# CITY OF RIVIERA BEACH MUNICIPAL FIREFIGHTERS' PENSION TRUST FUND

ACTUARIAL VALUATION REPORT AS OF OCTOBER 1, 2024

ANNUAL EMPLOYER CONTRIBUTION IS DETERMINED BY THIS VALUATION FOR THE PLAN YEAR ENDING SEPTEMBER 30, 2026







March 28, 2025

Board of Trustees City of Riviera Beach Municipal Firefighters' Pension Trust Fund Riviera Beach, Florida

Re: City of Riviera Beach Municipal Firefighters' Pension Trust Fund Actuarial Valuation as of October 1, 2024 and Actuarial Disclosures

**Dear Board Members:** 

The results of the October 1, 2024 Annual Actuarial Valuation of the City of Riviera Beach Municipal Firefighters' Pension Trust Fund are presented in this report.

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 System 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, 2026, and to report the actuarial information for Governmental Accounting Standards Board (GASB) Statement No. 67 for the fiscal year ending September 30, 2024. This report also includes estimated GASB Statement No. 67 information for the fiscal year ending September 30, 2025. 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 contribution rate in this report is determined using the actuarial assumptions and methods disclosed in Section B of this report. This report includes risk metrics in Section A but does not include a more robust assessment of the risks of future experience not meeting the actuarial assumptions. Additional assessment of risks was outside the scope of this assignment.

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 findings in this report are based on data and other information through September 30, 2024. The valuation was based upon information furnished by the Plan Administrator concerning Retirement System benefits, financial transactions, plan provisions and active members, terminated members, retirees and beneficiaries. We checked for internal reasonability and year-to-year consistency, but did not audit the data. We are not responsible for the accuracy or completeness of the information provided by the Plan Administrator.

Board of Trustees March 28, 2025 Page ii

This report was prepared using certain assumptions approved by the Board as authorized under Florida Statutes and prescribed by the Florida Statutes as described in the section of this report entitled Actuarial Assumptions and Methods. The investment return assumption was prescribed by the Board and the assumed mortality rates detailed in the Actuarial Assumptions and Methods section were prescribed by the Florida Statutes in accordance with Florida Statutes Chapter 112.63. All actuarial assumptions used in this report are reasonable for purposes of this valuation. The combined effect of the assumptions, excluding prescribed assumptions or methods set by law, is expected to have no significant bias (i.e. not significantly optimistic or pessimistic).

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

This report has been prepared by actuaries who have substantial experience valuing public employee retirement systems. To the best of our knowledge the information contained in this report is accurate and fairly presents the actuarial position of the City of Riviera Beach Municipal Firefighters' Pension Trust 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 Piotr Krekora are members of the American Academy of Actuaries. These actuaries meet the Academy's Qualification Standards 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. There is no benefit or expense to be provided by the plan and/or paid from the plan's assets for which liabilities or current costs have not been established or otherwise taken into account in the valuation. All known events or trends which may require a material increase in plan costs or required contribution rates have been taken into account in the valuation.

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

Respectfully submitted,

GABRIEL, ROEDER, SMITH & COMPANY

Peter N. Strong, FSA, MAAA, FCA

Enrolled Actuary No. 23-06975

Piotr Krekora, ASA, MAAA, FCA Enrolled Actuary No. 23-08432



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**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 System has been closed to new members since 2015. One consequence of this closure is that covered payroll will decline over time, and as a result, the required contributions as a percentage of covered payroll will likely increase in the absence of actuarial gains.

# **Comparison of Required Employer Contributions**

The following is a comparison of required contributions developed in this year's and last year's actuarial valuations:

	Foi	FYE 9/30/2026 Based on 10/1/2024 Valuation	5	Fo	r FYE 9/30/2025 Based on 10/1/2023 Valuation		Increase (Decrease)
Actuarially Determined Contribution As % of Covered Payroll	\$	1,578,849 37.76 %	%	\$	1,792,918 41.99 %	\$	(214,069) (4.23) %
Expected State Contribution* Discounted State Contribution As % of Covered Payroll	\$ \$	86,456 82,226 1.97 %	%	\$ \$	86,456 82,226 1.92 %	\$ \$	0 0 0.05 %
Net Required Employer Contribution* As % of Covered Payroll	\$	1,496,623 35.79 %	%	\$	1,710,692 40.07 %	\$	(214,069) (4.28) %

<sup>\*</sup>Assuming Chapter 175 State money continues to be received. If the receipt of Chapter 175 State money is suspended, then the required employer contribution for each year will be equal to the amount shown in the first row above.

The actuarially determined contribution listed above is for the fiscal year ending September 30, 2026. The amount has been calculated assuming it is made in full at the beginning of the year (i.e., on October 1, 2025). Since the Chapter 175 State money is usually received in August, this expected amount has been discounted to the beginning of the year to determine the net required employer contribution. If the employer contributions are made quarterly instead, the net required City contribution would increase to \$1,549,358.

The required employer contribution has been computed under the assumption that the amount to be received from the State on behalf of firefighters in 2025 and 2026 will be no less than \$86,456 (the 1998 base amount plus the cost of the age 55 and 10 normal retirement date), per Chapter 175, Florida Statutes. If the actual payment from the State falls below this amount, then the City must increase its contribution by the difference.



The actual employer and State contributions for the fiscal year ending September 30, 2024 were \$1,518,857 from the City and \$86,456 from the State, for a total of \$1,605,313. The required contribution was \$1,605,313.

#### **Revisions in Benefits**

There have been no revisions in benefits since the prior valuation.

#### **Revisions in Actuarial Assumptions or Methods**

There have been no revisions in actuarial assumptions or methods since the prior valuation.

#### **Actuarial Experience**

There was a net actuarial experience gain of \$1,111,222 for the year, which means that actual experience was more favorable than anticipated. The majority of this gain (\$788,550, net of the DROP and Share Plan accounts) was due to a higher than expected return on the actuarial (smoothed) value of assets. The recognized investment return on the actuarial value of assets was 7.4% on a gross basis and 6.7% on a net basis (net of the DROP and Share Plan accounts) versus an assumed rate of return of 5.9%. There was also a net liability-related experience gain of \$322,672. Average salary increases were 3.5% versus 7.5% expected, which resulted in about a \$1.2 to \$1.3 million experience gain. This was offset by a mortality experience loss, as no deaths occurred during the year (versus approximately 2 expected), resulting in about a \$0.9 to \$1.0 million offsetting loss.

#### **Funded Ratio**

The funded ratio this year is 100.8% compared to 99.9% last year. The funded ratio is equal to the actuarial value of assets divided by the actuarial accrued (past service) liability.

# **Analysis of Change in Employer Contributions**

The components of change in the required employer contribution as a percent of payroll are as follows (assuming beginning-of-year timing for the contribution payment):

Contribution Rate Last Year	40.07 %
Change in State Revenue	(0.05)
Normal Cost Rate	(4.54)
Administrative Expenses	0.31
Change in Assumptions or Methods	0.00
Contribution Rate This Year	35.79

# **Variability of Future Contribution Rates**

The Market Value of Assets exceeds the Actuarial Value of Assets by \$5,266,912 as of the valuation date (see Section C). This difference will be gradually recognized over the next several years, causing the contribution requirement to decrease, in the absence of offsetting losses.





# **Relationship to Market Value**

If Market Value had been the basis for the valuation, the net required City contribution under the Aggregate funding method would have been \$386,918 and the funded ratio would have been 105.7%. This funded ratio (on a market value basis) is up from 94.8% last year.

#### **Conclusion**

The remainder of this Report includes detailed actuarial valuation results, financial information, miscellaneous information and statistics, and a summary of plan provisions.



# RISKS ASSOCIATED WITH 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:

- Investment risk actual investment returns may differ from the expected returns;
- 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;
- 3. Salary and Payroll risk actual salaries and total payroll may differ from expected, resulting in actual future accrued liability and contributions differing from expected;
- 4. Longevity risk members may live longer or shorter than expected and receive pensions for a period of time other than assumed;
- 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:

	2024	2023	2022
Ratio of the market value of assets to total payroll	26.9	23.2	21.4
Ratio of actuarial accrued liability to payroll	25.5	24.5	22.8
Ratio of actives to retirees and beneficiaries	0.3	0.4	0.4
Ratio of net cash flow to market value of assets (Net of DROP and Share Accts.)	-3.7%	-3.5%	-3.1%

# **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.

# **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.

#### **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.

#### 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.



#### **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.



#### LOW-DEFAULT-RISK OBLIGATION MEASURE

Actuarial Standards of Practice No. 4 (ASOP No. 4) was revised and reissued in December 2021 by the Actuarial Standards Board (ASB). It includes a calculation called a low-default-risk obligation measure (LDROM) to be prepared and issued annually for defined benefit pension plans. The transmittal memorandum for ASOP No. 4 includes the following explanation:

"The ASB believes that the calculation and disclosure of this measure provides appropriate, useful information for the intended user regarding the funded status of a pension plan. The calculation and disclosure of this additional measure is not intended to suggest that this is the "right" liability measure for a pension plan. However, the ASB does believe that this additional disclosure provides a more complete assessment of a plan's funded status and provides additional information regarding the security of benefits that members have earned as of the measurement date."

The following information has been prepared in compliance with this requirement. Unless otherwise noted, the measurement date, actuarial cost methods, and assumptions used are the same as for the funding valuation covered in this actuarial valuation report.

- A. Low-default-risk Obligation Measure of benefits earned as of the measurement date: \$134,291,527
- B. Discount rate used to calculate the LDROM: <u>3.81% based on Bond Buyer "20-Bond GO Index" as of September 26</u>, 2024
- C. Other significant assumptions that differ from those used for the funding valuation: none
- D. Actuarial cost method used to calculate the LDROM: Individual Entry-Age Actuarial Cost Method
- E. Valuation procedures to value any significant plan provisions that are difficult to measure using traditional valuation procedures, and that differ from the procedures used in the funding valuation: none
- F. Commentary to help the intended user understand the significance of the LDROM with respect to the funded status of the plan, plan contributions, and the security of participant benefits: The LDROM is a market-based measurement of the pension obligation. It estimates the amount the plan would need to invest in low risk securities to provide the benefits with greater certainty. This measure may not be appropriate for assessing the need for or amount of future contributions. This measure may not be appropriate for assessing the sufficiency of plan assets to cover the estimated cost of settling the plan's benefit obligation.

The difference between the two measures (Valuation and LDROM) is one illustration of the savings the sponsor anticipates by taking on the risk in a diversified portfolio.



