City of Fresno Fire and Police Retirement System

Actuarial Valuation and Review
as of June 30, 2025

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November 17, 2025

Board of Retirement
City of Fresno Fire and Police Retirement System
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Dear Board Members:

We are pleased to submit this Actuarial Valuation and Review as of June 30, 2025. It summarizes the actuarial data used in the valuation, analyzes the preceding year's experience, and establishes the funding requirements for fiscal year 2026–2027.

This report has been prepared in accordance with generally accepted actuarial principles and practices for the exclusive use and benefit of the Board in administering the City of Fresno Fire and Police Retirement System, based upon information provided by the staff of the Retirement System and the Plan's other service providers.

Segal does not audit the data provided. The accuracy and comprehensiveness of the data is the responsibility of those supplying the data. To the extent we can, however, Segal does review the data for reasonableness and consistency. Based on our review of the data, we have no reason to doubt the substantial accuracy of the information on which we have based this report and we have no reason to believe there are facts or circumstances that would affect the validity of these results.

The measurements shown in this actuarial valuation may not be applicable for other purposes. Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements; and changes in plan provisions or applicable law.

The actuarial calculations were directed under the supervision of Jonathan Boyles, FSA, CERA, MAAA and Enrolled Actuary. We are members of the American Academy of Actuaries and we meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion herein. To the best of our knowledge, the information supplied in this actuarial valuation is complete and accurate. The assumptions used in this actuarial valuation were selected by the Board of Retirement based upon our analysis and

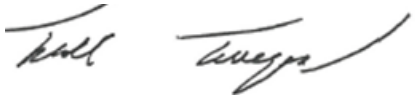
recommendations. In our opinion, the assumptions are reasonable and take into account the experience of the City of Fresno Fire and Police Retirement System and reasonable expectations. In addition, in our opinion, the combined effect of these assumptions is expected to have no significant bias.

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

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

Sincerely,

Segal



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Section 1: Actuarial Valuation Summary

Purpose and basis

This report has been prepared by Segal to present a valuation of the City of Fresno Fire and Police Retirement System ("the Retirement System" or "the System" or "the Plan") as of June 30, 2025. The valuation was performed to determine whether the assets and contribution rates are sufficient to provide the prescribed benefits.

The contribution requirements presented in this report are based on:

- The benefit provisions of the Plan, as administered by the Board of Retirement;
- The characteristics of covered active members, DROP participants, inactive vested members, and retired members and beneficiaries as of June 30, 2025, provided by the Retirement System;
- The assets of the Plan as of June 30, 2025, provided by the Retirement System;
- Economic assumptions regarding future salary increases and investment earnings adopted by the Board of Retirement for the June 30, 2025 valuation;
- Other actuarial assumptions regarding employee terminations, retirement, death, etc. adopted by the Board of Retirement for the June 30, 2025 valuation; and
- The funding policy adopted by the Board of Retirement.

Certain disclosure information required by Governmental Accounting Standards Board (GASB) Statements No. 67 and 68 as of June 30, 2025 for the Plan and the employer, respectively, are provided in separate reports.

One of the general goals of an actuarial valuation is to establish contributions which fully fund the Retirement System's liabilities, and which, as a percentage of payroll, remain as level as possible for each generation of active members. Annual actuarial valuations measure the progress toward this goal, as well as test the adequacy of the contribution rates.

The contribution requirements are determined as a percentage of payroll. The Retirement System's employer rates provide for both normal cost and a contribution to amortize any unfunded or overfunded actuarial accrued liabilities. In this valuation, we have applied the funding policy adopted by the Board.[1] Details of the funding policy are provided in *Section 4, Exhibit 1* starting on page 73.

[1] A "Comprehensive Actuarial Funding Policy" was jointly adopted on November 7, 2012 by the Retirement Boards for both the City of Fresno Employees Retirement System and the City of Fresno Fire and Police Retirement System. This policy was subsequently amended to lengthen the period used to amortize the actuarial surplus, when assets are greater than 110% of the actuarial accrued liabilities, from 25 years to 30 years starting with the June 30, 2018 valuations.

The rates calculated in this report may be adopted by the Board of Retirement for the fiscal year that extends from July 1, 2026 through June 30, 2027.

