATED RATIOS

GASB Statement No. 67

Fiscal year ending September 30,	2020	2019	2018	2017	2016	2015	2014	2013	2012
Total pension liability									
Service Cost	\$ 70,109,932	\$ 65,147,956	\$ 60,154,158	\$ 45,257,077	\$ 44,087,089	\$ 46,662,780	\$ 47,915,012	\$ 46,109,290	\$ 47,569,761
Interest on the Total Pension Liability	280,847,718	269,658,004	259,433,546	233,338,035	217,546,212	210,942,612	203,577,435	195,519,742	190,343,631
Benefit Changes	2,706,557	-	-	26,818,328	-	(28,684,960)	-	-	-
Difference between actual & expected experience	2,733,203	8,465,296	8,132,052	24,030,616	3,566,449	24,831,339	22,671,112	(4,675,994)	(12,512,641)
Assumption Changes	56,025,218	-	-	232,927,458	97,813,304	24,514,349	-	5,332,605	227,333,255
Benefit Payments	(192,399,945)	(188,392,606)	(183,474,634)	(170,465,766)	(159,726,007)	(148,628,476)	(138,179,183)	(128,655,957)	(116,955,126)
Refunds	(715,829)	(732,596)	(782,240)	(811,383)	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
Net Change in Total Pension Liability	219,306,854	154,146,054	143,462,882	391,094,365	203,287,047	129,637,644	135,984,376	113,629,686	335,778,880
Total Pension Liability - Beginning	4,034,218,560	3,880,072,506	3,736,609,624	3,345,515,259	3,142,228,212	3,012,590,568	2,876,606,192	2,762,976,506	2,427,197,626
Total Pension Liability - Ending (a)	\$ 4,253,525,414	\$ 4,034,218,560	\$ 3,880,072,506	\$ 3,736,609,624	\$ 3,345,515,259	\$ 3,142,228,212	\$ 3,012,590,568	\$ 2,876,606,192	\$ 2,762,976,506
Plan Fiduciary Net Position									
Contributions - Employer (City) (Including Buyback)	\$ 123,328,488	\$ 110,527,718	\$ 115,690,989	\$ 184,526,198	\$ 157,494,371	\$ 154,664,523	\$ 150,520,270	\$ 121,822,333	\$ 72,642,853
Contributions - Employer (State)	13,888,871	12,756,091	11,791,197	10,874,768	10,680,624	10,577,853	10,110,493	9,667,185	9,275,828
Contributions - Non-Employer Contributing Entity	-	-	-	-	-	-	-	-	-
Contributions - Employee (Including Buyback)	19,035,433	17,745,867	16,636,624	13,570,483	12,830,861	12,061,321	11,583,565	10,753,501	11,610,870
Net Investment Income, including Securities Lending	159,759,702	54,258,655	156,442,808	243,421,930	154,313,142	(62,884,634)	147,332,798	169,202,439	181,653,432
Benefit Payments	(192,399,945)	(188,392,606)	(183,474,634)	(170,465,766)	(159,726,007)	(148,628,476)	(138,179,183)	(128,655,957)	(116,955,126)
Distributions from Reserve Accounts	(25,171,453)	(55,730,720)	-	-	-	-	-	-	-
Refunds	(715,829)	(732,596)	(782,240)	(811,383)	-	-	-	-	-
Administrative Expense	(2,184,754)	(2,116,593)	(2,137,969)	(2,173,617)	(3,519,224)	(2,228,452)	(2,224,248)	(2,505,985)	(2,351,598)
Court Fines	519,212	701,652	775,741	759,291	832,536	920,774	881,291	757,984	770,125
Other	672,843	1,227,722	82,245	51,404	122,886	327,418	141,855	1,187,289	55,383
Net Change in Plan Fiduciary Net Position	96,732,568	(49,754,810)	115,024,761	279,753,308	173,029,189	(35,189,673)	180,166,841	182,228,789	156,701,767
Cummulative Effect of Change in Accounting Principle	-	-	-	-	2,238,000	-	-	-	-
Plan Fiduciary Net Position - Beginning (adjusted)	1,958,067,080	2,007,821,890	1,892,797,131	1,613,043,823	1,437,776,634	1,473,097,052	1,292,930,211	1,110,737,208	954,035,541
Plan Fiduciary Net Position - Ending	\$ 2,054,799,648	\$ 1,958,067,080	\$ 2,007,821,892	\$ 1,892,797,131	\$ 1,613,043,823	\$ 1,437,907,379	\$ 1,473,097,052	\$ 1,292,965,997	\$ 1,110,737,308
less Reserve Accounts and Sr. Staff Assets	(34,734,725)	(59,262,367)	(126,819,144)	(127,638,125)	(99,645,357)	(83,502,014)	(83,349,437)	(64,834,813)	(31,830,621)
Total Plan Fiduciary Net Position - Ending (b)	\$ 2,020,064,923	\$ 1,898,804,713	\$ 1,881,002,748	\$ 1,765,159,006	\$ 1,513,398,466	\$ 1,354,405,365	\$ 1,389,747,615	\$ 1,228,131,184	\$ 1,078,906,687
City's Net Pension Liability - Ending (a) - (b)	\$ 2,233,460,491	\$ 2,135,413,847	\$ 1,999,069,758	\$ 1,971,450,618	\$ 1,832,116,793	\$ 1,787,822,847	\$ 1,622,842,953	\$ 1,648,475,008	\$ 1,684,069,819
Plan Fiduciary Net Position as a Percentage of Total Pension Liability	47.49 %	47.07 %	48.48 %	47.24 %	45.24 %	43.10 %	46.13 %	42.69 %	39.05 %
Covered Employee Payroll	\$ 174,185,559	\$ 174,124,935	\$ 162,003,561	\$ 149,489,571	\$ 135,599,741	\$ 132,735,243	\$ 134,521,216	\$ 130,972,174	\$ 133,611,459
Net Pension Liability as a Percentage of Covered Payroll	1,282.23 %	1,226.37 %	1,233.97 %	1,318.79 %	1,351.12 %	1,346.91 %	1,206.38 %	1,258.65 %	1,260.42 %



SCHEDULE OF THE EMPLOYER'S NET PENSION LIABILITY

GASB Statement No. 67

FY Ending September 30,	Total Pension Liability	Plan Net Position	Net Pension Liability	Plan Net Position as a % of Total Pension Liability	Covered Payroll	Net Pension Liability as a % of Covered Payroll
2012	\$ 2,762,976,506	\$ 1,078,906,687	\$ 1,684,069,819	39.05%	\$ 133,611,459	1,260.42%
2013	2,876,606,192	1,228,131,184	1,648,475,008	42.69%	130,972,174	1,258.65%
2014	3,012,590,568	1,389,747,615	1,622,842,953	46.13%	134,521,216	1,206.38%
2015	3,142,228,212	1,354,405,365	1,787,822,847	43.10%	132,735,243	1,346.91%
2016	3,345,515,259	1,513,398,466	1,832,116,793	45.24%	135,599,741	1,351.12%
2017	3,736,609,624	1,765,159,006	1,971,450,618	47.24%	149,489,571	1,318.79%
2018	3,880,072,506	1,881,002,748	1,999,069,758	48.48%	162,003,561	1,233.97%
2019	4,034,218,560	1,898,804,713	2,135,413,847	47.07%	174,124,935	1,226.37%
2020	4,253,525,414	2,020,064,923	2,233,460,491	47.49%	174,185,559	1,282.23%



NOTES TO NET PENSION LIABILITY

GASB Statement No. 67

Valuation Date: September 30, 2020
Measurement Date: September 30, 2020

Methods and Assumptions Used to Determine Net Pension Liability:

Actuarial Cost Method	Entry Age Normal
Inflation	2.25%
Salary Increases	A range of 2.75% to 11.50%, depending on completed years of service, including inflation
Investment Rate of Return	6.90%
Retirement Age	Experience-based table of rates that are specific to the type of eligibility condition.
Mortality	PUB-2010 Headcount Weighted Safety Healthy Employee Mortality Table (for pre-retirement mortality) and the PUB-2010 Headcount Weighted Safety Healthy Retiree Mortality Table (for postretirement mortality), with separate rates for males and females and ages set forward one year, with mortality improvements projected to all future years after 2010 using Scale MP-2018. For males, the base mortality rates for both pre-retirement and post-retirement mortality are based on the Below Median Healthy tables. These are the same rates currently in use for Special Risk Class members of the Florida Retirement System (FRS), as mandated by Chapter 112.63, Florida Statutes.

Other Information:

Notes See Discussion of Valuation Results in the October 1, 2020 Actuarial Valuation Report.

Benefit changes reflect the DOJ-COJ Settlement which was adopted after September 30, 2019 and are recognized in the fiscal year ending September 30, 2020.

Assumption changes reflect the following changes:

- The investment return assumption was lowered from 7.0% to 6.9%.
- The mortality assumption was updated to the current mortality assumption being used by the Florida Retirement System, which was updated effective July 1, 2019 by the FRS, as required by Florida Statutes.
- Based on the Experience Study dated October 22, 2020, new salary increase rates, retirement rates, separation rates, disability rates, survivor rates and surviving spouse age differences were adopted to reflect observed experience over the 6-year experience study period reviewed.



SCHEDULE OF CONTRIBUTIONS

GASB Statement No. 67

FY Ending September 30,	Actuarially Determined Contribution	Actual Contribution	Contribution Deficiency (Excess) ¹	Covered Payroll	Actual Contribution as a % of Covered Payroll
2011	77,065,314	75,902,934	1,162,380	148,967,906	50.95%
2012	73,729,000	70,598,682	3,130,318	133,611,459	52.84%
2013	99,996,835	122,580,317	(22,583,482)	130,972,174	93.59%
2014	142,432,577	149,158,659	(6,726,082)	134,521,216	110.88%
2015	153,603,996	153,935,565	(331,569)	132,735,243	115.97%
2016	149,499,492	149,499,492 *	-	135,599,741	110.25%
2017	167,788,151	167,788,151 **	-	149,489,571	112.24%
2018	135,648,057	115,690,989	19,957,068 ***	162,003,561	71.41%
2019	135,264,010	110,527,718	24,736,292 ***	174,124,935	63.48%
2020	140,292,637	123,328,488	16,964,149 ***	174,185,559	70.80%

¹Contribution deficiency (excess) was assigned to the City Budget Stabilization Account prior to fiscal year ending September 30, 2016.