# **CHAPTER REVENUE**

Increments in Chapter revenue over that received in 1998 must first be used to fund the cost of compliance with minimum benefits. Once minimums are met, any subsequent additional Chapter revenue must be used to provide extra benefits.

As of the valuation date, there are no minimum benefit requirements outstanding.

Actuarial Confirmation of the Use of State Chapter Money			
Base Amount Previous Plan Year	\$ 86,456		
2. Amount Received for Previous Plan Year	782,099		
3. Benefit Improvements Made in Previous Plan Year	0		
4. Excess Funds for Previous Plan Year: (2) - (1) - (3)	695,643		
5. Accumulated Excess at Beginning of Previous Year	578,448		
6. Prior Excess Used in Previous Plan Year	578,448		
7. Accumulated Excess as of Valuation Date (Distributed to Share Plan): (4) + (5) - (6)	695,643		
8. Base Amount This Plan Year: (1) + (3)	86,456		

The Accumulated Excess shown in line 7 is being held in reserve to pay for additional benefits. The reserve is subtracted from Plan assets (see Section C of this Report). The Base Amount in line 8 is the maximum amount the employer may take as a credit against its required contribution; however, in no event may the employer take credit for more than the actual amount of Chapter revenue received.



# **SECTION B**

**VALUATION RESULTS** 

PARTICIPANT DATA				
	October 1, 2024 October 1, 2023			
ACTIVE MEMBERS				
Number Covered Annual Payroll Average Annual Payroll	\$ \$	30 4,181,254 139,375	\$ \$	32 4,269,706 133,428
Average Age Average Past Service Average Age at Hire		46.4 17.8 28.6		46.1 17.1 29.0
RETIREES & BENEFICIARIES				
Number Annual Benefits Average Annual Benefit Average Age	\$ \$	57 4,016,079 70,458 66.5	\$ \$	54 3,777,846 69,960 66.0
DROP RETIREES				
Number Annual Benefits Average Annual Benefit Average Age	\$ \$	13 1,364,195 104,938 56.2	\$ \$	14 1,439,608 102,829 55.2
DISABILITY RETIREES				
Number Annual Benefits Average Annual Benefit Average Age	\$ \$	16 592,933 37,058 64.2	\$ \$	15 523,014 34,868 64.1
TERMINATED VESTED MEMBERS				
Number Annual Benefits Average Annual Benefit Average Age	\$ \$	0 0 0 0.0	\$ \$	1 74,851 74,851 49.7



ACTUARIALLY DETERMINED CONTRIBUTION (ADC)					
A. Valuation Date	October 1, 2024 October 1 Payment Timing	October 1, 2024  Quarterly  Contribution  Payment Timing	October 1, 2023 October 1 Payment Timing		
B. ADC to Be Paid During Fiscal Year Ending	9/30/2026	9/30/2026	9/30/2025		
C. Assumed Date of Employer Contribution	October 1, 2025	Quarterly	October 1, 2024		
D. Annual Payment to Amortize Unfunded Actuarial Liability	\$ 0	\$ 0	\$ 0		
E. Employer Normal Cost	1,578,849	1,578,849	1,792,918		
F. ADC if Paid on the Valuation Date: D+E	1,578,849	1,578,849	1,792,918		
G. ADC Adjusted for Frequency of Payments	1,578,849	1,635,814	1,792,918		
H. ADC as % of Covered Payroll	37.76 %	39.12 %	41.99 %		
Assumed Rate of Increase     in Covered Payroll to     Contribution Year	N/A	N/A	N/A		
J. Covered Payroll for Contribution Year	4,181,254	4,181,254	4,269,706		
K. ADC for Contribution Year: H x J	1,578,849	1,635,814	1,792,918		
L. Estimate of State Revenue in Contribution Year (Discounted to Employer Contribution Date)*	82,226	86,456	82,226		
M. Net Employer ADC in Contribution Year*	1,496,623	1,549,358	1,710,692		
N. Net ADC as % of Covered Payroll in Contribution Year: M ÷ J	35.79 %	37.05 %	40.07 %		

<sup>\*</sup> Assuming Chapter 175 Sate money continues to be received. If the receipt of Chapter 175 State money is suspended, then the required employer contribution will be equal to the amount in Line K.



ACTUARIAL VALUE OF BENEFITS AND ASSETS				
A. Valuation Date	Oct	ober 1, 2024	October 1, 2023	
B. Actuarial Present Value of All Projected Benefits for 1. Active Members		20 040 012	\$ 39,060,438	
<ul><li>a. Service Retirement Bene b. Vesting Benefits</li></ul>	9	38,840,813 448,321	\$ 39,060,438 574,575	
c. Disability Benefits		2,113,115	2,414,294	
d. Preretirement Death Be	nefits	302,965	355,445	
e. Return of Member Conti	ibutions	-	2,254	
f. Total		41,705,214	42,407,006	
2. Inactive Members				
a. Service Retirees & Bene	iciaries	67,038,093	65,936,742	
b. Disability Retirees		6,907,074	6,043,971	
c. Terminated Vested Mem	bers	0	926,333	
d. Total		73,945,167	72,907,046	
3. Total for All Members	1	15,650,381	115,314,052	
C. Actuarial Accrued (Past Service) Liability	1	106,496,685	104,672,239	
D. Actuarial Value of Accumulated Benefits per FASB No. 35		103,213,477	100,375,959	
<ul><li>E. Plan Assets</li><li>1. Market Value</li><li>2. Actuarial Value</li></ul>		.12,581,037 .07,314,125	99,238,320 104,597,749	
F. Unfunded Accrued Liability: C -	E2	(817,440)	74,490	
G. Actuarial Present Value of Projected Covered Payroll		19,848,757	23,024,763	
H. Actuarial Present Value of Projected  Member Contributions		1,587,900	1,841,981	
I. Accumulated Contributions of Active Members		3,611,394	3,557,678	



CALCULATION OF EMPLOYER NORMAL COST AGGREGATE FUNDING METHOD					
A. Valuation Date	October 1, 2024	October 1, 2023			
B. Actuarial Present Value of Projected Benefits	\$ 115,650,381	\$ 115,314,052			
C. Actuarial Value of Assets	107,314,125	104,597,749			
D. Actuarial Present Value of Projected Member Contributions	1,587,900	1,841,981			
E. Actuarial Present Value of Projected Employer Normal Costs: B-C-D	6,748,356	8,874,322			
F. Actuarial Present Value of Projected Covered Payroll at Valuation Date	19,848,757	23,024,763			
G. Employer Normal Cost Rate: E/F	34.00 %	38.54 %			
H. Covered Annual Payroll	4,181,254	4,269,706			
I. Employer Normal Cost: G x H	1,421,626	1,645,545			
J. Assumed Amount of Administrative Expenses	157,223	147,373			
K. Total Employer Normal Cost: I+J	1,578,849	1,792,918			
L. Employer Normal Cost as % of Covered Payroll	37.76 %	41.99 %			



# **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.	Last Year's Actuarial Present Value of Projected Employer Normal Costs	\$ 8,874,322
2.	Last Year's Actual Employer Contributions*	1,605,313
3.	Prior Year Administrative Expenses	152,109
4.	Interest at the Assumed Rate on a. 1 for one year b. 2 less 3 from dates paid c. a - b	523,585 <u>85,125</u> 438,460
5.	This Year's Expected Actuarial Present Value of Projected Employer Normal Costs 1 2. + 3. + 4.c.	7,859,578
6.	This Year's Actual Actuarial Present Value of Projected Employer Normal Costs	6,748,356
7.	Net Actuarial Gain (Loss): 5 6.	1,111,222
8.	Gain (Loss) Due to Investments (net basis)	788,550
9.	Gain (Loss) Due to Other Causes	322,672

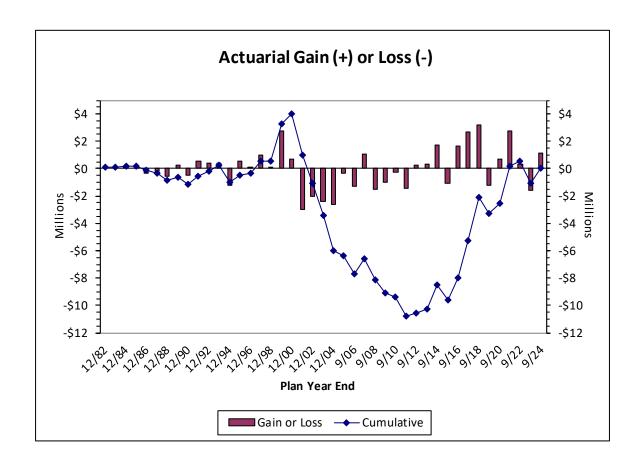
<sup>\*</sup> Includes Chapter 175 funds used to offset the City's contribution requirement.



Net actuarial gains in previous years have been as follows:

Year Ended	Gain (Loss)
12/31/82	\$ 81,184
12/31/83	59,747
12/31/84	40,132
12/31/85	14,477
12/31/86	(313,047)
12/31/87	(193,625)
12/31/88	(558,644)
12/31/89	257,178
12/31/90	(503,225)
12/31/91	531,554
12/31/92	376,653
12/31/93	430,165
12/31/94	(1,246,391)
12/31/95	573,581
12/31/96	141,439
12/31/97	1,007,432
12/31/97	12,464
12/31/99	2,726,314
12/31/00	680,594
12/31/01	(2,977,189)
12/31/02	(2,038,369)
12/31/03	(2,386,533)
12/31/04	(2,612,959)
9/30/05	(314,675)
9/30/06	(1,320,969)
9/30/07	1,061,921
9/30/08	(1,510,003)
9/30/09	(1,004,510)
9/30/10	(263,354)
9/30/11	(1,423,010)
9/30/12	226,245
9/30/13	352,262
9/30/14	1,717,694
9/30/15	(1,079,212)
9/30/16	1,622,769
9/30/17	2,676,424
9/30/18	3,221,475
9/30/19	(1,188,209)
9/30/20	724,033
9/30/21	2,730,843
9/30/22	339,916
9/30/23	(1,598,797)
9/30/24	1,111,222





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 table on the following page shows the actual fund earnings and salary increase rates compared to the assumed rates for the last several years.