The Actuarial Standard of Practice (ASOP) No. 4 provides guidelines for actuaries to follow when measuring pension obligations. For a plan such as that offered by the Retirement System that utilizes the actuarial surplus to provide contribution rate offsets and a Post Retirement Supplemental Benefit (PRSB) benefit, the valuation report must indicate that the impact of the application of any future actuarial surplus on the future financial condition of the plan has not been explicitly measured in the valuation. Furthermore, the actuary must consider using alternative procedures (such as stochastic modeling) for "gain sharing provisions that trigger benefit increases when investment returns are favorable but do not trigger benefit decreases when investment returns are unfavorable." Based on our analysis, we do not believe the System's actuarial surplus distribution provisions would necessarily fall under the guidelines of ASOP No. 4 so as to require quantification. This is based on the observation that only a portion of the surplus is available for distribution (on an amortized basis over 30 years pursuant to the Board's funding policy) when the funded status of the System is over 110% in a particular valuation (pursuant to the Municipal Code) and that surplus distribution will be suspended immediately if the funded status falls below 110% in the following valuation. Nonetheless, it should be understood that there is still a potential financial impact associated with the surplus distribution provision. The Board may wish to consider authorizing a supplemental study so that the potential impact can be quantified.

A supplemental study could help quantify the potential long-term financial impact of distributing surplus when the System's funded ratio exceeds 110%. The analysis would use stochastic modeling to simulate a wide range of future investment return patterns and assess how frequently distributable actuarial surplus may arise, how long it may persist, and the potential effect on contribution levels and funded status over time. The study could also examine alternative scenarios—such as different amortization periods—solely for comparison purposes, to provide the Board and the City with an objective framework for understanding the variability and risk under different market environments and the existing surplus distribution policy.

Valuation highlights

Implementation of the employer contribution rates in June 30, 2023 and June 30, 2024 valuations

1. In the June 30, 2024 actuarial valuation report dated November 18, 2024, it was noted that, as of that date, the recommended employer contribution rates for fiscal year 2024–2025, as determined in the June 30, 2023 actuarial valuation, had not yet been implemented by the City. (The City had decided to carry over unchanged the lower employer contribution rates from the prior fiscal year that were determined in the June 30, 2022 actuarial valuation.) Following discussions with Retirement System staff at

that time, Segal was directed to assume, for purposes of preparing the June 30, 2024 valuation results, that the recommended rates would ultimately be adopted and implemented by the City before the end of fiscal year 2024–2025. Consequently, the June 30, 2024 valuation did not reflect any anticipated contribution shortfall for fiscal year 2024–2025 arising from the continued payment of the lower fiscal year 2023–2024 rates.

As of the current June 30, 2025 actuarial valuation, it is our understanding that the lower City contribution rates determined in the June 30, 2022 actuarial valuation for fiscal year 2023–2024 were made throughout fiscal year 2024–2025 and continued by the City into fiscal year 2025–2026. Following consultation with Retirement System staff and legal counsel, we have been directed to reflect both the actual fiscal year 2024–2025 contribution shortfall and the anticipated fiscal year 2025–2026 contribution shortfall in the determination of the fiscal year 2026–2027 contribution rate for the City.

The actual fiscal year 2024–2025 contribution shortfall has been provided by the Retirement System and incorporated as a negative balance within the City Surplus (Deficit) Reserve account. This negative balance is treated as a System asset and represents the shortfall of the City's contributions for the prior fiscal year, arising from the City's decision to continue applying the lower fiscal year 2023–2024 contribution rates for the City.

The City Surplus (Deficit) Reserve account has not historically included a shortfall arising from the explicit adoption of City contribution rates below the actuarially determined contribution[1] (ADC). For this valuation, we have reflected such City contribution shortfalls at the direction of Retirement System staff and based on advice from legal counsel.

The impact of these contribution shortfalls on the recommended employer contribution rate is illustrated in lines 4a and 4b in the reconciliation of the recommended employer contribution rate from June 30, 2024 to June 30, 2025, as shown on page 35.

The shortfalls for both of fiscal years 2024–2025 and 2025–2026 have been reflected in the development of the City's contribution rate for fiscal year 2026–2027, as shown in Steps 4 and 12 of Table 4 in *Section 3, Exhibit H*. (The actual shortfall for fiscal year 2024–2025 is shown in Step 4 and the anticipated shortfall for fiscal year 2025–2026 is incorporated through Steps 9 through 12.)