*Plus \$5,000,000 Supplemental Payment

**Plus \$10,000,000 Supplemental Payment

***Contributions of \$20,000,000, \$24,736,292, and \$16,964,149 were allocated from the City Contribution Reserve (resulting from previous years' excess contributions) to fully meet the Actuarially Determined Contribution for fiscal year ending September 30, 2018, 2019 and 2020, respectively.



NOTES TO SCHEDULE OF CONTRIBUTIONS

GASB Statement No. 67

Valuation Date: October 1, 2018
Notes: Actuarially determined contribution rates are calculated as of October 1, which is two years prior to the end of the fiscal year in which contributions are reported.

Methods and Assumptions Used to Determine Contribution Rates:

Actuarial Cost Method	Entry Age Normal
Amortization Method	Level Percent of Payroll, Closed
Remaining Amortization Period	29 years
Asset Valuation Method	Market Value
Inflation	2.50%
Salary Increases	10% in 2017 and 2018, 10.5% in 2019, then 3.5% per year in 2020 and subsequent years, including inflation
Investment Rate of Return	7.00%
Retirement Age	Experience-based table of rates that are specific to the type of eligibility condition.
Mortality	RP-2000 Combined Healthy Participant Mortality Table (for pre-retirement mortality) and the RP-2000 Mortality Table for Annuitants (for postretirement mortality), with mortality improvements projected to all future years after 2000 using Scale BB. For males, the base mortality rates include a 90% blue collar adjustment and a 10% white collar adjustment. For females, the base mortality rates include a 100% white collar adjustment.

Other Information:

Notes: See Discussion of Valuation Results in the October 1, 2018 Actuarial Valuation Report, dated February 11, 2019.



SINGLE DISCOUNT RATE

GASB Statement No. 67

A single discount rate of 6.90% was used to measure the total pension liability. This single discount rate was based on the expected rate of return on pension plan investments of 6.90%. The projection of cash flows used to determine this single discount rate assumed that plan member contributions will be made at the current contribution rate and that employer contributions will be made at rates equal to the difference between the total actuarially determined contribution rates and the member rate. Based on these assumptions, the pension plan's fiduciary net position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the long-term expected rate of return on pension plan investments (6.90%) was applied to all periods of projected benefit payments to determine the total pension liability.

Regarding the sensitivity of the net pension liability to changes in the single discount rate, the following presents the plan's net pension liability, calculated using a single discount rate of 6.90%, as well as what the plan's net pension liability would be if it were calculated using a single discount rate that is 1-percentage-point lower or 1-percentage-point higher:

Sensitivity of the Net Pension Liability to the Single Discount Rate Assumption

1% Decrease	Current Single Discount Rate Assumption	1% Increase
5.90%	6.90%	7.90%
\$2,851,756,011	\$2,233,460,491	\$1,734,079,100

CALCULATION OF THE SINGLE DISCOUNT RATE

GASB Statement No. 67

GASB Statement No. 67 includes a specific requirement for the discount rate that is used for the purpose of the measurement of the Total Pension Liability. This rate considers the ability of the fund to meet benefit obligations in the future. To make this determination, employer contributions, future pension liability surtax revenue (using the prescribed annual increase assumption of 4.25%, which was set by the City of Jacksonville), employee contributions, benefit payments, expenses and investment returns are projected into the future. The Plan Net Position (assets) in future years can then be determined and compared to its obligation to make benefit payments in those years. As long as assets are projected to be on hand in a future year, the assumed valuation discount rate is used. In years where assets are not projected to be sufficient to meet benefit payments, the use of a “risk-free” rate is required, as described in the following paragraph.

We are unable to assess the risk that the timing and/or amount of future pension liability surtax proceeds may significantly deviate from the projections (due to legal challenges, economic hardships, or any other reason). Any such deviations could have a significant impact on the required contribution amount shown herein and on the future solvency risk that the Fund’s future assets may be insufficient to cover all future benefit payments.

The *Single Discount Rate* (SDR) is equivalent to applying these two rates to the benefits that are projected to be paid during the different time periods. The SDR reflects (1) the long-term expected rate of return on pension plan investments (during the period in which the fiduciary net position is projected to be sufficient to pay benefits) and (2) tax-exempt municipal bond rate based on the Bond Buyer 20-Bond Index of general obligation bonds with an average AA credit rating (which is published by the Federal Reserve) as of the measurement date (to the extent that the contributions for use with the long-term expected rate of return are not met).

For the purpose of this valuation, the expected rate of return on pension plan investments is 6.90%; the municipal bond rate is 2.41%; and the resulting single discount rate is 6.90%.

The tables in this section provide background for the development of the single discount rate.

The **Projection of Contributions** table shows the development of expected contributions in future years.

The **Projection of Plan Fiduciary Net Position** table shows the development of expected asset levels in future years.

The Present Values of Projected Benefit Payments table shows the development of the Single Discount Rate (SDR). It breaks down the benefit payments into present values for funded and unfunded portions and shows the equivalent total at the SDR.



SINGLE DISCOUNT RATE DEVELOPMENT PROJECTION OF CONTRIBUTIONS ENDING SEPTEMBER 30 FOR 2021 TO 2070

Year	Payroll for Current	Contributions from	Service Cost and	UAL	Pension Liability	Additional	Total Contributions
	Employees	Current Employees	Expense	Contributions	Surtax	Contributions	
	(a)	(b)	(c)	(d)	(e)	(f)	(g)=(b)+(c)+(d)+(e)+(f)
1	174,185,559	\$ 18,009,473	\$ 58,121,284	\$ 95,540,426	\$ -	\$ -	\$ 171,671,183
2	168,810,077	17,453,688	56,596,930	95,598,353	-	-	169,648,971
3	164,161,134	16,973,023	55,221,064	96,793,333	-	-	168,987,419
4	157,484,397	16,282,699	53,140,943	98,003,249	-	-	167,426,891
5	147,862,963	15,287,915	50,152,478	99,228,290	-	-	164,668,683
6	137,260,012	14,191,650	46,820,303	100,468,644	-	-	161,480,596
7	130,176,152	13,459,232	44,645,430	101,724,502	-	-	159,829,164
8	121,347,908	12,546,458	41,882,399	102,996,058	-	-	157,424,916
9	113,565,866	11,741,854	39,490,053	104,283,509	-	-	155,515,416
10	104,184,058	10,771,846	36,592,774	105,587,053	-	-	152,951,672
11	94,378,459	9,758,021	33,501,211	106,906,891	64,789,018	-	214,955,141
12	90,001,055	9,305,430	32,147,383	108,243,227	90,056,736	-	239,752,775
13	86,245,136	8,917,096	30,994,748	109,596,267	93,884,147	-	243,392,258
14	80,813,021	8,355,457	29,304,291	110,966,221	97,874,223	-	246,500,192
15	72,609,099	7,507,233	26,679,517	112,353,298	102,033,878	-	248,573,926
16	62,006,135	6,410,967	23,294,194	113,757,714	106,370,317	-	249,833,192
17	51,762,588	5,351,861	20,037,826	115,179,686	110,891,056	-	251,460,429
18	37,098,994	3,835,756	15,364,928	116,619,432	115,603,926	-	251,424,042
19	24,731,587	2,557,060	11,465,074	118,077,175	120,517,093	-	252,616,401
20	18,328,449	1,895,023	9,460,515	119,553,140	125,639,069	-	256,547,747
21	14,170,414	1,465,114	8,183,949	121,047,554	130,978,730	-	261,675,346
22	10,693,778	1,105,656	7,125,288	122,560,648	136,545,326	-	267,336,918
23	7,847,377	811,360	6,270,442	124,092,656	142,348,502	-	273,522,959
24	5,425,039	560,908	5,554,555	125,643,815	148,398,313	-	280,157,591
25	3,349,498	346,313	4,955,237	127,214,362	154,705,241	-	287,221,153
26	2,077,403	214,788	4,621,413	128,804,542	161,280,214	-	294,920,957
27	701,653	72,546	4,254,706	130,414,599	168,134,623	-	302,876,473
28	-	-	4,119,088	-	175,280,345	105,880,912	285,280,345
29	-	-	4,211,768	-	182,729,760	105,788,232	292,729,760
30	-	-	4,306,533	-	190,495,774	105,693,467	300,495,774
31	-	-	4,403,430	-	198,591,845	105,596,570	308,591,845
32	-	-	4,502,507	-	207,031,998	105,497,493	317,031,998
33	-	-	4,603,813	-	215,830,858	105,396,187	325,830,858
34	-	-	4,707,399	-	225,003,669	105,292,601	335,003,669
35	-	-	4,813,315	-	234,566,325	105,186,685	344,566,325
36	-	-	4,921,614	-	-	-	4,921,614
37	-	-	5,032,351	-	-	-	5,032,351
38	-	-	5,145,579	-	-	-	5,145,579
39	-	-	5,261,355	-	-	-	5,261,355
40	-	-	5,379,735	-	-	-	5,379,735
41	-	-	5,500,779	-	-	-	5,500,779
42	-	-	5,624,547	-	-	-	5,624,547
43	-	-	5,751,099	-	-	-	5,751,099
44	-	-	5,880,499	-	-	-	5,880,499
45	-	-	6,012,810	-	-	-	6,012,810
46	-	-	6,148,098	-	-	-	6,148,098
47	-	-	6,286,430	-	-	-	6,286,430
48	-	-	6,427,875	-	-	-	6,427,875
49	-	-	6,572,502	-	-	-	6,572,502
50	-	-	6,720,384	-	-	-	6,720,384