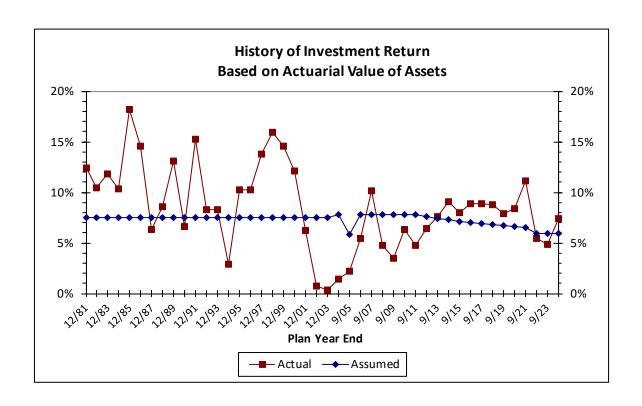


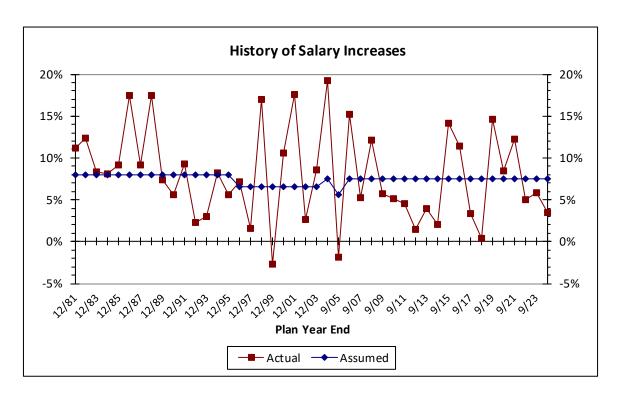
	Investment Return		Salary In	creases
Year Ending	Actual	Assumed	Actual	Assumed
	42.4	7.5	44.2	
12/31/1981 12/31/1982	12.4 10.4	7.5 7.5	11.2 12.4	8.0 8.0
	10.4	7.5 7.5		8.0 8.0
12/31/1983			8.3	
12/31/1984	10.3	7.5	8.1	8.0
12/31/1985	18.2	7.5	9.2	8.0
12/31/1986	14.6	7.5	17.5	8.0
12/31/1987	6.3	7.5	9.2	8.0
12/31/1988	8.6	7.5	17.4	8.0
12/31/1989	13.1	7.5	7.4	8.0
12/31/1990	6.6	7.5	5.6	8.0
12/31/1991	15.2	7.5	9.3	8.0
12/31/1992	8.3	7.5	2.3	8.0
12/31/1993	8.3	7.5	3.0	8.0
12/31/1994	2.9	7.5	8.2	8.0
12/31/1995	10.2	7.5	5.6	8.0
12/31/1996	10.2	7.5	7.2	6.5
12/31/1997	13.8	7.5	1.6	6.5
12/31/1998	15.9	7.5	17.0	6.5
12/31/1999	14.6	7.5	(2.7)	6.5
12/31/2000	12.1	7.5	10.6	6.5
12/31/2001	6.2	7.5	17.6	6.5
12/31/2002	0.7	7.5	2.7	6.5
12/31/2003	0.3	7.5	8.6	6.5
12/31/2004	1.4	7.75	19.2	7.5
9/30/2005 *	2.2	5.8	(1.9)	5.6
9/30/2006	5.4	7.75	15.2	7.5
9/30/2007	10.1	7.75	5.2	7.5
9/30/2008	4.8	7.75	12.1	7.5
9/30/2009	3.5	7.75	5.7	7.5
9/30/2010	6.3	7.75	5.1	7.5
9/30/2011	4.8	7.75	4.5	7.5
9/30/2012	6.4	7.60	1.4	7.5
9/30/2012	7.6	7.45	4.0	7.5 7.5
9/30/2013	9.1	7.43	2.1	7.5 7.5
9/30/2014	8.0	7.30 7.15	14.1	7.5 7.5
9/30/2016	8.9	7.00	11.4	7.5
9/30/2010	8.9	6.90	3.4	7.5 7.5
9/30/2017	8.8	6.80	0.4	7.5 7.5
9/30/2018	7.9	6.70	14.6	7.5 7.5
9/30/2019	8.4	6.60	8.4	7.5 7.5
9/30/2021	11.1	6.50	12.2	7.5
9/30/2021	5.4	5.90	5.0	7.5
9/30/2023	4.9	5.90	5.8	7.5
9/30/2024	7.4	5.90	3.5	7.5
Averages	8.4 %		7.8 %	

<sup>\* 9</sup> months.

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 the end of each year.









# Actual (A) Compared to Expected (E) Decrements Among Active Employees

Year	Num Add Dur Ye	led ing ar	DF Retir	rice & ROP ement	Disab Retire	ment	De	1	Vested	erminati Other	To	tals	Active Members End of
Ended	Α	E	Α	E	Α	E	Α	E	Α	Α	Α	E	Year
12/31/2002	10	11	3	3	0	0	0	0	0	8	8	4	71
12/31/2003	7	6	1	1	2	0	0	0	0	3	3	4	72
12/31/2004	13	11	1	1	0	0	0	0	0	10	10	1	74
9/30/2005	5	5	1	4	0	0	0	0	0	4	4	2	74
9/30/2006	4	10	2	5	1	0	0	0	1	6	7	2	68
9/30/2007	14	6	1	5	0	0	0	0	0	5	5	2	76
9/30/2008	4	3	0	4	0	1	0	0	0	3	3	2	77
9/30/2009	0	3	2	4	0	1	0	0	0	1	1	2	74
9/30/2010	0	5	4	3	0	1	0	0	1	0	1	1	69
9/30/2011	0	7	7	3	0	1	0	0	0	0	0	1	62
9/30/2012	0	1	1	1	0	0	0	0	0	0	0	1	61
9/30/2013	2	0	0	2	0	1	0	0	0	0	0	1	63
9/30/2014	1	3	1	1	0	1	0	0	1	1	2	1	61
9/30/2015	3	2	0	3	1	1	0	0	0	1*	1	1	62
9/30/2016	0	0	2	4	1	1	0	0	0	0	0	1	59
9/30/2017	0	0	4	5	1	1	0	0	0	1	1	1	53
9/30/2018	0	0	0	3	0	1	0	0	0	0	0	1	53
9/30/2019	0	0	2	5	0	1	0	0	0	0	0	1	51
9/30/2020	0	0	3	7	0	1	0	0	0	0	0	0	48
9/30/2021	0	0	7	7	1	1	0	0	1	0	1	0	39
9/30/2022	0	0	4	4	0	1	0	0	0	0	0	0	35
9/30/2023	0	0	3	3	0	1	0	0	0	0	0	0	32
9/30/2024	0	0	2	2	0	0	0	0	0	0	0	0	30
9/30/2025		0		5		0		0				0	
22.75 Yr Totals **	63	73	51	80	7	15	0	0	4	43	47	29	

<sup>\*</sup> Non-vested FRS transfer.



<sup>\*\*</sup> Totals are through current Plan Year only.

	RECENT HISTORY OF UAAL AND FUNDED RATIO									
	Number of									
Valuation	Active	Inactive	Covered Annual	Actuarial Value of	Actuarial Accrued	UAAL	Funded	Employer Normal		
Date	Members	iviembers	Payroll	Assets	Liability	UAAL	Ratio %	Cost (NC)	Payroll	
1/1/91	55	10	2,151,903	8,521,606	11,069,894	2,548,288	77.0	411,633	19.13	
1/1/92	51	10	2,225,567	10,206,309	12,258,748	2,052,439	83.3	424,788	19.09	
1/1/93	54	13	2,234,941	11,407,776	13,057,963	1,650,187	87.4	429,870	19.23	
1/1/94	50	13	2,144,370	12,673,744	13,848,782	1,175,038	91.5	405,240	18.90	
1/1/95	52	16	2,256,089	13,457,557	15,570,785	2,113,228	86.4	425,476	18.86	
1/1/96	56	19	2,309,202	15,008,667	17,296,189	2,287,522	86.8	438,938	19.01	
1/1/97	55	19	2,450,914	16,671,406	18,730,569	2,059,163	89.0	463,494	18.91	
1/1/98	60	20	2,571,100	19,109,983	20,069,992	960,009	95.2	501,534	19.51	
1/1/99	64	22	2,972,305	22,128,171	22,986,658	858,487	96.3	576,969	19.41	
1/1/00	61	25	2,630,781	25,288,836	23,327,797	(1,961,039)	108.4	534,845	20.33	
1/1/01	70	27	3,026,411	27,839,615	25,131,594	(2,708,021)	110.8	628,896	20.78	
1/1/02	72	30	3,529,369	29,123,055	29,317,926	194,871	99.3	682,687	19.34	
1/1/03	71	33	3,615,655	28,964,119	31,090,939	2,126,820	93.2	700,292	19.37	
1/1/04	72	36	3,683,548	28,816,071	32,432,230	3,616,159	88.9	1,063,050	28.86	
1/1/05	74	36	4,276,236	29,287,661	35,443,114	6,155,453	82.6	1,202,655	28.12	
10/1/05	74	38	4,100,785	30,239,606	36,638,255	6,398,649	82.5	1,159,902	28.28	
10/1/06	68	41	4,240,518	32,350,352	39,774,636	7,424,284	81.3	1,206,612	28.45	
10/1/07	76	42	4,641,947	36,012,018	42,138,145	6,126,127	85.5	1,322,113	28.48	
10/1/08	75	44	4,942,836	38,344,135	46,046,922	7,702,787	83.3	1,406,807	28.46	
10/1/09	74	44	5,160,744	41,550,471	48,736,535	7,186,064	85.3	1,476,834	28.62	
10/1/10	69	49	4,882,701	44,450,953	51,671,299	7,220,346	86.0	1,392,899	28.53	
10/1/11	62	56	4,235,888	45,743,708	55,325,432	9,581,724	82.7	1,235,360	29.16	
10/1/12	61	57	4,217,167	46,830,748	58,171,996	11,341,248	80.5	1,309,536	31.05	
10/1/13	63	57	4,463,814	48,981,836	61,591,384	12,609,548	79.5	1,464,101	32.80	
10/1/14	60	59	4,361,506	52,416,012	64,924,490	12,508,478	80.7	1,494,519	34.27	
10/1/15*	62	60	5,039,947	68,658,449	69,812,479	1,154,030	98.3	1,660,393	32.94	
10/1/16	59	62	5,332,052	73,147,186	73,731,115	583,929	99.2	1,797,481	33.71	
10/1/17	53	67	4,860,470	77,743,871	76,548,479	(1,195,392)	101.6	1,678,439	34.53	
10/1/18	53	67	4,879,809	82,654,189	78,791,849	(3,862,340)	104.9	1,720,968	35.27	
10/1/19	51	68	5,364,891	87,202,122	85,150,279	(2,051,843)	102.4	1,937,306	36.11	
10/1/20	48	71	5,414,432	92,482,412	88,571,372	(3,911,040)	104.4	1,994,530	36.84	
10/1/21	39	77	4,853,307	99,821,963	98,781,784	(1,040,179)	101.1	1,818,576	37.47	
10/1/22	35	81	4,466,043	103,133,142	101,769,086	(1,364,056)	101.3	1,601,083	35.85	
10/1/23	32	84	4,269,706	104,597,749	104,672,239	74,490	99.9	1,792,918	41.99	
10/1/24	30	86	4,181,254	107,314,125	106,496,685	(817,440)	100.8	1,578,849	37.76	

<sup>\*</sup>From the Actuarial Impact Statement dated September 19, 2016.