DROP cost neutrality and proposed cost control measures

2. Following the completion of the DROP Cost neutrality study in 2023, the Board has prepared some cost control measures and related amendments that, if adopted by the City, would result in helping make the DROP cost neutral. Since these measures have not been adopted by the City, we have continued to apply only the maximum reduction of 3% to the interest crediting rate for the DROP account that is currently in the Municipal Code.

[1] The City has never before chosen to pay a contribution rate separate from what the Retirement System has set.

Assumption changes

3. The results of this valuation reflect changes in the economic and demographic assumptions as recommended by Segal and adopted by the Board for the June 30, 2025 valuation. These changes were documented in the July 1, 2021 through June 30, 2024 Actuarial Experience Study and June 30, 2025 Economic Actuarial Assumptions Report, both dated June 3, 2025 and are also outlined in *Section 4, Exhibit 1* of this report. These assumption changes increased the Actuarial Accrued Liability by $45.4 million and increased the employer Normal Cost rate by 1.32% of payroll.

Funding measures

4. The funded ratio (the ratio of valuation value of assets to the actuarial accrued liability) increased from 114.9% to 116.2%. This ratio is one measure of funding status, and its history is a measure of funding progress. Using the market value of assets, the funded ratio increased from 118.0% to 120.9%. These measurements are not necessarily appropriate for assessing the sufficiency of plan assets to cover the estimated cost of settling the Plan's benefit obligation or the need for, or the amount of, future contributions. A history of the System's funded ratios is provided in *Section 2, Subsection G* on pages 38 and 39.

5. The prefunded actuarial accrued liability (the difference between the actuarial accrued liability and the valuation value of assets) increased from $258.4 million to $300.4 million. The increase in prefunded actuarial accrued liability (PAAL) is primarily due to the 10.13% investment return on the valuation value (i.e., after asset smoothing) greater than the assumed rate of 6.75% used in the June 30, 2024 valuation and individual salary increases lower than expected[1], partially offset by changes in actuarial assumptions and contributions less than expected. A reconciliation of the System's PAAL from the prior year is provided in *Section 2, Subsection E* on page 32.

6. As of June 30, 2025, there is an actuarial surplus available for distribution as the Retirement System has Valuation Value of Assets that are in excess of 110% of the actuarial accrued liability. Such actuarial surplus in the Retirement System is used to reduce the City's contribution and to provide a PRSB pursuant to the Municipal Code. The determination and allocation of actuarial surplus as of June 30, 2025 as well as for the last valuation as of June 30, 2024 is provided in *Section 3, Exhibit H* of this report.

Actuarial experience

7. The net actuarial gain of $74.8 million, or 4.0% of actuarial accrued liability, is due to an investment gain of $66.7 million, or 3.6% of actuarial accrued liability and a net experience gain from other actuarial experience of $13.7 million, or 0.7% of the actuarial

[1] The individual salary increases during fiscal year 2024-2025 of about 7.1% (on average) were actually higher than those expected by the actuarial assumptions (5.6%, on average). However, some of those higher-than-expected increases were implicitly offset by the over-reporting of salaries during fiscal year 2023-2024 for the June 30, 2024 valuations as those salaries included 27 instead of 26 pay periods.

accrued liability, partially offset by a contribution loss of $5.6 million, or 0.3% of actuarial accrued liability. The net gain from sources other than investment and contribution experience was primarily due to individual salary increases lower than expected for active members.[1]

8. The rate of return on the market value of assets was 11.08% for the year ending June 30, 2025. The return on the valuation value of assets was 10.13% for the same period after recognizing a portion of this year's investment gain and a portion of prior years' investment gains and losses. This resulted in an actuarial gain when measured against the assumed rate of return of 6.75% used in the June 30, 2024 valuation.

Contributions

9. The employer rate calculated in this valuation has increased from 23.31% to 28.46% of payroll. This increase is due to a 1.32% of payroll increase in the normal cost rate resulting from changes in actuarial assumptions, a 4.27% of payroll increase reflecting the cumulative impact of the contribution shortfall from fiscal year 2024–2025 and the projected contribution shortfall for fiscal year 2025–2026, caused by the City not adopting the recommended contribution rates determined in the prior two valuations, and changes in membership demographics among all active (DROP and non-DROP) members. A complete reconciliation of the Retirement System's employer rate is provided in *Section 2, Subsection F* on page 35.