SINGLE DISCOUNT RATE DEVELOPMENT PROJECTION OF CONTRIBUTIONS ENDING SEPTEMBER 30 FOR 2071 TO 2120

Year	Payroll for Current	Contributions from	Service Cost and	UAL	Pension Liability	Additional	Total Contributions
	Employees	Current Employees	Expense	Contributions	Surtax	Contributions	
	(a)	(b)	(c)	(d)	(e)	(f)	(g)=(b)+(c)+(d)+(e)+(f)
51	-	-	6,871,592	-	-	-	6,871,592
52	-	-	7,026,203	-	-	-	7,026,203
53	-	-	7,184,292	-	-	-	7,184,292
54	-	-	7,345,939	-	-	-	7,345,939
55	-	-	7,511,222	-	-	-	7,511,222
56	-	-	7,680,224	-	-	-	7,680,224
57	-	-	7,853,029	-	-	-	7,853,029
58	-	-	8,029,723	-	-	-	8,029,723
59	-	-	8,210,392	-	-	-	8,210,392
60	-	-	8,395,125	-	-	-	8,395,125
61	-	-	8,584,016	-	-	-	8,584,016
62	-	-	8,777,156	-	-	-	8,777,156
63	-	-	8,974,642	-	-	-	8,974,642
64	-	-	9,176,572	-	-	-	9,176,572
65	-	-	9,383,044	-	-	-	9,383,044
66	-	-	9,594,162	-	-	-	9,594,162
67	-	-	9,810,031	-	-	-	9,810,031
68	-	-	10,030,757	-	-	-	10,030,757
69	-	-	10,256,449	-	-	-	10,256,449
70	-	-	10,487,219	-	-	-	10,487,219
71	-	-	10,723,181	-	-	-	10,723,181
72	-	-	10,964,453	-	-	-	10,964,453
73	-	-	11,211,153	-	-	-	11,211,153
74	-	-	11,463,404	-	-	-	11,463,404
75	-	-	11,721,331	-	-	-	11,721,331
76	-	-	11,985,061	-	-	-	11,985,061
77	-	-	12,254,725	-	-	-	12,254,725
78	-	-	12,530,456	-	-	-	12,530,456
79	-	-	12,812,392	-	-	-	12,812,392
80	-	-	13,100,671	-	-	-	13,100,671
81	-	-	13,395,436	-	-	-	13,395,436
82	-	-	13,696,833	-	-	-	13,696,833
83	-	-	14,005,012	-	-	-	14,005,012
84	-	-	14,320,124	-	-	-	14,320,124
85	-	-	14,642,327	-	-	-	14,642,327
86	-	-	14,971,780	-	-	-	14,971,780
87	-	-	15,308,645	-	-	-	15,308,645
88	-	-	15,653,090	-	-	-	15,653,090
89	-	-	16,005,285	-	-	-	16,005,285
90	-	-	16,365,404	-	-	-	16,365,404
91	-	-	16,733,625	-	-	-	16,733,625
92	-	-	17,110,132	-	-	-	17,110,132
93	-	-	17,495,110	-	-	-	17,495,110
94	-	-	17,888,750	-	-	-	17,888,750
95	-	-	18,291,246	-	-	-	18,291,246
96	-	-	18,702,799	-	-	-	18,702,799
97	-	-	19,123,611	-	-	-	19,123,611
98	-	-	19,553,893	-	-	-	19,553,893
99	-	-	19,993,855	-	-	-	19,993,855
100	-	-	20,443,717	-	-	-	20,443,717



SINGLE DISCOUNT RATE DEVELOPMENT PROJECTION OF PLAN FIDUCIARY NET POSITION ENDING SEPTEMBER 30 FOR 2021 TO 2070

Year	Projected Beginning Plan Net Position	Projected Total Contributions	Projected Benefit Payments	Projected Administrative Expenses	Projected Investment Earnings at 6.90%	Projected Ending Plan Net Position
	(a)	(b)	(c)	(d)	(e)	(f)=(a)+(b)-(c)-(d)+(e)
1	\$ 2,020,064,923	\$ 171,671,183	\$ 207,450,430	\$ 2,258,871	\$ 138,094,053	\$ 2,120,120,858
2	2,120,120,858	169,648,971	216,605,003	2,309,695	144,617,021	2,215,472,152
3	2,215,472,152	168,987,419	226,309,081	2,361,664	150,842,848	2,306,631,674
4	2,306,631,674	167,426,891	233,142,289	2,414,801	156,846,298	2,395,347,773
5	2,395,347,773	164,668,683	238,839,517	2,469,134	162,679,019	2,481,386,824
6	2,481,386,824	161,480,596	256,478,668	2,524,690	167,907,274	2,551,771,337
7	2,551,771,337	159,829,164	268,386,376	2,581,496	172,301,890	2,612,934,519
8	2,612,934,519	157,424,916	282,321,450	2,639,579	175,965,875	2,661,364,280
9	2,661,364,280	155,515,416	296,711,044	2,698,970	178,752,574	2,696,222,256
10	2,696,222,256	152,951,672	315,554,697	2,759,697	180,429,478	2,711,289,012
11	2,711,289,012	214,955,141	324,394,008	2,821,790	183,270,548	2,782,298,903
12	2,782,298,903	239,752,775	340,365,895	2,885,280	188,467,486	2,867,267,989
13	2,867,267,989	243,392,258	351,048,746	2,950,199	194,089,208	2,950,750,510
14	2,950,750,510	246,500,192	365,531,964	3,016,578	199,461,348	3,028,163,508
15	3,028,163,508	248,573,926	381,640,491	3,084,451	204,324,418	3,096,336,910
16	3,096,336,910	249,833,192	387,312,995	3,153,851	208,876,312	3,164,579,567
17	3,164,579,567	251,460,429	395,279,541	3,224,813	213,367,589	3,230,903,231
18	3,230,903,231	251,424,042	404,034,146	3,297,372	217,643,230	3,292,638,986
19	3,292,638,986	252,616,401	416,533,909	3,371,563	221,516,882	3,346,866,796
20	3,346,866,796	256,547,747	430,791,548	3,447,423	224,905,712	3,394,081,285
21	3,394,081,285	261,675,346	440,604,595	3,524,990	228,001,929	3,439,628,975
22	3,439,628,975	267,336,918	458,945,223	3,604,302	230,711,897	3,475,128,264
23	3,475,128,264	273,522,959	471,910,194	3,685,399	232,928,625	3,505,984,255
24	3,505,984,255	280,157,591	475,956,768	3,768,321	235,142,674	3,541,559,430
25	3,541,559,430	287,221,153	480,081,448	3,853,108	237,694,185	3,582,540,212
26	3,582,540,212	294,920,957	482,771,125	3,939,803	240,688,884	3,631,439,126
27	3,631,439,126	302,876,473	484,837,366	4,028,448	244,259,693	3,689,709,477
28	3,689,709,477	285,280,345	485,991,237	4,119,088	247,641,187	3,732,520,683
29	3,732,520,683	292,729,760	486,581,133	4,211,768	250,824,722	3,785,282,263
30	3,785,282,263	300,495,774	486,240,698	4,306,533	254,737,064	3,849,967,870
31	3,849,967,870	308,591,845	484,246,208	4,403,430	259,539,401	3,929,449,478
32	3,929,449,478	317,031,998	480,258,592	4,502,507	265,441,878	4,027,162,255
33	4,027,162,255	325,830,858	474,924,551	4,603,813	272,660,075	4,146,124,824
34	4,146,124,824	335,003,669	469,488,117	4,707,399	281,360,590	4,288,293,568
35	4,288,293,568	344,566,325	464,122,333	4,813,315	291,673,081	4,455,597,327
36	4,455,597,327	4,921,614	456,256,036	4,921,614	291,957,929	4,291,299,220
37	4,291,299,220	5,032,351	448,337,084	5,032,351	280,890,007	4,123,852,143
38	4,123,852,143	5,145,579	439,318,494	5,145,579	269,642,110	3,954,175,759
39	3,954,175,759	5,261,355	429,465,853	5,261,355	258,268,686	3,782,978,592
40	3,782,978,592	5,379,735	418,023,495	5,379,735	246,844,259	3,611,799,356
41	3,611,799,356	5,500,779	407,552,222	5,500,779	235,388,125	3,439,635,259
42	3,439,635,259	5,624,547	395,497,045	5,624,547	223,917,769	3,268,055,983
43	3,268,055,983	5,751,099	383,662,560	5,751,099	212,480,279	3,096,873,701
44	3,096,873,701	5,880,499	370,704,567	5,880,499	201,108,295	2,927,277,429
45	2,927,277,429	6,012,810	356,509,056	6,012,810	189,887,729	2,760,656,102
46	2,760,656,102	6,148,098	343,592,586	6,148,098	178,829,043	2,595,892,559
47	2,595,892,559	6,286,430	330,659,362	6,286,430	167,899,113	2,433,132,310
48	2,433,132,310	6,427,875	317,354,211	6,427,875	157,120,027	2,272,898,126
49	2,272,898,126	6,572,502	302,606,054	6,572,502	146,564,193	2,116,856,265
50	2,116,856,265	6,720,384	287,151,122	6,720,384	136,321,606	1,966,026,749

Reserve Accounts and Sr. Staff Plan Assets are excluded from the Plan Net Position for the purpose of this projection.