	RECENT HISTORY OF REQUIRED AND ACTUAL CONTRIBUTIONS									
	End of			Required Co	ontributio	ns				
	Year To Which	Employer &	State	Estimated	d State	Net Empl	oyer	Act	ual Contributi	ons
Valuation Date	Valuation Applies	Amount	% of Payroll	Amount	% of Payroll	Amount	% of Payroll	Employer	State	Total
1/1/91	12/31/91	581,504	27.02	59,235	2.75	522,269	24.27	513,610	68,246	581,856
1/1/92	12/31/92	619,064	27.82	68,246	3.07	550,818	24.75	558,810	60,254	619,064
1/1/93	12/31/93	611,088	27.34	60,254	2.70	550,834	24.65	550,834	62,761	613,595
1/1/94	12/31/94	571,614	26.66	62,761	2.93	508,853	23.73	517,385	66,726	584,111
1/1/95	12/31/95	674,781	29.91	66,726	2.96	608,055	26.95	608,055	68,849	676,904
		,		ŕ		,		,	,	,
1/1/96	12/31/96	709,570	30.73	68,849	2.98	640,721	27.75	624,744	84,827	709,571
1/1/97	12/31/97	723,503	29.52	84,827	3.46	638,676	26.06	625,520	97,983	723,503
1/1/98	12/31/98	680,242	26.46	97,983	3.81	582,259	22.65	595,092	85,151	680,243
1/1/99	12/31/99	757,963	25.50	85,151	2.86	672,812	22.64	672,812	85,151	757,963
1/1/00	12/31/00	490,990	18.61	85,151	3.23	405,839	15.38	404,756	86,456	491,212
1/1/01	12/31/01	532,550	17.60	86,456	2.86	446,094	14.74	446,094	86,456	532,550
1/1/02	12/31/02	833,966	23.63	86,456	2.45	747,510	21.18	747,510	86,456	833,966
1/1/03	12/31/03	1,023,737	28.31	86,456	2.39	937,281	25.92	937,281	86,456	1,023,737
1/1/04	12/31/04	1,461,891	39.69	86,456	2.35	1,375,435	37.34	1,375,435	86,456	1,461,891
1/1/05	9/30/05	1,352,664	42.18	86,456	2.70	1,266,208	39.48	1,266,208	86,456	1,352,664
1/1/05	9/30/06	1,774,733	41.50	86,456	2.02	1,688,277	39.48	1,942,376	86,456	2,028,832
10/1/05	9/30/07	1,833,543	43.20	86,456	2.04	1,747,087	41.16	1,919,976	86,456	2,006,432
10/1/06	9/30/08	1,964,049	44.75	86,456	1.97	1,877,593	42.78	2,205,000	86,456	2,291,456
10/1/07	9/30/09	2,032,748	42.31	86,456	1.80	1,946,292	40.51	2,183,709	86,456	2,270,165
10/1/08	9/30/10	2,229,992	43.59	86,456	1.69	2,143,536	41.90	2,143,536	86,456	2,229,992
10/1/09	9/30/11*	2,297,857	43.02	86,456	1.62	2,211,401	41.40	1,902,972	86,456	1,989,428
10/1/10	9/30/12*	1,961,806	38.82	86,456	1.71	1,875,350	37.11	1,506,228	86,456	1,592,684
10/1/11	9/30/13*	2,017,145	46.01	86,456	1.97	1,930,689	44.04	1,930,689	86,456	2,017,145
10/1/12	9/30/14*	2,267,060	51.94	86,456	1.98	2,180,604	49.96	2,180,604	86,456	2,267,060
10/1/13	9/30/15*	2,491,591	53.93	86,456	1.87	2,405,135	52.06	14,937,283	86,456	15,023,739
10/1/14	9/30/16**	1 400 500	34.38	96 456	1.98	1 412 122	22.40	1 412 122	96 156	1 400 500
		1,499,589		86,456		1,413,133	32.40	1,413,133	86,456	1,499,589
10/1/15	9/30/17**	1,750,374	34.73	86,456	1.72	1,663,918	33.01	1,663,918	86,456	1,750,374
10/1/16	9/30/18**	1,853,151	34.75	86,456	1.62	1,766,695	33.13	1,766,695	86,456	1,853,151
10/1/17	9/30/19**	1,683,275	34.63	86,456	1.78	1,596,819	32.85	1,596,819	86,456	1,683,275
10/1/18	9/30/20**	1,725,737	35.36	86,456	1.77	1,639,281	33.59	1,639,281	86,456	1,725,737
10/1/19	9/30/21**	1,942,008	36.20	86,456	1.61	1,855,552	34.59	1,855,552	86,456	1,942,008
10/1/20	9/30/22**	1,999,165	36.93	86,456	1.60	1,912,709	35.33	1,912,709	86,456	1,999,165
10/1/21	9/30/23**	1,822,806	37.56	86,456	1.78	1,736,350	35.78	1,736,350	86,456	1,822,806
10/1/22	9/30/24**	1,605,313	35.94	86,456	1.94	1,518,857	34.01	1,518,857	86,456	1,605,313
10/1/23	9/30/25**	1,797,148	42.09	86,456	2.02	1,710,692	40.07	N/A	N/A	N/A
10/1/24	9/30/26**	1,583,079	37.86	86,456	2.07	1,496,623	35.79	N/A	N/A	N/A

<sup>\*</sup> During the fiscal years ending September 30, 2011 through September 30, 2015, the required contribution dollar amounts shown are estimates only. The actual contributions are no less than the percentage of the actual covered payroll amount for the fiscal year.

<sup>\*\*</sup>Beginning with the fiscal year ending September 30, 2016, the required contribution dollar amounts shown assume the employer contribution is deposited at the beginning of the year.



# 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 the **Aggregate Method**. The excess of the Actuarial Present Value of Projected Benefits of the group included in the valuation, over the sum of the Actuarial Value of Assets and the Actuarial Present Value of Future Member Contributions (if any) is allocated as a level percentage of earnings of the group between the valuation date and the assumed retirement age. This allocation is performed for the group as a whole, not as a sum of individual allocations. The portion of this Actuarial Present Value allocated to a specific year is called the Employer Normal Cost.

Under this method, actuarial gains and losses, plan amendments, and changes in actuarial assumptions and methods reduce or increase future Normal Costs.

Actuarial Value of Assets - The Actuarial Value of Assets phases in the difference between the actual return and expected return on Actuarial 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 5.90% per year, compounded annually (net after investment expenses).

The **Inflation Rate** assumed in this valuation was 2.5% per year.

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 5.90% investment return rate translates to an assumed real rate of return over inflation of 3.40%.

The rate of salary increase used for individual members is 7.5% per year. Part of the assumption is for merit and/or seniority increase, and 2.5% recognizes inflation. This assumption is used to project a member's current salary to the salaries upon which benefits will be based.

# **Demographic Assumptions**

**The mortality tables** used in the valuation are based on the PUB-2010 Headcount Weighted Mortality Tables described on the following page, with mortality improvements generationally projected for healthy lives to all future years after 2010 using Scale MP-2018. No mortality improvement is projected for disabled lives.



	Pre-Retirement PUB-2010 Table	Post-Retirement PUB-2010 Table
Female Healthy	Headcount Weighted Safety Employee Female Table, set forward 1 year	Headcount Weighted Safety Healthy Retiree Female Table, set forward 1 year
Male Healthy	Headcount Weighted Safety Below Median Employee Male Table, set forward 1 year	Headcount Weighted Safety Below Median Healthy Retiree Male Table, set forward 1 year
Female Disabled	N/A	80% Headcount Weighted General Disabled Retiree Female Table; 20% Headcount Weighted Safety Disabled Retiree Female Table
Male Disabled	N/A	80% Headcount Weighted General Disabled Retiree Male Table; 20% Headcount Weighted Safety Disabled Retiree Male Table

These are the same rates as used for Special Risk Class members in the July 1, 2023 Actuarial Valuation of the Florida Retirement System (FRS). 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 FRS.

The following table presents post-retirement mortality rates and life expectancies at illustrative ages. These assumptions are used to measure the probabilities of each benefit payment being made after retirement.

FRS Healthy Post-Retirement Mortality for Special Risk Class Members

	Sample	Probability of		Future	Life
	Attained	Dying Ne	xt Year	Expectanc	y (years)
	Ages (in 2024)	Men	Women	Men	Women
٠	50	0.42 %	0.19 %	32.78	36.61
	55	0.54	0.35	28.01	31.57
	60	0.90	0.59	23.40	26.77
	65	1.30	0.91	19.10	22.22
	70	2.06	1.42	15.06	17.95
	75	3.47	2.36	11.44	14.01
	80	6.13	4.04	8.34	10.52



The following table presents pre-retirement mortality rates and life expectancies at illustrative ages. These assumptions are used to measure the probabilities of active members dying prior to retirement (85% of deaths are assumed to be service-connected).

FRS Healthy Pre-Retirement Mortality for Special Risk Class Members

Sample	Probability of		Future Life		
Attained	Dying Ne	xt Year	Expectancy (years)		
Ages (in 2024)	Men	Women	Men	Women	
50	0.16 %	0.10 %	35.91	39.81	
55	0.25	0.16	30.82	34.66	
60	0.42	0.22	25.86	29.58	
65	0.68	0.30	21.08	24.56	
70	1.16	0.54	16.53	19.64	
75	2.04	1.04	12.27	14.93	
80	6.13	4.04	8.34	10.52	

The following table presents disabled post-retirement mortality rates and life expectancies at illustrative ages.