10. The member rate calculated in this valuation has decreased from 8.97% to 8.93% of payroll. This is based on the 9% contribution rate paid by all Tier 2 members, excluding those who are over age 60 with at least 10 years of service who are not required to make member contributions. A complete reconciliation of the Retirement System's aggregate member rate is provided in *Section 2, Subsection F* on page 36.

    Effective March 7, 2011, active members who signed up for the DROP are required to continue their employee contributions; however, those contributions are deposited into the members' DROP accounts and therefore not available to fund the value of the retirement benefit earned up to the date of the DROP. Therefore, those contributions that will be deposited into the DROP accounts are disregarded in this valuation.

    The detailed member rates are provided in *Section 4, Exhibit 3* of this report.

[1] The individual salary increases during fiscal year 2024-2025 of about 7.1% (on average) were actually higher than those expected by the actuarial assumptions (5.6%, on average). However, some of those higher-than-expected increases were implicitly offset by the over-reporting of salaries during fiscal year 2023-2024 for the June 30, 2024 valuations as those salaries included 27 instead of 26 pay periods.

Future expectations

11. The total unrecognized net investment **gain** as of June 30, 2025 is $85.5 million as compared to an unrecognized net investment **gain** of $53.2 million in the previous valuation. This net deferred gain of $85.5 million will be recognized in the determination of the actuarial value of assets for funding purposes in the next few years as shown in *Section 2, Subsection B* on page 25.

    The net deferred gain of $85.5 million represents about 3.6% of the market value of assets. Unless offset by future investment losses or other unfavorable experience, the recognition of the $85.5 million net market gain is expected to have an impact on the Retirement System's future funded ratio and contribution rate requirements. This potential impact may be illustrated as follows:

    a. If the net deferred gain were recognized immediately in the valuation value of assets, the funded percentage would increase from 116.2% to 120.9%.

       For comparison purposes, if the net deferred gain in the June 30, 2024 valuation had been recognized immediately in the June 30, 2024 valuation, the funded percentage would have increased from 114.9% to 118.0%.

    b. If the net deferred gain were recognized immediately in the valuation value of assets, the employer contribution rate would decrease from 28.46% to 26.55% of payroll.

       For comparison purposes, if the net deferred gain in the June 30, 2024 valuation had been recognized immediately in the June 30, 2024 valuation, the employer contribution rate would have decreased from 23.31% to 22.11% of payroll.

    c. If the net deferred gains in this year's valuation were recognized immediately and entirely in the Valuation Value of Assets, the PRSB benefit of $136.35 per month would increase to $213.93 for the 2026 calendar year.

       For comparison purposes, if the net deferred gains in the June 30, 2024 valuation had been recognized immediately in the June 30, 2024 valuation, the PRSB benefit of $135.40 per month would have increased to $185.73 for the 2025 calendar year.

Risk

12. It is important to note that this actuarial valuation is based on plan assets as of June 30, 2025. The Plan's funded status does not reflect short-term fluctuations of the market, but rather is based on the market values on the last day of the plan year. Segal is available to prepare projections of potential outcomes of market conditions and other demographic experience upon request.

13. Because the actuarial valuation results are dependent on a given set of assumptions, there is a risk that emerging results may differ significantly as actual experience proves to be different from the assumptions. We have not been engaged to perform a detailed analysis of the potential range of the impact of risk relative to the Plan's future financial condition, but have included a brief discussion of some risks that may affect the Plan in *Section 2, Subsection I*, beginning on page 41. A more detailed assessment would provide the Board of Retirement with a better understanding of the inherent risks.

14. The risk assessment in *Section 2, Subsection I* includes the disclosure of a "Low-Default-Risk Obligation Measure" (LDROM). This disclosure, along with commentary on the significance of the LDROM, is a requirement under Actuarial Standard of Practice No. 4 (ASOP 4) for all pension funding actuarial valuation reports and can be found on pages 43-44.

GASB

15. This report constitutes an actuarial valuation for the purpose of determining the actuarially determined contribution (ADC) under the Plan's funding policy and measuring the progress of that funding policy. The Net Pension Liability and Pension Expense under GASB Statements No. 67 and No. 68, for inclusion in the Plan's and employer's financial statements as of June 30, 2025, will be provided separately. The accounting disclosures will utilize different methodologies from those employed in the funding valuation, as required by the GASB. However, the ADC in this valuation is expected to be used as the ADC for GASB financial reporting.