SINGLE DISCOUNT RATE DEVELOPMENT PROJECTION OF PLAN FIDUCIARY NET POSITION ENDING SEPTEMBER 30 FOR 2071 TO 2120

Year	Projected Beginning Plan Net Position	Projected Total Contributions	Projected Benefit Payments	Projected Administrative Expenses	Projected Investment Earnings at 6.90%	Projected Ending Plan Net Position
	(a)	(b)	(c)	(d)	(e)	(f)=(a)+(b)-(c)-(d)+(e)
51	1,966,026,749	6,871,592	271,977,316	6,871,592	126,429,134	1,820,478,567
52	1,820,478,567	7,026,203	255,175,808	7,026,203	116,956,294	1,682,259,053
53	1,682,259,053	7,184,292	238,846,649	7,184,292	107,973,107	1,551,385,511
54	1,551,385,511	7,345,939	224,455,242	7,345,939	99,431,054	1,426,361,323
55	1,426,361,323	7,511,222	210,626,554	7,511,222	91,273,518	1,307,008,287
56	1,307,008,287	7,680,224	197,240,670	7,680,224	83,492,268	1,193,259,885
57	1,193,259,885	7,853,029	184,189,694	7,853,029	76,086,377	1,085,156,569
58	1,085,156,569	8,029,723	171,472,912	8,029,723	69,058,660	982,742,317
59	982,742,317	8,210,392	159,074,897	8,210,392	62,412,674	886,080,094
60	886,080,094	8,395,125	147,073,755	8,395,125	56,150,114	795,156,453
61	795,156,453	8,584,016	135,483,970	8,584,016	50,269,561	709,942,044
62	709,942,044	8,777,156	124,256,719	8,777,156	44,770,646	630,455,971
63	630,455,971	8,974,642	113,570,302	8,974,642	39,648,639	556,534,308
64	556,534,308	9,176,572	103,375,659	9,176,572	34,893,893	488,052,542
65	488,052,542	9,383,044	93,561,034	9,383,044	30,501,608	424,993,116
66	424,993,116	9,594,162	84,156,308	9,594,162	26,469,559	367,306,367
67	367,306,367	9,810,031	75,190,704	9,810,031	22,793,328	314,908,991
68	314,908,991	10,030,757	66,694,580	10,030,757	19,466,136	267,680,547
69	267,680,547	10,256,449	58,696,342	10,256,449	16,478,710	225,462,915
70	225,462,915	10,487,219	51,220,035	10,487,219	13,819,324	188,062,204
71	188,062,204	10,723,181	44,287,443	10,723,181	11,473,860	155,248,621
72	155,248,621	10,964,453	37,916,810	10,964,453	9,425,844	126,757,655
73	126,757,655	11,211,153	32,121,062	11,211,153	7,656,585	102,293,178
74	102,293,178	11,463,404	26,904,963	11,463,404	6,145,490	81,533,706
75	81,533,706	11,721,331	22,264,683	11,721,331	4,870,506	64,139,529
76	64,139,529	11,985,061	18,187,970	11,985,061	3,808,609	49,760,167
77	49,760,167	12,254,725	14,654,641	12,254,725	2,936,299	38,041,825
78	38,041,825	12,530,456	11,636,286	12,530,456	2,230,130	28,635,669
79	28,635,669	12,812,392	9,097,627	12,812,392	1,667,228	21,205,270
80	21,205,270	13,100,671	6,997,214	13,100,671	1,225,786	15,433,842
81	15,433,842	13,395,436	5,289,311	13,395,436	885,498	11,030,029
82	11,030,029	13,696,833	3,925,587	13,696,833	627,898	7,732,340
83	7,732,340	14,005,012	2,857,406	14,005,012	436,595	5,311,529
84	5,311,529	14,320,124	2,037,580	14,320,124	297,371	3,571,320
85	3,571,320	14,642,327	1,421,845	14,642,327	198,186	2,347,660
86	2,347,660	14,971,780	969,617	14,971,780	129,095	1,507,138
87	1,507,138	15,308,645	645,347	15,308,645	82,099	943,891
88	943,891	15,653,090	418,607	15,653,090	50,927	576,211
89	576,211	16,005,285	264,354	16,005,285	30,790	342,647
90	342,647	16,365,404	162,417	16,365,404	18,133	198,363
91	198,363	16,733,625	97,064	16,733,625	10,394	111,693
92	111,693	17,110,132	56,412	17,110,132	5,793	61,074
93	61,074	17,495,110	31,817	17,495,110	3,135	32,392
94	32,392	17,888,750	17,427	17,888,750	1,644	16,608
95	16,608	18,291,246	9,255	18,291,246	832	8,185
96	8,185	18,702,799	4,752	18,702,799	404	3,837
97	3,837	19,123,611	2,345	19,123,611	185	1,677
98	1,677	19,553,893	1,087	19,553,893	79	669
99	669	19,993,855	460	19,993,855	31	239
100	239	20,443,717	239	20,443,717	8	9

Reserve Accounts and Sr. Staff Plan Assets are excluded from the Plan Net Position for the purpose of this projection.



SINGLE DISCOUNT RATE DEVELOPMENT PRESENT VALUES OF PROJECTED BENEFITS ENDING SEPTEMBER 30 FOR 2021 TO 2070

Year	Projected Beginning Plan Net Position	Projected Benefit Payments	Funded Portion of Benefit Payments	Unfunded Portion of Benefit Payments	Present Value of Funded Benefit Payments using Expected Return Rate (v)	Present Value of Unfunded Benefit Payments using Municipal Bond Rate (vf)	Present Value of Benefit Payments using Single Discount Rate (sdr)
(a)	(b)	(c)	(d)	(e)	(f)=(d)*v ^{(a)-5}	(g)=(e)*vf ^{(a)-5}	(h)=(c)/(1+sdr) ^{(a)-5}
1	\$ 2,020,064,923	\$ 207,450,430	\$ 207,450,430	\$ -	\$ 200,643,681	\$ -	\$ 200,643,681
2	2,120,120,858	216,605,003	216,605,003	-	195,975,565	-	195,975,565
3	2,215,472,152	226,309,081	226,309,081	-	191,539,222	-	191,539,222
4	2,306,631,674	233,142,289	233,142,289	-	184,586,140	-	184,586,140
5	2,395,347,773	238,839,517	238,839,517	-	176,891,315	-	176,891,315
6	2,481,386,824	256,478,668	256,478,668	-	177,694,453	-	177,694,453
7	2,551,771,337	268,386,376	268,386,376	-	173,942,370	-	173,942,370
8	2,612,934,519	282,321,450	282,321,450	-	171,163,472	-	171,163,472
9	2,661,364,280	296,711,044	296,711,044	-	168,276,402	-	168,276,402
10	2,696,222,256	315,554,697	315,554,697	-	167,411,948	-	167,411,948
11	2,711,289,012	324,394,008	324,394,008	-	160,992,973	-	160,992,973
12	2,782,298,903	340,365,895	340,365,895	-	158,016,496	-	158,016,496
13	2,867,267,989	351,048,746	351,048,746	-	152,456,558	-	152,456,558
14	2,950,750,510	365,531,964	365,531,964	-	148,499,961	-	148,499,961
15	3,028,163,508	381,640,491	381,640,491	-	145,036,637	-	145,036,637
16	3,096,336,910	387,312,995	387,312,995	-	137,691,661	-	137,691,661
17	3,164,579,567	395,279,541	395,279,541	-	131,453,514	-	131,453,514
18	3,230,903,231	404,034,146	404,034,146	-	125,692,171	-	125,692,171
19	3,292,638,986	416,533,909	416,533,909	-	121,216,800	-	121,216,800
20	3,346,866,796	430,791,548	430,791,548	-	117,274,050	-	117,274,050
21	3,394,081,285	440,604,595	440,604,595	-	112,203,412	-	112,203,412
22	3,439,628,975	458,945,223	458,945,223	-	109,330,212	-	109,330,212
23	3,475,128,264	471,910,194	471,910,194	-	105,162,522	-	105,162,522
24	3,505,984,255	475,956,768	475,956,768	-	99,218,221	-	99,218,221
25	3,541,559,430	480,081,448	480,081,448	-	93,618,385	-	93,618,385
26	3,582,540,212	482,771,125	482,771,125	-	88,066,311	-	88,066,311
27	3,631,439,126	484,837,366	484,837,366	-	82,734,547	-	82,734,547
28	3,689,709,477	485,991,237	485,991,237	-	77,578,530	-	77,578,530
29	3,732,520,683	486,581,133	486,581,133	-	72,659,209	-	72,659,209
30	3,785,282,263	486,240,698	486,240,698	-	67,921,771	-	67,921,771
31	3,849,967,870	484,246,208	484,246,208	-	63,277,049	-	63,277,049
32	3,929,449,478	480,258,592	480,258,592	-	58,705,316	-	58,705,316
33	4,027,162,255	474,924,551	474,924,551	-	54,306,173	-	54,306,173
34	4,146,124,824	469,488,117	469,488,117	-	50,219,395	-	50,219,395
35	4,288,293,568	464,122,333	464,122,333	-	46,441,008	-	46,441,008
36	4,455,597,327	456,256,036	456,256,036	-	42,707,101	-	42,707,101
37	4,291,299,220	448,337,084	448,337,084	-	39,257,119	-	39,257,119
38	4,123,852,143	439,318,494	439,318,494	-	35,984,506	-	35,984,506
39	3,954,175,759	429,465,853	429,465,853	-	32,906,901	-	32,906,901
40	3,782,978,592	418,023,495	418,023,495	-	29,962,727	-	29,962,727
41	3,611,799,356	407,552,222	407,552,222	-	27,326,638	-	27,326,638
42	3,439,635,259	395,497,045	395,497,045	-	24,806,670	-	24,806,670
43	3,268,055,983	383,662,560	383,662,560	-	22,511,112	-	22,511,112
44	3,096,873,701	370,704,567	370,704,567	-	20,346,877	-	20,346,877
45	2,927,277,429	356,509,056	356,509,056	-	18,304,703	-	18,304,703
46	2,760,656,102	343,592,586	343,592,586	-	16,502,821	-	16,502,821
47	2,595,892,559	330,659,362	330,659,362	-	14,856,535	-	14,856,535
48	2,433,132,310	317,354,211	317,354,211	-	13,338,386	-	13,338,386
49	2,272,898,126	302,606,054	302,606,054	-	11,897,588	-	11,897,588
50	2,116,856,265	287,151,122	287,151,122	-	10,561,221	-	10,561,221

Reserve Accounts and Sr. Staff Plan Assets are excluded from the Plan Net Position for the purpose of this projection.