**FRS Disabled Mortality for Special Risk Class Members** 

Sample	Probabi	lity of	Future	Life
Attained	Dying Ne	xt Year	Expectance	y (years)
Ages (in 2024)	Men	Women	Men	Women
50	1.45 %	1.25 %	24.04	26.84
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

The rates of retirement used to measure the probability of eligible members retiring were as follows:

Number of Years After First Eligibility for Normal Retirement	Probability of Normal Retirement
0	50 %
1	30
2	30
3	30
4	30
5	30
6	100



Rates of disability among active members (85% of disabilities are assumed to be service-connected).

Sample	% Becoming Disabled
Ages	Within Next Year
20	0.28 %
25	0.30
30	0.36
35	0.46
40	0.60
45	1.02
50	2.00
55	3.10

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). This assumption measures the probabilities of members separating from employment.

Sample Ages	Years of Service	Percent Separating Within Next Year
All	0	9.00 %
	1	6.00
	2	4.80
	3	4.20
	4	3.60
25	5 & Over	3.60
30		3.06
35		1.62
40		0.96
45		0.66
50		0.60
55		0.60
60		0.60

# Changes from the previous valuation:

None.



# **Miscellaneous and Technical Assumptions**

Administrative & Investment Expenses

The investment return assumption is intended to be the return net of investment expenses. Annual administrative expenses are assumed to be equal to the average of the prior two years' expenses. Assumed administrative expenses are added to the Normal Cost.

**Benefit Service** 

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

**Decrement Operation** 

Disability and mortality decrements operate during retirement eligibility.

**Decrement Timing** 

Decrements of all types are assumed to occur at the beginning of the year.

**Eligibility Testing** 

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

**Forfeitures** 

For vested separations from service, it is assumed that 0% of members separating will withdraw their contributions and forfeit an employer financed benefit. It was further assumed that the liability at termination is the greater of the vested deferred benefit (if any) or the member's accumulated contributions.

Incidence of Contributions

Employer contributions are assumed to be made in equal installments at the end of each quarter. Member contributions are assumed to be received continuously throughout the year based upon the computed percent of payroll shown in this report, and the actual payroll payable at the time contributions are made.

**Liability Load** 

Projected benefits are loaded by a unique load for each active member, determined based on each member's actual number of unused vacation and sick leave hours as of October 1, 2014, as provided by the City and the Plan Administrator.

**Marriage Assumption** 

100% of males and 100% of females are assumed to be married for purposes of death-in-service benefits. Male spouses are assumed to be three years older than female spouses for active member valuation purposes.

Normal Form of Benefit A 10-year certain and life annuity is the normal form of benefit.

**Pay Increase Timing** 

Middle of fiscal year. This is equivalent to assuming that reported pays represent amounts paid to members during the year ended on the valuation date.

**Service Credit Accruals** 

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



# **GLOSSARY**

Actuarial Accrued Liability (AAL)

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

**Actuarial Assumptions** 

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.

**Actuarial Cost Method** 

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

**Actuarial Equivalent** 

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

Actuarial Present Value (APV)

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.

Actuarial Present Value of Future Benefits (APVFB)

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.

**Actuarial Valuation** 

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

Actuarial Value of Assets

The value of the assets as of a given date, used by the actuary for valuation purposes. This may be the market or fair value of 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).

Actuarially Determined Contribution (ADC)

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.



#### **Amortization Method**

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

#### **Amortization Payment**

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

#### **Amortization Period**

The period used in calculating the Amortization Payment.

#### Closed Amortization Period

A specific number of years that is reduced by one each year, and declines to zero with the passage of time. For example if the amortization period is initially set at 20 years, it is 19 years at the end of one year, 18 years at the end of two years, etc.

#### **Employer Normal Cost**

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

# **Equivalent Single Amortization Period**

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

#### **Experience Gain/Loss**

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

#### **Funded Ratio**

The ratio of the Actuarial Value of Assets to the Actuarial Accrued Liability.

#### **GASB**

Governmental Accounting Standards Board.



GASB No. 67 and GASB No. 68

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

**Normal Cost** 

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

Open Amortization Period

An open amortization period is one which is used to determine the Amortization Payment but which does not change over time. In other words, if the initial period is set as 20 years, the same 20-year period is used in determining the Amortization Period each year. In theory, if an Open Amortization Period is used to amortize the Unfunded Actuarial Accrued Liability, the UAAL will never completely disappear, but will become smaller each year, either as a dollar amount or in relation to covered payroll.

**Unfunded Actuarial Accrued Liability** 

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

**Valuation Date** 

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





**PENSION FUND INFORMATION** 

#### Statement of Plan Assets at Market Value

	September 30				
Item		2024	2023		
A. Cash and Cash Equivalents (Operating Cash)	\$	-	\$	-	
3. Receivables:					
1. Member Contributions	\$	12,734	\$	13,062	
2. Employer Contributions		-		-	
3. State Contributions		-		-	
4. Investment Income and Other Receivables		42,275		42,686	
5. Total Receivables	\$	55,009	\$	55,748	
C. Investments					
1. Short Term Investments	\$	4,658,739	\$	3,386,107	
2. Domestic Equities		68,535,631		52,705,671	
3. International Equities		11,367,646		9,957,847	
4. Domestic Fixed Income		13,112,430		12,509,744	
5. International Fixed Income		-		-	
6. Real Estate		16,168,953		22,183,135	
7. Hedge Funds		5,618,306		5,324,362	
8. Private Credit		1,371,650		-	
9. Total Investments	\$ 1	20,833,355	\$	106,066,866	
D. Liabilities					
1. Benefits Payable	\$	-	\$	-	
2. Accrued Expenses and Other Payables		(44,096)		(31,420)	
3. Prepaid (Deferred) Contributions				-	
4. Total Liabilities	\$	(44,096)	\$	(31,420)	
E. Total Market Value of Assets Available for Benefits	\$ 1	20,844,268	\$	106,091,194	
Reserves					
1. Share Plan Account Balance	\$	(4,310,082)	\$	(3,707,911)	
2. DROP Accounts		(3,953,149)		(3,144,963)	
3. Total Reserves	\$	(8,263,231)	\$	(6,852,874)	
G. Market Value Net of Reserves	\$ 1	12,581,037	\$	99,238,320	
H. Allocation of Investments					
1. Short Term Investments		3.9%		3.2%	
2. Domestic Equities		56.7%		49.7%	
3. International Equities		9.4%		9.4%	
4. Domestic Fixed Income		10.9%		11.8%	
5. International Fixed Income		0.0%		0.0%	
6. Real Estate		13.4%		20.9%	
7. Hedge Funds		4.6%		5.0%	
8. ICMA Account for DROP		1.1%		0.0%	
9. Total Investments		100.0%		100.0%	



# **Reconciliation of Plan Assets**

			Septemb	er 30	r 30		
	Item		2024	2023			
Α.	Market Value of Assets at Beginning of Year	\$	106,091,194	\$	100,533,980		
В.	Revenues and Expenditures						
	1. Contributions						
	a. Employee Contributions	\$	317,463	\$	363,801		
	b. Employer Contributions		1,518,857		1,736,350		
	c. State Contributions		782,099		664,904		
	d. Purchased Service Credit		-		-		
	e. Total	\$	2,618,419	\$	2,765,055		
	2. Investment Income						
	a. Interest, Dividends, and Other Income	\$	2,456,938	\$	1,944,770		
	b. Net Realized Gains/(Losses)		5,874,855		1,411,764		
	c. Net Unrealized Gains/(Losses)		10,927,358		4,600,811		
	d. Net Earnings on DROP ICMA Accounts		-		-		
	e. Investment Expenses		(529,489)		(433,943)		
	f. Net Investment Income	\$	18,729,662	\$	7,523,402		
	3. Benefits and Refunds						
	a. Regular Monthly Benefits	\$	(4,507,243)	\$	(4,169,855)		
	b. Refunds		-		-		
	c. Lump Sum Benefits		-		-		
	d. Share Plan Distributions		(690,932)		(337,099)		
	e. DROP Distributions		(1,244,723)		(61,952)		
	f. Total	\$	(6,442,898)	\$	(4,568,906)		
	4. Administrative and Miscellaneous Expenses	\$	(152,109)	\$	(162,337)		
	5. Transfers	\$	-	\$	-		
C.	Market Value of Assets at End of Year	\$	120,844,268	\$	106,091,194		
D.	Reserves						
	1. Share Plan Account Balance	\$	(4,310,082)	\$	(3,707,911)		
	2. DROP Accounts	-	(3,953,149)	-	(3,144,963)		
	3. Total Reserves	\$	(8,263,231)	\$	(6,852,874)		
E.	Market Value Net of Reserves	\$	112,581,037	\$	99,238,320		



## **Development of Actuarial Value of Assets**

	Valuation Date – September 30	2023	2024	2025	2026	2027	2028
A.	Actuarial Value of Assets Beginning of Year	\$ 108,130,558	\$ 111,450,623				
В.	Market Value End of Year	106,091,194	120,844,268				
C.	Market Value Beginning of Year	100,533,980	106,091,194				
D.	Non-Investment/Administrative Net Cash Flow	(1,966,188)	(3,976,588)				
E.	Investment Income						
	E1. Actual Market Total: B-C-D	7,523,402	18,729,662				
	E2. Assumed Rate of Return	5.90%	5.90%	5.90%	5.90%	5.90%	5.90%
	E3. Assumed Amount of Return	6,353,308	6,480,012				
	E4. Amount Subject to Phase-In: E1–E3	1,170,094	12,249,650				
F.	Phased-In Recognition of Investment Income						
	F1. Current Year: 0.2 x E4	234,019	2,449,930				
	F2. First Prior Year	(4,085,444)	234,019	2,449,930			
	F3. Second Prior Year	2,936,028	(4,085,444)	234,019	2,449,930		
	F4. Third Prior Year	88,776	2,936,028	(4,085,444)	234,019	2,449,930	
	F5. Fourth Prior Year	(240,434)	88,776	2,936,026	(4,085,446)	234,018	2,449,930
	F6. Total Phase-Ins	(1,067,055)	1,623,309	1,534,531	(1,401,497)	2,683,948	2,449,930
G.	Actuarial Value of Assets End of Year						
	G1. Preliminary Actuarial Value of Assets End of Year:						
	A+D+E3+F6	\$ 111,450,623	\$ 115,577,356				
	G2. Upper Corridor Limit: 120%*B	127,309,433	145,013,122				
	G3. Lower Corridor Limit: 80%*B	84,872,955	96,675,414				
	G4. Actuarial Value of Assets End of Year	111,450,623	115,577,356				
	G5. Share Plan Accounts	(3,707,911)	(4,310,082)				
	G6. DROP Accounts	(3,144,963)	(3,953,149)				
	G7. Final Actuarial Value of Assets End of Year	104,597,749	107,314,125				
Н.	Difference between Market & Actuarial Value of Assets	(5,359,429)	5,266,912				
I.	Actuarial Rate of Return	4.91%	7.38%				
J.	Market Value Rate of Return	7.52%	17.93%				
K.	Ratio of Actuarial Value of Assets to Market Value	105.05%	95.64%				

The Actuarial Value of Assets recognizes assumed investment return (line E3) fully each year. Differences between actual and assumed investment income (Line E4) are phased-in over a closed 5-year period. 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 the assumed rate, Actuarial Value of Assets will tend to be greater than Market Value. If assumed rates are exactly realized for 5 consecutive years, Actuarial Value of Assets will become equal to Market Value.