Summary of key valuation results

Employer and Average Member Contribution Calculated as of June 30

($ in '000s)

Line Description	2025 Contribution Rate	2025 Annual Amount	2024 Contribution Rate	2024 Annual Amount
Employer contribution rate[1]				
• Tier 1 Normal Cost Rate[2]	N/A	$0	N/A	$0
• Tier 2 Normal Cost Rate	26.78%	44,054	25.12%	41,324
• All Categories Combined	26.78%	44,054	25.12%	41,324
• Surplus Offset	(2.59%)	(4,255)	(1.93%)	(3,175)
• Contribution (Excess)/Shortfall from Prior Fiscal Years[3]	4.27%	7,032	0.12%	197
Required Contributions	**28.46%**	**$46,831**	**23.31%**	**$38,346**
Member contribution rates[4]				
Tier 1[2]	N/A	$0	N/A	$0
Tier 2[5]	8.93%	$13,093	8.97%	$13,151
All Categories Combined	**8.93%**	**$13,093**	**8.97%**	**$13,151**

[1] Based on projected fiscal year 2026–2027 annual payroll for active non-DROP and DROP members of $164,505 (dollars in thousands).

[2] There were no active Tier 1 members reported in the membership data as of June 30, 2024 and 2025.

[3] The adjustment shown as of June 30, 2025 for determining the required employer contribution rate for fiscal year 2026–2027 reflects the combined effect of the employer contribution shortfall for the 2024–2025 fiscal year and the projected employer contribution shortfall for the 2025–2026 fiscal year. The individual impacts of these contribution shortfalls on the recommended employer contribution rate are illustrated on lines 4a and 4b of the reconciliation of the recommended employer contribution rate from June 30, 2024 to June 30, 2025, as shown on page 35.

[4] Based on projected fiscal year 2026–2027 annual payroll for members not in the DROP of $146,613 (dollars in thousands).

[5] Reflects that Tier 2 members over age 60 with at least 10 years of service do not have to make a member contribution.

Section 1: Actuarial Valuation Summary

Valuation Results as of June 30
($ in '000s)

Line Description	2025	2024
Actuarial accrued liability		
• Total actuarial accrued liability	$1,850,523	$1,732,763
– Active non-DROP members	$610,709	$610,736
– Active DROP members	176,291	105,007
– Retired members and beneficiaries	1,015,285	970,745
– Inactive members[1]	48,238	46,275
• Normal cost for plan year beginning June 30	$55,485	$52,744
Assets		
• Market value of assets (MVA)[2]	$2,236,490	$2,044,347
• Valuation value of assets (VVA)	$2,150,961	$1,991,117
Funded status		
• Prefunded/(Unfunded) actuarial accrued liability on market value of assets	$385,967	$311,584
• Funded percentage on MVA basis	120.9%	118.0%
• Prefunded/(Unfunded) actuarial accrued liability on valuation value of assets	$300,438	$258,354
• Funded percentage on VVA basis	116.2%	114.9%

[1] Includes inactive members due a refund of member contributions.
[2] Excludes non-valuation reserves and other adjustments.

Section 1: Actuarial Valuation Summary

Line Description	2025	2024
Key assumptions		
• Net investment return	6.75%	6.75%
• Inflation rate	2.50%	2.50%
• Payroll growth	3.00%	3.00%
• Amortization period on VVA basis[1]	30 years	30 years
• Cost-of-living adjustment (COLA)		
– Tier 1	3.00%	3.00%
– Tier 2	2.50%	2.50%

[1] Change in Prefunded AAL or Unfunded AAL as a result of gains or losses for each valuation are amortized over 30 years (when the Plan has Prefunded AAL) or separate periods of 15 years (when the Plan has Unfunded AAL). Details on the funding policy are provided in *Section 4, Exhibit 1*.