SINGLE DISCOUNT RATE DEVELOPMENT PRESENT VALUES OF PROJECTED BENEFITS ENDING SEPTEMBER 30 FOR 2071 TO 2120

Year	Projected Beginning Plan Net Position	Projected Benefit Payments	Funded Portion of Benefit Payments	Unfunded Portion of Benefit Payments	Present Value of Funded Benefit Payments using Expected Return Rate (v)	Present Value of Unfunded Benefit Payments using Municipal Bond Rate (vf)	Present Value of Benefit Payments using Single Discount Rate (sdr)
(a)	(b)	(c)	(d)	(e)	(f)=(d)*v ⁿ ((a)-.5)	(g)=(e)*vf ⁿ ((a)-.5)	(h)=((c)/(1+sdr) ⁿ (a-.5)
51	\$ 1,966,026,749	\$ 271,977,316	\$ 271,977,316	\$ -	\$ 9,357,473	\$ -	\$ 9,357,473
52	1,820,478,567	255,175,808	255,175,808	-	8,212,733	-	8,212,733
53	1,682,259,053	238,846,649	238,846,649	-	7,191,006	-	7,191,006
54	1,551,385,511	224,455,242	224,455,242	-	6,321,535	-	6,321,535
55	1,426,361,323	210,626,554	210,626,554	-	5,549,172	-	5,549,172
56	1,307,008,287	197,240,670	197,240,670	-	4,861,092	-	4,861,092
57	1,193,259,885	184,189,694	184,189,694	-	4,246,440	-	4,246,440
58	1,085,156,569	171,472,912	171,472,912	-	3,698,090	-	3,698,090
59	982,742,317	159,074,897	159,074,897	-	3,209,267	-	3,209,267
60	886,080,094	147,073,755	147,073,755	-	2,775,631	-	2,775,631
61	795,156,453	135,483,970	135,483,970	-	2,391,865	-	2,391,865
62	709,942,044	124,256,719	124,256,719	-	2,052,065	-	2,052,065
63	630,455,971	113,570,302	113,570,302	-	1,754,520	-	1,754,520
64	556,534,308	103,375,659	103,375,659	-	1,493,943	-	1,493,943
65	488,052,542	93,561,034	93,561,034	-	1,264,833	-	1,264,833
66	424,993,116	84,156,308	84,156,308	-	1,064,258	-	1,064,258
67	367,306,367	75,190,704	75,190,704	-	889,502	-	889,502
68	314,908,991	66,694,580	66,694,580	-	738,066	-	738,066
69	267,680,547	58,696,342	58,696,342	-	607,629	-	607,629
70	225,462,915	51,220,035	51,220,035	-	496,009	-	496,009
71	188,062,204	44,287,443	44,287,443	-	401,192	-	401,192
72	155,248,621	37,916,810	37,916,810	-	321,311	-	321,311
73	126,757,655	32,121,062	32,121,062	-	254,628	-	254,628
74	102,293,178	26,904,963	26,904,963	-	199,513	-	199,513
75	81,533,706	22,264,683	22,264,683	-	154,446	-	154,446
76	64,139,529	18,187,970	18,187,970	-	118,023	-	118,023
77	49,760,167	14,654,641	14,654,641	-	88,957	-	88,957
78	38,041,825	11,636,286	11,636,286	-	66,076	-	66,076
79	28,635,669	9,097,627	9,097,627	-	48,326	-	48,326
80	21,205,270	6,997,214	6,997,214	-	34,769	-	34,769
81	15,433,842	5,289,311	5,289,311	-	24,586	-	24,586
82	11,030,029	3,925,587	3,925,587	-	17,070	-	17,070
83	7,732,340	2,857,406	2,857,406	-	11,623	-	11,623
84	5,311,529	2,037,580	2,037,580	-	7,753	-	7,753
85	3,571,320	1,421,845	1,421,845	-	5,061	-	5,061
86	2,347,660	969,617	969,617	-	3,229	-	3,229
87	1,507,138	645,347	645,347	-	2,010	-	2,010
88	943,891	418,607	418,607	-	1,220	-	1,220
89	576,211	264,354	264,354	-	721	-	721
90	342,647	162,417	162,417	-	414	-	414
91	198,363	97,064	97,064	-	232	-	232
92	111,693	56,412	56,412	-	126	-	126
93	61,074	31,817	31,817	-	66	-	66
94	32,392	17,427	17,427	-	34	-	34
95	16,608	9,255	9,255	-	17	-	17
96	8,185	4,752	4,752	-	8	-	8
97	3,837	2,345	2,345	-	4	-	4
98	1,677	1,087	1,087	-	2	-	2
99	669	460	460	-	1	-	1
100	239	239	239	-	0	-	0
Totals					\$ 4,819,104,898	\$ -	\$ 4,819,104,898

Reserve Accounts and Sr. Staff Plan Assets are excluded from the Plan Net Position for the purpose of this projection.



SECTION E

PROJECTION OF ASSETS, LIABILITIES AND CONTRIBUTION REQUIREMENTS

Jacksonville Police and Fire Pension Fund
40-Year Projection - Current Plan, Methods and Assumptions