## **Reconciliation of DROP Accounts**

Year	Balance at					
Ended	Beginning					Balance at
9/30	of Year	Adjustment	Credits	Interest	Distributions	End of Year
2009	\$ -	\$ -	\$ 11,396	\$ 17	\$ -	\$ 11,413 *
2010	11,413	437	370,353	21,714	-	403,917
2011	403,917	-	1,015,657	(19,643)	(153,366)	1,246,565
2012	1,246,565	-	926,927	209,919	(401,069)	1,982,342
2013	1,982,342	-	626,607	258,165	(477,752)	2,389,362
2014	2,389,362	-	517,630	241,500	(1,226,315)	1,922,177
2015	1,922,177	-	184,504	24,731	(1,034,312)	1,097,100
2016	1,097,100	-	28,387	(38,416)	(1,087,071)	-
2017	-	-	285,346	18,293	-	303,639
2018	303,639	-	428,442	56,621	-	788,702
2019	788,702	-	448,944	52,868	(209,544)	1,080,970
2020	1,080,970	-	468,019	91,628	(263,164)	1,377,453
2021	1,377,453	-	884,111	332,654	(412,168)	2,182,050
2022	2,182,050	5,466	1,161,713	(208,157)	(1,384,237)	1,756,835
2023	1,756,835	-	1,301,257	148,823	(61,952)	3,144,963
2024	3,144,963	178	1,426,316	626,415	(1,244,723)	3,953,149

## **Share Plan Account Reconciliation**

Year	Balance at					
Ended	Beginning			Investment		Balance at
9/30	of Year	Adjustment	Credits	Earnings	Distributions	<b>End of Year</b>
2012	\$1,700,140	\$ -	\$ 271,577	\$ 163,651	\$ (655,240)	\$ 1,480,128
2013	1,480,128	-	280,780	169,557	(268,787)	1,661,678
2014	1,661,678	-	274,190	151,001	(199,144)	1,887,725
2015	1,887,725	(5,433)	269,930	49,000	(226,188)	1,975,034
2016	1,975,034	-	263,758	143,531	(272,150)	2,110,173
2017	2,110,173	-	230,855	261,196	(173,591)	2,428,633
2018	2,428,633	-	243,844	231,368	(183,615)	2,720,230
2019	2,720,230	-	299,881	157,644	(176,758)	3,000,997
2020	3,000,997	-	286,708	179,799	(215,040)	3,252,464
2021	3,252,464	-	329,123	654,518	(451,252)	3,784,853
2022	3,784,853	-	345,328	(423,190)	(466,410)	3,240,581
2023	3,240,581	-	578,448	225,981	(337,099)	3,707,911
2024	3,707,911	-	695,643	597,460	(690,932)	4,310,082



#### **Investment Rate of Return**

	investment i	Rate of Return			
Year Ended	Market Value Basis *	Actuarial Value Basis			
12/31/81	7.4 %	12.4			
12/31/82	29.0	10.4			
12/31/83	5.3	11.8			
12/31/84	12.1	10.3			
12/31/85	24.9	18.2			
12/31/86	14.3	14.6			
12/31/87	3.7	6.3			
12/31/88	8.2	8.6			
12/31/89	6.2 17.0	13.1			
12/31/90	5.5	6.6			
, ,					
12/31/91	18.4	15.2			
12/31/92	8.1	8.3			
12/31/93	7.8	8.3			
12/31/94	1.9	2.9			
12/31/95	26.7	10.2			
12/31/96	13.2	10.2			
12/31/97	24.4	13.8			
12/31/98	18.7	15.9			
12/31/99	4.1	14.6			
12/31/00	2.6	12.1			
12/31/01	(3.7)	6.2			
12/31/02	(9.3)	0.7			
12/31/03	16.4	0.3			
12/31/04	8.3	1.4			
9/30/05 (9 months)	6.0	2.2			
9/30/06	8.0	5.4			
9/30/07	13.5	10.1			
9/30/08	(9.1)	4.8			
9/30/09	1.8	3.5			
9/30/10	7.6	6.3			
9/30/11	(0.1)	4.8			
9/30/12	17.1	6.4			
9/30/13	13.9	7.6			
9/30/14	9.5	9.1			
9/30/15	2.5	8.0			
9/30/16	8.0	8.9			
9/30/17	12.9	8.9			
9/30/18	10.9	8.8			
9/30/19	5.0	7.9			
9/30/20	6.8	8.4			
9/30/21	21.2	11.1			
9/30/21	(12.2)	5.4			
9/30/23	7.5	4.9			
9/30/23	7.5 17.9	4.9 7.4			
, ,	17.5	7.7			
Average Returns:					
Last 5 Years	7.6 %	7.4 %			
Last 10 Years	7.7 %	8.0 %			
All Years	9.1 %	8.4 %			

<sup>\*</sup> Net of investment expenses after 2005.

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.





FINANCIAL ACCOUNTING INFORMATION

	FASB NO. 35 INFORM	MATION	
Α.	Valuation Date	October 1, 2024	October 1, 2023
В.	Actuarial Present Value of Accumulated Plan Benefits		
	1. Vested Benefits		
	<ul><li>a. Members Currently Receiving Payments</li><li>b. Terminated Vested Members</li><li>c. Other Members</li><li>d. Total</li></ul>	\$ 73,945,167 0 28,496,670 102,441,837	\$ 71,980,713 926,333 26,836,975 99,744,021
	2. Non-Vested Benefits	771,640	631,938
	3. Total Actuarial Present Value of Accumulated Plan Benefits: 1d + 2	103,213,477	100,375,959
	4. Accumulated Contributions of Active Members	3,611,394	3,557,678
C.	Changes in the Actuarial Present Value of Accumulated Plan Benefits		
	1. Total Value at Beginning of Year	100,375,959	96,777,677
	2. Increase (Decrease) During the Period Attributable to:		
	a. Plan Amendment	0	0
	<ul><li>b. Change in Actuarial Assumptions</li><li>c. Latest Member Data, Benefits Accumulated</li></ul>	0	0
	and Decrease in the Discount Period	8,771,077	9,069,394
	d. Benefits Paid, Net of DROP/Share Plan	(5,933,559)	(5,471,112)
	e. Net Increase	2,837,518	3,598,282
	3. Total Value at End of Period	103,213,477	100,375,959
D.	Market Value of Assets	112,581,037	99,238,320
E.	Funded Ratio: D/C3	109.1%	98.9%
F.	Actuarial Assumptions - See page entitled Actuarial Assumptions and Methods		



# SCHEDULE OF CHANGES IN THE EMPLOYER'S NET PENSION LIABILITY AND RELATED RATIOS **GASB Statement No. 67**

Fiscal year ending September 30,	2025*	2024	2023	2022	2021	2020	2019	2018	2017	2016
Total pension liability										
Service Cost	\$ 1,981,020	\$ 2,021,974	\$ 2,124,240	\$ 2,068,833	\$ 2,292,703	\$ 2,181,362	\$ 1,953,700	\$ 1,910,217	\$ 2,072,763	\$ 2,007,441
Interest	6,670,044	6,489,444	6,343,419	6,264,486	6,167,859	5,774,910	5,648,589	5,498,701	5,284,573	5,047,019
Benefit Changes	-	-	-	-	-	-	-	-	-	(1,232,998)
Difference between actual & expected experience	477,473	354,826	(962,932)	1,813,889	1,009,125	2,448,542	(1,742,128)	(1,257,928)	(274,409)	1,766,326
Assumption Changes	-	-	-	5,818,630	(1,381,779)	873,554	830,599	816,095	805,243	1,305,722
Benefit Payments	(6,475,648)	(6,442,898)	(4,568,906)	(5,886,519)	(4,651,210)	(4,182,159)	(4,004,040)	(3,752,449)	(3,718,306)	(4,846,547)
Refunds	(1,291)	-	-	-	-	-	-	-	(47,371)	(20,514)
Other (Contributions to Share Plan Accounts)	695,643	695,643	578,448	345,328	329,123	286,708	299,881	243,844	230,855	263,758
Net Change in Total Pension Liability	3,347,241	3,118,989	3,514,269	10,424,647	3,765,821	7,382,917	2,986,601	3,458,480	4,353,348	4,290,207
Total Pension Liability - Beginning	114,309,044	111,190,055	107,675,786	97,251,139	93,485,318	86,102,401	83,115,800	79,657,320	75,303,972	71,013,765
Total Pension Liability - Ending (a)	\$ 117,656,285	\$114,309,044	\$ 111,190,055	\$107,675,786	\$ 97,251,139	\$ 93,485,318	\$86,102,401	\$83,115,800	\$ 79,657,320	\$ 75,303,972
Plan Fiduciary Net Position										
Contributions - Employer	\$ 1,710,692	\$ 1,518,857	\$ 1,736,350	\$ 1,912,709	\$ 1,855,552	\$ 1,639,281	\$ 1,596,819	\$ 1,766,695	\$ 1,663,918	\$ 1,413,133
Contributions - Employer (from State)	782,099	782,099	664,904	431,784	415,579	373,164	386,337	330,300	317,311	350,214
Contributions - Non-Employer Contributing Entity	-	-	-	-	-	-	-	-	-	-
Contributions - Member	334,500	317,463	363,801	389,907	441,483	451,261	430,076	376,634	399,448	414,577
Net Investment Income	7,044,903	18,729,662	7,523,402	(14,238,885)	20,972,496	6,449,904	4,554,287	9,179,537	9,770,808	5,742,118
Benefit Payments	(6,475,648)	(6,442,898)	(4,568,906)	(5,886,519)	(4,651,210)	(4,182,159)	(4,004,040)	(3,752,449)	(3,718,306)	(4,846,547)
Refunds	(1,291)	-	-	-	-	-	-	-	(47,371)	(20,514)
Administrative Expense	(157,223)	(152,109)	(162,337)	(132,408)	(115,024)	(115,105)	(111,125)	(124,296)	(113,852)	(125,298)
Other		-	-	-	-	-	-	-	-	-
Net Change in Plan Fiduciary Net Position	3,238,032	14,753,074	5,557,214	(17,523,412)	18,918,876	4,616,346	2,852,354	7,776,421	8,271,956	2,927,683
Plan Fiduciary Net Position - Beginning	120,844,268	106,091,194	100,533,980	118,057,392	99,138,516	94,522,170	91,669,816	83,893,395	75,621,439	72,693,756
Plan Fiduciary Net Position - Ending (b)	\$124,082,300	\$ 120,844,268	\$106,091,194	\$100,533,980	\$ 118,057,392	\$99,138,516	\$94,522,170	\$91,669,816	\$83,893,395	\$ 75,621,439
Net Pension Liability - Ending (a) - (b)	(6,426,015)	(6,535,224)	5,098,861	7,141,806	(20,806,253)	(5,653,198)	(8,419,769)	(8,554,016)	(4,236,075)	(317,467)
Plan Fiduciary Net Position as a Percentage										
of Total Pension Liability	105.46 %	105.72 %	95.41 %	93.37 %	121.39 %	106.05 %	109.78 %	110.29 %	105.32 %	100.42 %
Covered Payroll	\$ 4,181,254	\$ 4,101,751	\$ 4,516,028	\$ 4,807,344	\$ 5,479,117	\$ 5,575,164	\$ 5,315,261	\$ 4,657,792	\$ 4,944,856	\$ 5,212,098
Net Pension Liability as a Percentage										
of Covered Payroll	(153.69)%	(159.33)%	112.91 %	148.56 %	(379.74)%	(101.40)%	(158.41)%	(183.65)%	(85.67)%	(6.09)%