Demographic Data as of June 30

Demographic Data by Status	2025	2024	Change
Active non-DROP members			
• Number of members	1,108	1,148	(3.5%)
• Average age	38.8	39.0	(0.2)
• Average service	11.0	11.2	(0.2)
• Total projected compensation	$142,343,483	$145,885,780	(2.4%)
• Average projected compensation[1]	$128,469	$127,078	1.1%
Active DROP members			
• Number of members	110	77	42.9%
• Average age	57.5	57.9	(0.4)
• Average service	24.7	23.8	0.9
• Total projected compensation	$17,371,242	$11,983,885	45.0%
• Average projected compensation[1]	$157,920	$155,635	1.5%
Retired members and beneficiaries			
• Number of members	1,245	1,223	1.8%
– Service retired	427	423	0.9%
– Disability retired	512	496	3.2%
– Beneficiaries	306	304	0.7%
• Average age	68.3	68.0	0.3
• Average monthly benefit[2]	$4,907	$4,750	3.3%
Inactive members			
• Number of members[3]	192	185	3.8%
• Average age	40.3	41.0	(0.7)
Total members	**2,655**	**2,633**	**0.8%**

[1] June 30, 2024 payroll was projected payroll for fiscal year 2024–2025. June 30, 2025 payroll was projected payroll for fiscal year 2025–2026.
[2] Excludes supplemental benefits (if any) paid from PRSB and benefits derived from DROP account balances.
[3] Includes inactive members due a refund of member contributions.

Important information about actuarial valuations

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

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

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

Section 1: Actuarial Valuation Summary

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

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

Section 2: Actuarial Valuation Results

A. Member information

The Actuarial Valuation and Review considers the number and demographic characteristics of covered members, including active members, inactive vested members, retired members and beneficiaries.

This section presents a summary of significant statistical data on these member groups. More detailed information for this valuation year and the preceding valuation can be found in *Section 3, Exhibits A, B, and C*.

Member Population

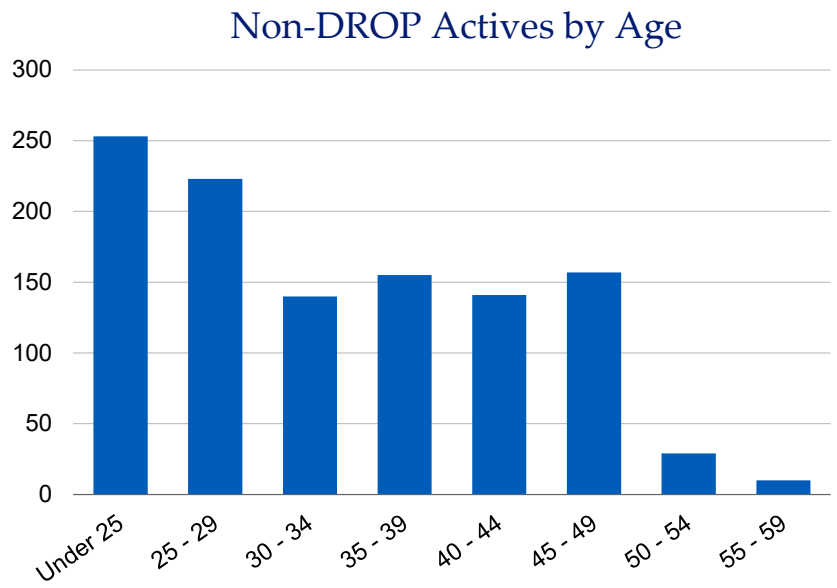
As of June 30	Active Members[1]	Inactive Members[2]	Retired Members and Beneficiaries (Pay Status)	Total Non-Actives	Ratio of Non-Actives to Actives	Ratio of Pay Status to Actives
2016	1,054	102	1,011	1,113	1.06	0.96
2017	1,086	117	1,046	1,163	1.07	0.96
2018	1,133	115	1,066	1,181	1.04	0.94
2019	1,123	121	1,085	1,206	1.07	0.97
2020	1,095	126	1,107	1,233	1.13	1.01
2021	1,082	124	1,126	1,250	1.16	1.04
2022	1,134	138	1,154	1,292	1.14	1.02
2023	1,203	162	1,188	1,350	1.12	0.99
2024	1,225	185	1,223	1,408	1.15	1.00
2025	1,218	192	1,245	1,437	1.18	1.02