Valuation Date	Covered October 1 Payroll	Actuarial Accrued Liability	Net Actuarial Value of Assets	Unfunded Actuarial Accrued Liability	Net Present Value of Future Pension Liability	Net Unfunded Actuarial Accrued Liability	Funded Ratio on Valuation Date	Total Contribution					
								Fiscal Year Ending	Pension Liability Contribution	% of Total Cont'n	Required City Contribution ¹²	% of Total Cont'n	Total Contribution
10/1/20	174,185,559	4,253,525,414	2,041,049,063	2,212,476,351	909,196,697	1,303,279,654	47.98%	2021	0	0.0%	148,475,947	100.0%	148,475,947
10/1/21	168,810,077	4,408,908,527	2,128,399,818	2,280,508,709	971,931,269	1,308,577,440	48.27%	2022	0	0.0%	157,352,434	100.0%	157,352,434
10/1/22	164,161,134	4,563,344,685	2,221,202,652	2,342,142,033	1,038,994,526	1,303,147,507	48.67%	2023	0	0.0%	158,108,067	100.0%	158,108,067
10/1/23	157,484,397	4,716,430,408	2,306,381,541	2,410,048,867	1,110,685,149	1,299,363,718	48.90%	2024	0	0.0%	158,108,067	100.0%	158,108,067
10/1/24	147,862,963	4,870,094,652	2,404,472,422	2,465,622,230	1,187,322,424	1,278,299,806	49.37%	2025	0	0.0%	157,956,807	100.0%	157,956,807
10/1/25	137,260,012	5,024,296,672	2,498,116,668	2,526,180,004	1,269,247,671	1,256,932,333	49.72%	2026	0	0.0%	155,760,225	100.0%	155,760,225
10/1/26	130,176,152	5,166,264,965	2,576,344,882	2,589,920,083	1,356,825,761	1,233,094,322	49.87%	2027	0	0.0%	153,300,800	100.0%	153,300,800
10/1/27	121,347,908	5,302,652,747	2,644,046,697	2,658,606,050	1,450,446,738	1,208,159,312	49.86%	2028	0	0.0%	152,029,227	100.0%	152,029,227
10/1/28	113,565,866	5,430,182,912	2,699,561,113	2,730,621,799	1,550,527,563	1,180,094,236	49.71%	2029	0	0.0%	150,202,037	100.0%	150,202,037
10/1/29	104,184,058	5,548,268,092	2,740,999,013	2,807,269,079	1,657,513,965	1,149,755,114	49.40%	2030	64,789,018	30.6%	148,781,940	100.0%	148,781,940
10/1/30	94,378,459	5,650,956,964	2,763,033,547	2,887,923,417	1,771,882,428	1,116,040,989	48.89%	2031	90,056,736	38.3%	146,909,263	69.4%	211,698,281
10/1/31	90,001,055	5,747,283,326	2,840,521,010	2,906,762,316	1,827,711,737	1,079,050,579	49.42%	2032	93,884,147	39.4%	144,842,665	61.7%	234,899,401
10/1/32	86,245,136	5,831,809,136	2,930,531,325	2,901,277,811	1,860,711,976	1,040,565,835	50.25%	2033	97,874,223	40.4%	144,473,263	60.6%	238,357,410
10/1/33	80,813,021	5,909,461,597	3,018,447,957	2,891,013,640	1,892,031,976	998,981,664	51.08%	2034	102,033,878	41.4%	144,570,763	59.6%	242,444,986
10/1/34	72,609,099	5,975,100,396	3,100,734,405	2,874,365,991	1,921,387,620	952,978,371	51.89%	2035	106,370,317	42.7%	144,130,685	58.6%	246,164,563
10/1/35	62,006,135	6,024,952,277	3,174,636,497	2,850,315,780	1,948,468,033	901,847,747	52.69%	2036	110,891,056	44.2%	142,681,336	57.3%	249,051,653
10/1/36	51,762,588	6,067,673,615	3,249,281,232	2,818,392,383	1,972,933,443	845,458,940	53.55%	2037	115,603,926	45.6%	142,681,336	57.3%	249,051,653
10/1/37	37,098,994	6,100,570,675	3,321,605,571	2,778,965,104	1,994,412,865	784,552,239	54.45%	2038	120,517,093	47.4%	137,769,035	54.4%	253,372,961
10/1/38	24,731,587	6,120,212,051	3,390,406,497	2,729,805,554	2,012,501,614	717,303,940	55.40%	2039	125,639,069	49.1%	133,668,640	52.6%	254,185,733
10/1/39	18,328,449	6,122,853,929	3,450,236,422	2,672,617,507	2,026,758,643	645,858,864	56.35%	2040	130,978,730	50.5%	129,084,111	50.9%	255,723,180
10/1/40	14,170,414	6,108,101,283	3,499,847,416	2,608,253,867	2,036,703,670	571,550,197	57.30%	2041	136,545,326	51.6%	128,560,975	49.5%	259,539,705
10/1/41	10,693,778	6,080,340,189	3,545,725,730	2,534,614,459	2,041,814,098	492,800,361	58.31%	2042	142,348,502	52.7%	128,098,033	48.4%	264,643,359
10/1/42	7,847,377	6,030,152,520	3,580,234,949	2,449,917,571	2,041,521,705	408,395,866	59.37%	2043	148,398,313	53.7%	127,960,025	47.3%	270,308,527
10/1/43	5,425,039	5,961,825,127	3,608,648,880	2,353,176,247	2,035,209,090	317,967,157	60.53%	2044	154,705,241	54.7%	128,101,926	46.3%	276,500,239
10/1/44	3,349,498	5,883,514,435	3,640,361,864	2,243,152,571	2,022,205,856	220,946,715	61.87%	2045	161,280,214	55.8%	128,234,044	45.3%	282,939,285
10/1/45	2,077,403	5,794,606,509	3,675,924,716	2,118,681,793	2,001,784,511	116,897,282	63.44%	2046	168,134,623	57.2%	127,906,837	44.2%	289,187,051
10/1/46	701,653	5,696,212,243	3,717,008,434	1,979,203,809	1,973,156,067	6,047,742	65.25%	2047	175,280,345	61.4%	126,029,317	42.8%	294,163,940
10/1/47	0	5,588,274,565	3,763,233,306	1,825,041,259	1,935,465,319	(110,424,060)	67.34%	2048	182,729,760	62.4%	110,000,000	37.6%	292,729,760
10/1/48	0	5,471,387,233	3,801,179,673	1,670,207,560	1,887,785,772	(217,578,212)	69.47%	2049	190,495,774	63.4%	110,000,000	36.6%	300,495,774
10/1/49	0	5,345,824,767	3,848,430,324	1,497,394,443	1,829,114,204	(331,719,761)	71.99%	2050	198,591,845	64.4%	110,000,000	35.6%	308,591,845
10/1/50	0	5,211,950,475	3,906,907,348	1,305,043,127	1,758,364,824	(453,321,697)	74.96%	2051	207,031,998	65.3%	110,000,000	34.7%	317,031,998
10/1/51	0	5,070,901,009	3,979,427,438	1,091,473,571	1,674,363,011	(582,889,440)	78.48%	2052	215,830,858	66.2%	110,000,000	33.8%	325,830,858
10/1/52	0	4,924,242,024	4,069,366,507	854,875,517	1,575,838,591	(720,963,074)	82.64%	2053	225,003,669	67.2%	110,000,000	32.8%	335,003,669
10/1/53	0	4,772,978,565	4,179,679,671	593,298,894	1,461,418,628	(868,119,734)	87.57%	2054	234,566,325	68.1%	110,000,000	31.9%	344,566,325
10/1/54	0	4,616,898,790	4,312,255,257	304,643,533	1,329,619,693	(1,024,976,160)	93.40%	2055	0	0.0%	20,206,460	100.0%	20,206,460
10/1/55	0	4,455,597,327	4,468,949,177	(13,351,850)	0	(13,351,850)	100.30%	2056	0	0.0%	20,661,106	100.0%	20,661,106
10/1/56	0	4,291,299,220	4,305,600,249	(14,301,029)	0	(14,301,029)	100.33%	2057	0	0.0%	21,125,980	100.0%	21,125,980
10/1/57	0	4,123,852,143	4,139,168,472	(15,316,329)	0	(15,316,329)	100.37%	2058	0	0.0%	21,601,315	100.0%	21,601,315
10/1/58	0	3,954,175,759	3,970,578,086	(16,402,327)	0	(16,402,327)	100.41%	2059	0	0.0%	22,087,344	100.0%	22,087,344
10/1/59	0	3,782,978,592	3,800,542,507	(17,563,915)	0	(17,563,915)	100.46%	2060	0	0.0%	22,584,309	100.0%	22,584,309
10/1/60	0	3,611,799,356	3,630,605,680	(18,806,324)	0	(18,806,324)	100.52%	2061	0	0.0%	23,092,456	100.0%	23,092,456
10/1/60	0	3,611,799,356	3,630,605,680	(18,806,324)	0	(18,806,324)	100.52%	2062	0	0.0%	23,092,456	100.0%	23,092,456
Total:									3,699,580,986	43.1%	4,875,503,557	56.9%	8,575,084,543
Total Present Value at 6.9%:									795,109,996	28.3%	2,013,022,831	71.7%	2,808,132,827

¹Future City contributions are assumed to be equal to the dollar amount of the calculated contribution, payable in December of the fiscal year beginning one year after the valuation date.

²Future City contributions do not reflect the potential use of reserves that have been allocated to the City that may be used to offset the City's required contribution amount. As of October 1, 2020, approximately \$16.3 million in reserves are available for use by the City.

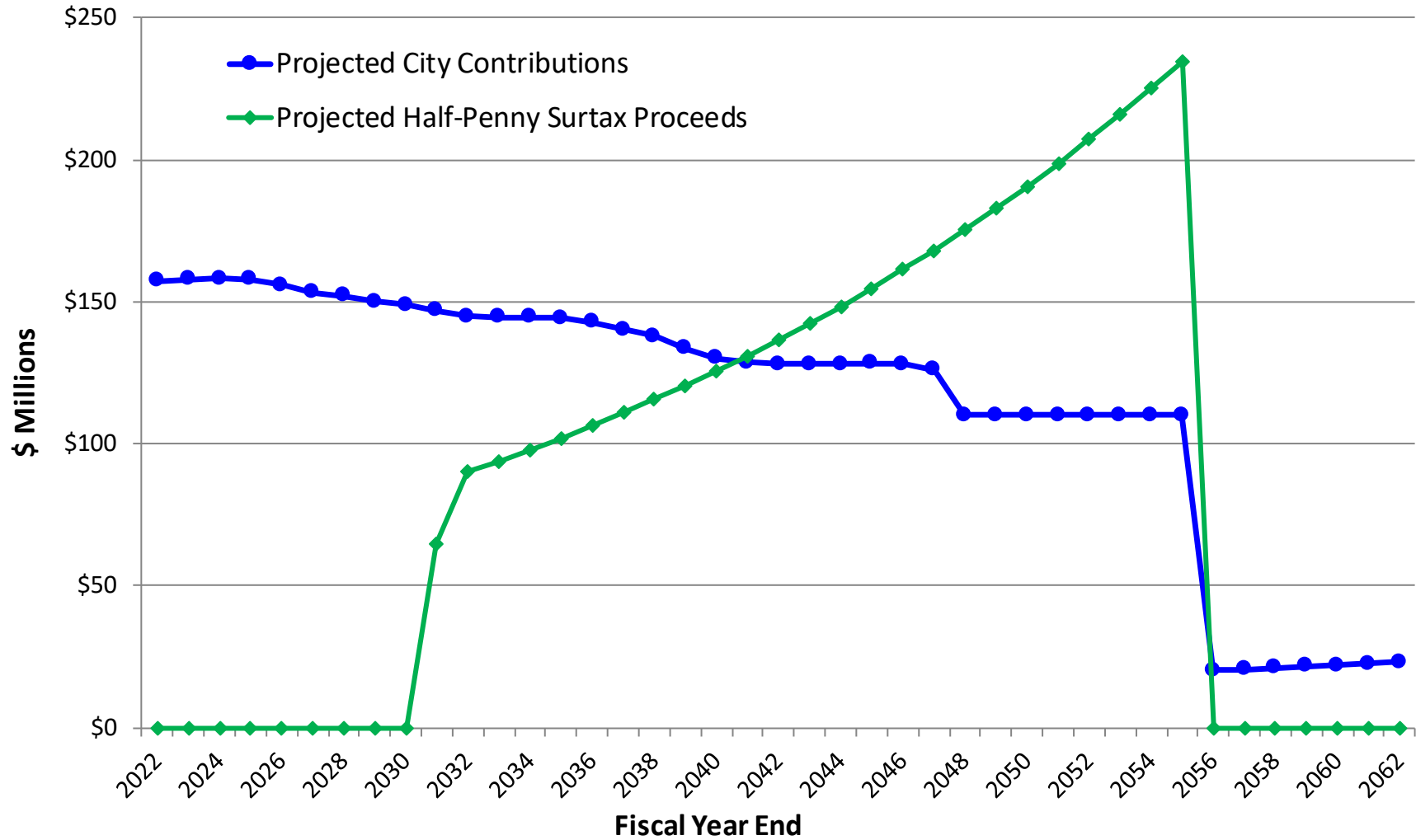
Assumptions

- Investment Return Assumption: 6.9% per year
- Actuarial Value of Assets: 5-Year Smoothed Market
- Payroll Growth Rate Assumption: 1.25% per year
- Pension Liability Surtax Proceeds: 58.3% of Total Revenue Allocated to Police and Fire Pension Fund; Projected to increase 4.25% annually
- Annual Expenses and Contributions from Court Fines: Projected to increase 2.25% annually