<sup>\*</sup> These figures are estimates only. Actual figures will be provided after the end of the fiscal year.



# SCHEDULE OF THE EMPLOYER'S NET PENSION LIABILITY GASB Statement No. 67

	Total			Plan Fiduciary Net		Net Pension Liability
FY Ending	Pension	Plan Fiduciary	Net Pension	Position as a % of	Covered	as a % of Covered
September 30,	Liability	Net Position	Liability	Total Pension Liability	Payroll	Payroll
2016	\$ 75,303,972	\$ 75,621,439	\$ (317,467)	100.42%	\$ 5,212,098	(6.09)%
2017	\$ 79,657,320	\$ 83,893,395	\$ (4,236,075)	105.32%	\$ 4,944,856	(85.67)%
2018	\$ 83,115,800	\$ 91,669,816	\$ (8,554,016)	110.29%	\$ 4,657,792	(183.65)%
2019	\$ 86,102,401	\$ 94,522,170	\$ (8,419,769)	109.78%	\$ 5,315,261	(158.41)%
2020	\$ 93,485,318	\$ 99,138,516	\$ (5,653,198)	106.05%	\$ 5,575,164	(101.40)%
2021	\$ 97,251,139	\$ 118,057,392	\$ (20,806,253)	121.39%	\$ 5,479,117	(379.74)%
2022	\$ 107,675,786	\$ 100,533,980	\$ 7,141,806	93.37%	\$ 4,807,344	148.56 %
2023	\$ 111,190,055	\$ 106,091,194	\$ 5,098,861	95.41%	\$ 4,516,028	112.91 %
2024	\$ 114,309,044	\$ 120,844,268	\$ (6,535,224)	105.72%	\$ 4,101,751	(159.33)%
2025*	\$ 117,656,285	\$124,082,300	\$ (6,426,015)	105.46%	\$ 4,181,254	(153.69)%

<sup>\*</sup> These figures are estimates only. Actual figures will be provided after the end of the fiscal year.



# NOTES TO NET PENSION LIABILITY GASB Statement No. 67 (for Fiscal Year Ending September 30, 2025)

Valuation Date: October 1, 2024
Measurement Date: September 30, 2025

#### Methods and Assumptions Used to Determine Net Pension Liability:

Actuarial Cost Method Entry Age Normal

Inflation 2.50% Salary Increases 7.50% Investment Rate of Return 5.90%

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

eligibility condition.

Mortality The same versions of Pub-2010 Headcount-Weighted Mortality

Tables as used by the Florida Retirement System (FRS) in their July 1, 2023 actuarial valuation for Special Risk class members (with mortality improvements projected for non-disabled lives to all future years after 2010 using Scale MP-2018). Florida Statutes

Chapter 112.63(1)(f) mandates the use of mortality tables from one of the two most recently published FRS actuarial valuation reports.

Other Information:

Notes See Discussion of Valuation Results on Page 1.



# SCHEDULE OF CONTRIBUTIONS GASB Statement No. 67

FY Ending September 30,	Actuarially Determined Contribution	C	Actual ontribution	Def	ribution iciency xcess)	Covered Payroll	Actual Contribution as a % of Covered Payroll
2016	\$ 1,499,589	\$	1,499,589	\$	-	\$ 5,212,098	28.77%
2017	\$ 1,750,374	\$	1,750,374	\$	-	\$ 4,944,856	35.40%
2018	\$ 1,853,151	\$	1,853,151	\$	-	\$ 4,657,792	39.79%
2019	\$ 1,683,275	\$	1,683,275	\$	-	\$ 5,315,261	31.67%
2020	\$ 1,725,737	\$	1,725,737	\$	-	\$ 5,575,164	30.95%
2021	\$ 1,942,008	\$	1,942,008	\$	-	\$ 5,479,117	35.44%
2022	\$ 1,999,165	\$	1,999,165	\$	-	\$ 4,807,344	41.59%
2023	\$ 1,822,806	\$	1,822,806	\$	-	\$ 4,516,028	40.36%
2024	\$ 1,605,313	\$	1,605,313	\$	-	\$ 4,101,751	39.14%
2025*	\$ 1,797,148	\$	1,797,148	\$	-	\$ 4,181,254	42.98%

<sup>\*</sup> These figures are estimates only. Actual figures will be provided after the end of the fiscal year.



# NOTES TO SCHEDULE OF CONTRIBUTIONS GASB Statement No. 67 (for Fiscal Year Ending September 30, 2025)

Valuation Date: October 1, 2023

Notes Actuarially determined contribution rates are calculated as of the

October 1st 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 Aggregate

Amortization Method N/A Remaining Amortization Period N/A

Asset Valuation Method 5-year smoothed market

Inflation 2.50% Salary Increases 7.50% Investment Rate of Return 5.90%

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

eligibility condition.

Mortality The same versions of Pub-2010 Headcount-Weighted Mortality

Tables as used by the Florida Retirement System (FRS) in their July 1, 2022 actuarial valuation for Special Risk class members (with mortality improvements projected for non-disabled lives to all future years after 2010 using Scale MP-2018). Florida Statutes Chapter 112.63(1)(f) mandates the use of mortality tables from one of the two most recently published FRS actuarial valuation

reports.

Other Information:

Notes See Discussion of Valuation Results on Page 1 in the October 1,

2023 Actuarial Valuation Report dated March 11, 2024.



# SINGLE DISCOUNT RATE GASB Statement No. 67

A single discount rate of 5.90% 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 5.90%. 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 (5.90%) 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 5.90%, 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\*

		Current Single Discount	
FY Ending	1% Decrease	Rate Assumption	1% Increase
September 30,	4.90%	5.90%	6.90%
2025*	\$5,446,690	(\$6,426,015)	(\$16,360,797)

<sup>\*</sup> These figures are estimates only. Actual figures will be provided after the end of the fiscal year.



# **S**ECTION **E**

**M**ISCELLANEOUS INFORMATION

	RECONCILIATION OF MEMBERSH	IP DATA	
		From 10/1/23 To 10/1/24	From 10/1/22 To 10/1/23
A.	Active Members		
1.	Number Included in Last Valuation	32	35
2.	New Members Included in Current Valuation	0	0
3.	Non-Vested Employment Terminations	0	0
4.	Vested Employment Terminations	0	0
5.	Service Retirements	0	(1)
6.	DROP Retirements	(2)	(2)
7.	Disability Retirements	0	0
8.	Deaths	0	0
9.	Other - FRS Non-Vested Transfers	0_	0
10.	Number Included in This Valuation	30	32
В.	Terminated Vested Members		
1.	Number Included in Last Valuation	1	1
2.	Additions from Active Members	0	0
	Lump Sum Payments/Refund of Contributions	0	0
4.	Payments Commenced	(1)	0
5.	•	0	0
6.	Other - Return to Active	0	0
7.	Number Included in This Valuation	0	1
C.	DROP Plan Members		
1	Number to dead in Leah Valuation	1.4	12
1.	Number Included in Last Valuation	14	13
2. 3.	Additions from Active Members Retirements	2	2
3. 4.	Deaths	(3) 0	0
5.	Other		(1) 0
6.	Number Included in This Valuation	<u>0</u> 13	14
D.	Service Retirees, Disability Retirees and Beneficiaries	13	
	<u> </u>		
1.	Number Included in Last Valuation	69	67
2.	Additions from Active Members	0	1
3.	Additions from Terminated Vested Members	1	0
4.	Additions from DROP Plan Members	3	0
5.	Deaths Resulting in No Further Payments	0	0
6.	Deaths Resulting in New Survivor Benefits	0	1
7.	End of Certain Period - No Further Payments	0	0
8.	Other	0	0
9.	Number Included in This Valuation	73	69