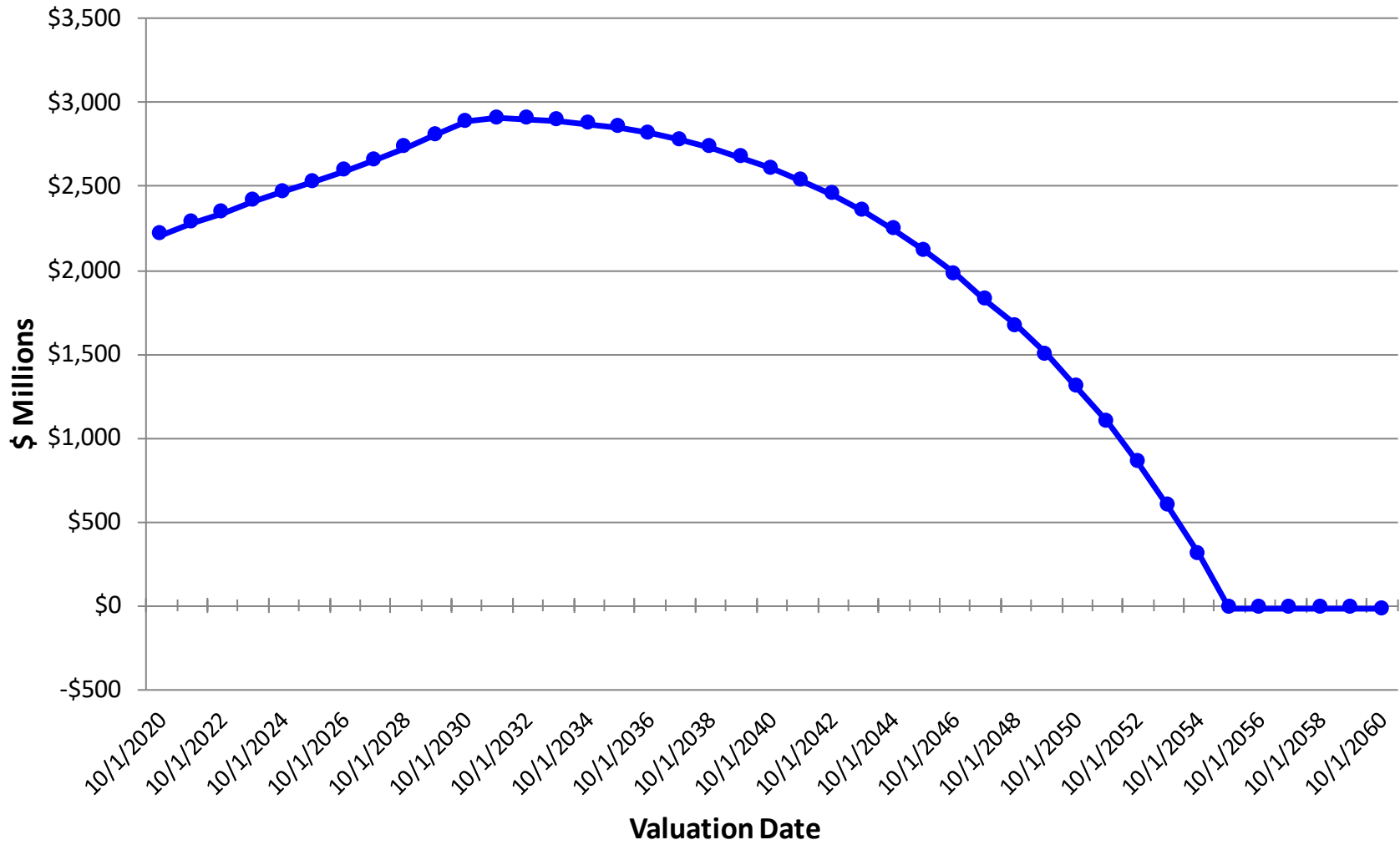
Future experience was assumed to be consistent with the aforementioned actuarial assumptions and methods. If experience differs from the actuarial assumptions or if the Board adopts different assumptions or methods, future results could be significantly different from the projected results above.



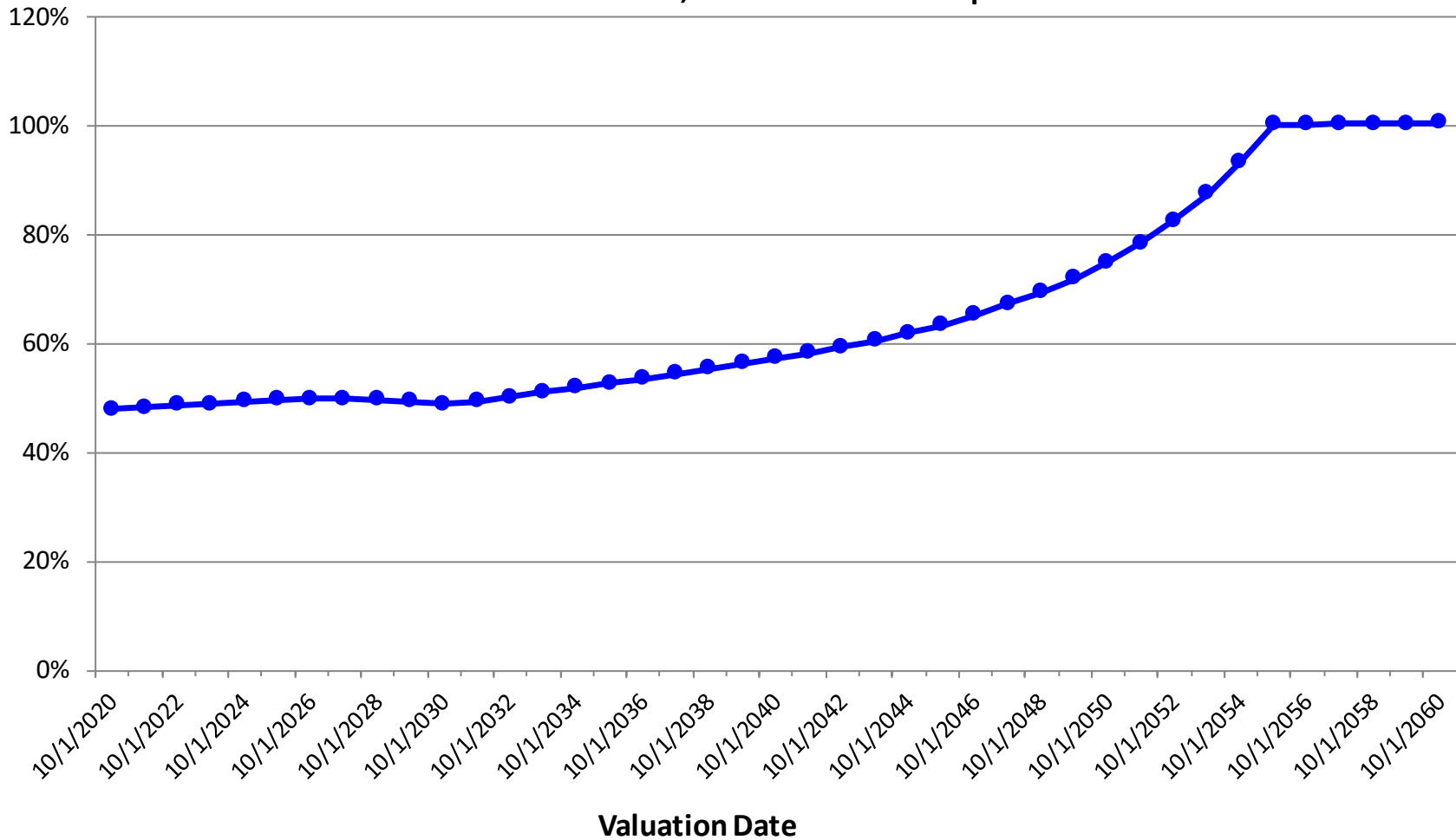
Jacksonville Police and Fire Pension Fund 40-Year Projection of Pension Liability Surtax Proceeds and Required City Contributions



**Jacksonville Police and Fire Pension Fund
40-Year Projection of Unfunded Actuarial Accrued Liability
Current Plan, Methods and Assumptions**



**Jacksonville Police and Fire Pension Fund
40-Year Projection of Funded Ratio
Current Plan, Methods and Assumptions**



SECTION F

MISCELLANEOUS INFORMATION

RECONCILIATION OF TOTAL MEMBERSHIP DATA		
	From 10/1/19 To 10/1/20	From 10/1/18 To 10/1/19
A. Active Members		
1. Number Included in Last Valuation	2,301	2,384
2. New Members Included in Current Valuation	0	0
3. Non-Vested Employment Terminations	(2)	(13)
4. Vested Employment Terminations	(9)	(16)
5. DROP Retirement	(51)	(46)
6. Service Retirements	(5)	(4)
7. Disability Retirements	0	(2)
8. Deaths	(1)	(2)
9. Other - Rehires	3	0
10. Number Included in This Valuation	<u>2,236</u>	<u>2,301</u>
B. Terminated Vested Members		
1. Number Included in Last Valuation	82	82
2. Additions from Active Members	9	16
3. Lump Sum Payments/Refund of Contributions	(4)	0
4. Payments Commenced	(1)	(15)
5. Deaths	0	(1)
6. Rehire	(3)	0
7. Other - Data Corrections	0	0
8. Number Included in This Valuation	<u>83</u>	<u>82</u>
C. DROP Retirees, Service Retirees, Disability Retirees and Beneficiaries		
1. Number Included in Last Valuation	3,045	3,010
2. Additions from Active Members	56	52
3. Additions from Terminated Vested Members	1	15
4. Deaths	(64)	(56)
5. Additions from New Survivor Benefits	32	27
6. End of Certain Period - No Further Payments	(3)	(3)
7. Other - Data Corrections	0	0
8. Number Included in This Valuation	<u>3,067</u>	<u>3,045</u>

Note: Participant Data is collected as of July 1.



ACTIVE MEMBERS AS OF OCTOBER 1, 2020

Age Group	Years of Service to Valuation Date									Earnings	
	0-1	1-4	5-9	10-14	15-19	20-24	25-29	30+	Total	Total	Average
< 25	-	11	2	-	-	-	-	-	13	\$ 784,360	\$ 60,335
25-29	-	130	80	1	-	-	-	-	211	12,879,398	61,040
30-34	-	126	162	71	-	-	-	-	359	24,253,472	67,558
35-39	-	69	98	203	90	-	-	-	460	35,529,035	77,237
40-44	-	33	47	127	214	33	-	-	454	37,439,669	82,466
45-49	-	12	21	75	176	115	12	-	411	35,264,015	85,801
50-54	-	4	7	36	81	67	21	-	216	19,384,241	89,742
55-59	-	1	-	27	40	25	3	-	96	7,673,018	79,927
60-64	-	-	-	1	8	4	1	-	14	1,253,674	89,548
65-69	-	-	-	-	2	-	-	-	2	155,389	77,695
70+	-	-	-	-	-	-	-	-	-	-	-
Total	-	386	417	541	611	244	37	-	2,236	174,616,271	78,093

Average Age: 41.0 Average Service: 12.5

INACTIVE MEMBERS AS OF OCTOBER 1, 2020

Age	<u>Terminated Vested</u>		<u>Disabled</u>		<u>Retired</u>		<u>DROP</u>		<u>Beneficiaries</u>		<u>Grand Total</u>	
	<u>Number</u>	<u>Benefits</u>	<u>Number</u>	<u>Benefits</u>	<u>Number</u>	<u>Benefits</u>	<u>Number</u>	<u>Benefits</u>	<u>Number</u>	<u>Benefits</u>	<u>Number</u>	<u>Benefits</u>
Under 25	0	0	0	0	0	0	0	0	21	261,759	21	261,759
25 - 29	1	6,278	0	0	0	0	0	0	0	0	1	6,278
30 - 34	6	75,452	0	0	0	0	0	0	1	16,641	7	92,093
35 - 39	14	220,311	0	0	0	0	0	0	2	69,241	16	289,552
40 - 44	28	467,662	1	36,194	1	42,433	5	237,138	6	159,098	41	942,525
45 - 49	11	209,170	0	0	97	4,592,811	73	3,699,443	7	254,816	188	8,756,240
50 - 54	19	393,150	6	274,077	340	18,714,732	137	7,870,144	14	586,646	516	27,838,749
55 - 59	2	31,752	9	409,579	390	23,050,180	59	3,055,766	20	894,519	480	27,441,796
60 - 64	2	31,500	9	420,307	316	21,041,944	16	844,762	33	1,452,591	376	23,791,104
65 - 69	0	0	11	510,683	332	23,012,703	4	174,416	56	2,809,684	403	26,507,486
70 - 74	0	0	7	263,533	388	27,508,772	0	0	65	2,901,668	460	30,673,973
75 - 79	0	0	2	53,176	200	14,532,784	0	0	93	3,894,488	295	18,480,448
80 - 84	0	0	0	0	114	8,011,683	0	0	59	2,771,304	173	10,782,987
85 - 89	0	0	1	4,547	56	3,121,957	0	0	55	2,022,452	112	5,148,956
90 - 94	0	0	0	0	18	939,177	0	0	30	849,090	48	1,788,267
95 - 99	0	0	0	0	3	84,085	0	0	10	289,923	13	374,008
100 & Over	0	0	0	0	0	0	0	0	0	0	0	0
Total	83	1,435,275	46	1,972,096	2,255	144,653,261	294	15,881,669	472	19,233,920	3,150	183,176,221
Average Age:		44.1		63.3		65.2		52.8		72.2		64.5
Avg. Annual Benefit:		17,292		42,872		64,148		54,019		40,750		58,151



SECTION G

SUMMARY OF PLAN PROVISIONS

SUMMARY OF PLAN PROVISIONS

POLICE AND FIREFIGHTERS PENSION FUND

A. Ordinances

The Plan was established under the Code of Ordinances for the City of Jacksonville, Florida, Title V, Chapter 121. The Plan is also governed by certain provisions of Chapter 175, Florida Statutes, Chapter 185, Florida Statutes, Part VII, Chapter 112, Florida Statutes and the Internal Revenue Code.

B. Effective Date

Not Available.

C. Plan Year

October 1 through September 30

D. Type of Plan

Qualified, governmental defined benefit retirement plan; for GASB purposes it is a single employer plan.

E. Eligibility Requirements

Any police officer or firefighter employed by the City on a regular full-time basis in an approved budgeted position. The plan is closed to new entrants effective October 1, 2017.

F. Credited Service

Credited Service is measured as the total number of months and fractional parts thereof of full-time employment with the City during which time prescribed employee contributions are made.

Members may purchase up to 5 years of service as a Florida State Certified Police Officer or Firefighter with another public employer and up to 2 years of wartime military service. No service is credited for any periods of employment for which the member received a refund of their contributions.

G. Compensation

Amounts actually paid to participants, including base salary, longevity, City college incentive, enhanced certification pay, emergency operation and hazardous duty pay; shift differential, and "upgrade" pay; and excluding all overtime, state incentive pay, reimbursed expenses and allowances such as cleaning/clothes allowances, and payments for unused accrued time.



H. Average Final Compensation (AFC)

The average of Compensation shall be the final two years of Credited Service immediately preceding the time of retirement.

I. Time Service Retirement

Eligibility: A member may retire on the first day of the month coincident with attainment of 20 years of Credited Service.

Benefit: Average final compensation multiplied by:
(1) 3.0% for each year of Credited Service for the first 20 years of service, plus
(2) 2.0% for each year of Credited Service for years in excess of 20 years of service.

The maximum benefit is 80% of AFC.

Normal Form of Benefit: 75% Joint and Survivor option.

Health Care Supplement: Monthly benefit of \$5.00 multiplied by years of Credited Service (not in excess of 30).

COLA: Each retiree will receive a 3.0% increase in benefits beginning with the first bi-weekly pay period in the first January after commencement of benefit and in each subsequent first bi-weekly pay period in January.

J. Delayed Retirement

Same as Time Service Retirement taking into account compensation earned and service credited until the date of actual retirement.

K. Disability Retirement

Eligibility: Any member who becomes totally and permanently disabled as a result of an act occurring in the performance of service for the City is immediately eligible for a disability benefit.

Benefit: The greater of:
(1) the member's accrued benefit to date of disability, or
(2) 60% of AFC in effect on the date of disability.

Normal Form of Benefit: 75% Joint and Survivor option.



Health Care

Supplement: Monthly benefit of \$5.00 multiplied by years of actual years of Credited Service (not in excess of 30).

COLA: Each disabled retiree will receive a 3.0% increase in benefits beginning with the first bi-weekly pay period in the first January after commencement of benefit and in each subsequent first bi-weekly pay period in January.

L. Pre-Retirement Death

Eligibility: Any member who is killed or dies from effects of an injury or of any illness or disease is eligible for survivor benefits regardless of Credited Service.

Benefit: If the member has a legal spouse, the pension benefit is the greater of:
(1) 75% of the member's accrued benefit to date of death, or
(2) 45% of AFC (i.e. 75% of the member's minimum projected time service retirement benefit) in effect on the date of death.

If the member had children, an additional \$200/month per child (total 75% of normal benefit if orphan) until (i) child reaches age 18 years, whether or not the child is a qualified student, or (ii) child reaches age 22, provided the child is a qualified student, or (iii) each child becomes married, provided that the total of the surviving spouse and children's benefits do not exceed the total of the deceased member's projected benefit.

If the member does not have a surviving spouse or children, a refund of the member's contributions to the Plan without interest shall be payable to the estate of the Member.

Normal Form

of Benefit: Payable for the life of the beneficiary.

Health Care

Supplement: Monthly benefit of \$5.00 multiplied by years of actual years of Credited Service (not in excess of 30).

COLA: Each beneficiary will receive a 3.0% increase in benefits beginning with the first bi-weekly pay period in the first January after commencement of benefit and in each subsequent first bi-weekly pay period in January.

M. Vested Termination

Eligibility: A member has earned a non-forfeitable right to Plan benefits after the completion of 5 years of Credited Service. Optionally, vested members may elect a refund in lieu of the vested benefits otherwise due.



Benefit: The benefit is the member’s accrued Time Service Retirement Benefit. The benefit begins on the date that would have been the member’s Time Service Retirement date based on years of Credited Service at the termination date.

Normal Form of Benefit: 75% Joint and Survivor option.

Health Care Supplement: Same as Time Service Retirement.

COLA: Same as Time Service Retirement.

N. Refunds

Members terminating employment with less than 5 years of Credited Service will receive a refund of the member’s contributions without interest.

O. Member Contributions

10% of Compensation; 2% of Compensation for members in the DROP.

P. Employer Contributions

Any additional amount determined by the actuary needed to fund the plan properly according to State laws.

Q. Cost of Living Increases

Each retiree and beneficiary will receive a 3.0% increase in benefits on each first bi-weekly pay period in January.

R. Deferred Retirement Option Plan

Eligibility: Same as Time Service Retirement.

Benefit: The member’s Credited Service and AFC are frozen upon entry into the DROP. The monthly retirement benefit as described under Normal Retirement is calculated based upon the frozen Credited Service and AFC.

Maximum

DROP Period: The following time limits will apply for eligibility to elect to participate in the DROP:

<u>Years of Credited Service at Time of Election:</u>	<u>Maximum Pay Periods of Participation:</u>	<u>Maximum Months of Participation:</u>
20 but less than 30 years	130 biweekly	60
30 but less than 31 years	78 biweekly	36
31 but less than 32 years	52 biweekly	24



Interest

Credited: An annual rate of return of 8.40%.

Normal Form

of Benefit: Lump Sum, Direct Rollover, Partial Lump Sum with a Direct Rollover, or Monthly Distribution of the remaining balance.

COLA: Same as Normal Retirement.

S. Other Ancillary Benefits

There are no ancillary retirement type benefits not required by statutes but which might be deemed a City of Jacksonville Police and Fire Pension Fund liability if continued beyond the availability of funding by the current funding source.

T. Changes from Previous Valuation

None.