# **ACTIVE PARTICIPANT SCATTER**

					Years	of Service	to Valuati	on Date					
Age Group	0-1	1-2	2-3	3-4	4-5	5-9	10-14	15-19	20-24	25-29	30-34	35 & Up	Totals
20-24 NO.	0	0	0	0	0	0	0	0	0	0	0	0	C
TOT PAY	0	0	0	0	0	0	0	0	0	0	0	0	C
AVG PAY	0	0	0	0	0	0	0	0	0	0	0	0	0
25-29 NO.	0	0	0	0	0	0	0	0	0	0	0	0	0
TOT PAY	0	0	0	0	0	0	0	0	0	0	0	0	0
AVG PAY	0	0	0	0	0	0	0	0	0	0	0	0	0
30-34 NO.	0	0	0	0	0	0	1	0	0	0	0	0	1
TOT PAY	0	0	0	0	0	0	134,512	0	0	0	0	0	134,512
AVG PAY	0	0	0	0	0	0	134,512	0	0	0	0	0	134,512
35-39 NO.	0	0	0	0	0	2	0	2	0	0	0	0	4
TOT PAY	0	0	0	0	0	256,106	0	284,074	0	0	0	0	540,180
AVG PAY	0	0	0	0	0	128,053	0	142,037	0	0	0	0	135,045
40-44 NO.	0	0	0	0	0	1	0	8	0	0	0	0	g
TOT PAY	0	0	0	0	0	130,003	0	993,762	0	0	0	0	1,123,765
AVG PAY	0	0	0	0	0	130,003	0	124,220	0	0	0	0	124,863
45-49 NO.	0	0	0	0	0	0	0	5	1	0	0	0	6
TOT PAY	0	0	0	0	0	0	0	677,505	171,839	0	0	0	849,344
AVG PAY	0	0	0	0	0	0	0	135,501	171,839	0	0	0	141,557
50-54 NO.	0	0	0	0	0	0	0	2	6	0	0	0	8
TOT PAY	0	0	0	0	0	0	0	232,827	894,591	0	0	0	1,127,418
AVG PAY	0	0	0	0	0	0	0	116,414	149,098	0	0	0	140,927
55 & Up NO.	0	0	0	0	0	0	0	2	0	0	0	0	2
TOT PAY	0	0	0	0	0	0	0	254,905	0	0	0	0	254,905
AVG PAY	0	0	0	0	0	0	0	127,452	0	0	0	0	127,453
TOT NO.	0	0	0	0	0	3	1	19	7	0	0	0	30
TOT AMT	0	0	0	0	0	386,109			1,066,430	0	0	0	4,030,124
AVG AMT	0	0	0	0	0	128,703	134,512	128,583	152,347	0	0	0	134,337



# **INACTIVE PARTICIPANT SCATTER**

	Term	Terminated					Decea	sed with
	Vested Total		<b>Disabled</b> Total		<b>Retired</b> Total		<b>Beneficiary</b> Total	
Age Group	Number	Benefits	Number	Benefits	Number	Benefits	Number	Benefits
Under 20	-	-	-	-	-	-	-	-
20-24	-	-	-	-	-	-	-	-
25-29	-	-	-	-	-	-	-	-
30-34	-	-	-	-	-	-	-	-
35-39	-	-	-	-	-	-	-	-
40-44	-	-	-	-	_	-	_	-
45-49	-	-	1	53,402	3	390,289	-	-
50-54	-	-	2	110,610	6	613,389	-	-
55-59	-	-	1	36,284	16	1,346,971	1	47,265
60-64	-	-	4	127,177	14	1,080,332	-	-
65-69	-	-	5	209,029	10	855,010	1	35,426
70-74	-	-	1	25,062	5	337,863	3	86,463
75-79	-	-	1	16,937	4	276,599	1	48,541
80-84	_	-	1	14,432	5	230,240	1	31,886
85-89	-	-	-	-	-	-	-	-
90-94	-	-	-	-	-	-	-	-
95-99	-	-	-	-	-	-	-	-
100 & Over	-	-	-	-	-	-	-	-
Total	-	-	16	592,933	63	5,130,693	7	249,581
Average Age				64		64		72



# **S**ECTION **F**

**SUMMARY OF PLAN PROVISIONS** 

## SUMMARY OF PLAN PROVISIONS

(Florida Statutes Chapter 175 as amended by City Ordinance)

#### A. Ordinances

The Plan was established under the Code of Ordinances for the City of Riviera Beach, Florida, Chapter 14, Article III, and was most recently amended under Ordinance No. 4058 passed and adopted on February 4, 2015. The Plan is also governed by certain provisions of Chapter 175, Florida Statutes, Part VII, Chapter 112, Florida Statutes and the Internal Revenue Code.

#### **B.** Effective Date

Not provided

#### 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

All regular uniformed members of the Fire Department hired prior to May 1, 2015, including active volunteers, are eligible to participate in the plan if. Effective May 1, 2015 the plan is closed to new entrants per City Ordinance No. 4058.

#### F. Credited Service

Service is measured as the total length of service with the City from the date of employment to the date of termination or retirement. No service is credited for any periods of employment for which the member received a refund of their contributions.

#### G. Compensation

Total gross compensation; includes pay for unused accumulated leave time paid at termination or retirement. The amount of overtime pay that is included in pensionable salary is limited to 300 hours per year effective October 1, 2014. The number of accumulated unused sick and vacation leave hours included in pensionable salary is limited to the lesser of the number accrued as of October 1, 2014 or the number paid at retirement.



#### H. Average Final Compensation (AFC)

The average of Compensation over the highest 2 years within the last 10 years of Credited Service immediately preceding termination or retirement.

#### I. Normal Retirement

Eligibility: A member may retire on the first day of the month coincident with or next

following the earlier of:

(1) 20 years of Credited Service regardless of age, or

(2) age 55 and 10 years of Credited Service.

Benefit: 3.0% of AFC multiplied by Credited Service.

Normal Form

of Benefit: 10 Years Certain and Life thereafter; other options are also available.

COLA: None

### J. Early Retirement

Eligibility: A member may elect to retire earlier than the Normal Retirement Eligibility

upon attainment of age 50 and 10 years of Credited Service.

Benefit: The Normal Retirement Benefit is reduced by 3.0% for each year by which the

Early Retirement date precedes the Normal Retirement date.

Normal Form

of Benefit: 10 Years Certain and Life thereafter; other options are also available.

COLA: None

#### K. Delayed Retirement

Same as Normal Retirement taking into account Compensation earned and service credited until the date of actual retirement.

#### L. Service Connected Disability

Eligibility: Any member who becomes totally and permanently disabled and unable to

render useful and efficient service as a firefighter 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) Accrued Normal Retirement Benefit taking into account Compensation earned and service credited until the date of disability, or
- (2) 60% of the average monthly salary in the last year of Credited Service prior to the date of disability.

Normal Form

of Benefit: 10 Years Certain and Life thereafter; or until recovery from disability. Other

options are also available.

COLA: None

#### M. Non-Service Connected Disability

Eligibility: Any member with 10 years of Credited Service who becomes totally and

permanently disabled and unable to render useful and efficient service as a

firefighter is immediately eligible for a disability benefit.

Benefit: The greater of:

(1) Accrued Normal Retirement Benefit taking into account Compensation earned and service credited until the date of disability, or

(2) 48% of the average monthly salary in the last year of Credited Service prior

to the date of disability.

Normal Form

of Benefit: 10 Years Certain and Life thereafter; or until recovery from disability. Other

options are also available.

COLA: None

#### N. Death in the Line of Duty

Eligibility: Any member whose death is determined to be the result of a service incurred

injury is eligible for survivor benefits regardless of Credited Service.

Benefit: For members with less than 10 years of Credited Service:

- (1) Spouse will receive a refund of the member's contributions with interest,
- (2) Spouse will receive 33 1/3% of the average monthly salary in the last year of Credited Service prior to the date of death, and
- (3) Eligible children, if any, (and if more than 1 divided equally) will receive 25% of the average monthly salary in the last year of Credited Service prior to the date of death.



For members with 10 or more years of Credited Service:

- (1) Spouse will receive a refund of the member's contributions with interest,
- (2) Spouse will receive the greater of the accrued Normal Retirement Benefit or 33 1/3% of the average monthly salary in the last year of Credited Service prior to the date of death, and
- (3) Eligible children, if any, (and if more than 1 divided equally) will receive 25% of the average monthly salary in the last year of Credited Service prior to the date of death.

Normal Form

of Benefit: Spouse's benefits are payable until death. Children's benefits are payable until

age 18 (age 21 if a full-time student), marriage or death.

COLA: None

#### O. Other Pre-Retirement Death

Eligibility: Any member with 10 or more years of Credited Service is eligible for survivor

benefits.

Benefit: Spouse, or other beneficiary, will receive the accrued Normal Retirement

Benefit as of the date of death.

Normal Form

of Benefit: Paid for the life of the spouse, or until remarriage. If there is no spouse, the

beneficiary is paid for 10 years.

COLA: None

The beneficiary of any plan member with less than 10 years of Credited Service will receive a refund of the member's accumulated contributions with interest.

#### P. Post Retirement Death

Benefit determined by the form of benefit elected upon retirement.

## Q. Optional Forms

In lieu of electing the Normal Form of benefit, the optional forms of benefits available to all retirees are a Single Life Annuity or the 50%, 66 2/3%, 75% and 100% Joint and Survivor Annuity options.

#### R. Vested Termination

Eligibility: A member has earned a non-forfeitable right to Plan benefits after the

completion of 10 years of Credited Service provided the member elects to



leave the accumulated contributions in the fund.

Benefit: The benefit is the member's accrued Normal Retirement Benefit as of the date

of termination. Benefit is payable at what would have been the member's Normal Retirement date as if the member remained employed. Alternatively, the member may elect to receive the benefit any time after age 50 with

actuarial reduction for Early Retirement.

Normal Form

of Benefit: 10 Years Certain and Life thereafter; other options are also available.

COLA: None

Members terminating employment with less than 10 years of Credited Service will receive a refund of accumulated contributions with interest.

#### S. Refunds

Eligibility: All members terminating employment with less than 10 years of Credited

Service are eligible. Optionally, vested members may elect a refund in lieu of

the vested benefits otherwise due.

Benefit: Refund of the member's contributions with interest. Interest is currently

credited with simple interest of 5.5% per year.

#### T. Member Contributions

8.0% of Compensation

#### **U. State Contributions**

Chapter 175 Premium Tax Refunds

#### V. Employer Contributions

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

#### W. Cost of Living Increases

Not applicable

#### X. 13th Check

Not applicable



#### Y. Deferred Retirement Option Plan

Eligibility: Plan members who meet one of the following criteria are eligible for the

DROP:

(1) 20 years of Credited Service regardless of age, or

(2) age 55 and 10 years of Credited Service.

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: 60 months, but not beyond 30 years of Credited Service.

Interest

Credited: The member's DROP account is credited at a rate equal to the actual net rate

of investment return realized by the system. If the member elects a selfdirected DROP, the investment return is determined by the self-directed

investments.

Normal Form

of Benefit: Lump Sum

COLA: None

#### Z. Other Ancillary Benefits

There are no ancillary retirement type benefits not required by statutes but which might be deemed a City of Riviera Beach Firefighters' Pension Trust Fund liability if continued beyond the availability of funding by the current funding source.

#### **AA. Changes from Previous Valuation**

None.