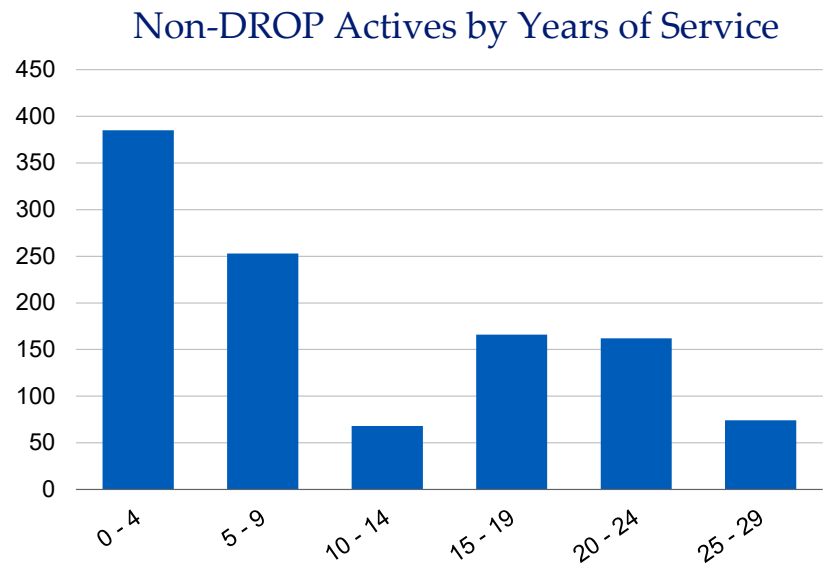
[1] Includes DROP members.
[2] Includes inactive members due a refund of member contributions.

Non-DROP active members

Demographic Data	As of June 30, 2025	As of June 30, 2024	Change
Active members	1,108	1,148	(3.5%)
Average age[1]	38.8	39.0	(0.2)
Average years of service	11.0	11.2	(0.2)
Average compensation	$128,469	$127,078	1.1%

Distribution of Non-DROP Active Members as of June 30, 2025





[1] Among the active members, there were none with unknown age information.

DROP active members

Demographic Data	As of June 30, 2025	As of June 30, 2024	Change
Active members	110	77	42.9%
Average age[1]	57.5	57.9	(0.4)
Average years of service	24.7	23.8	0.9
Average compensation	$157,920	$155,635	1.5%

Inactive members

Demographic Data	As of June 30, 2025	As of June 30, 2024	Change
Inactive members[2]	192	185	3.8%

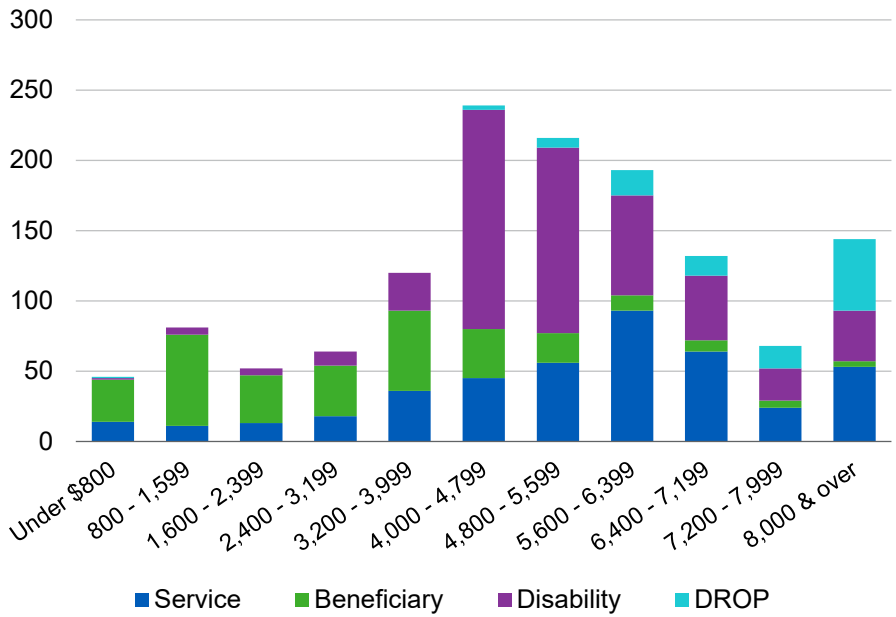
[1] Among the active members, there were none with unknown age information.
[2] Includes inactive members due a refund of member contributions.

Retired members and beneficiaries

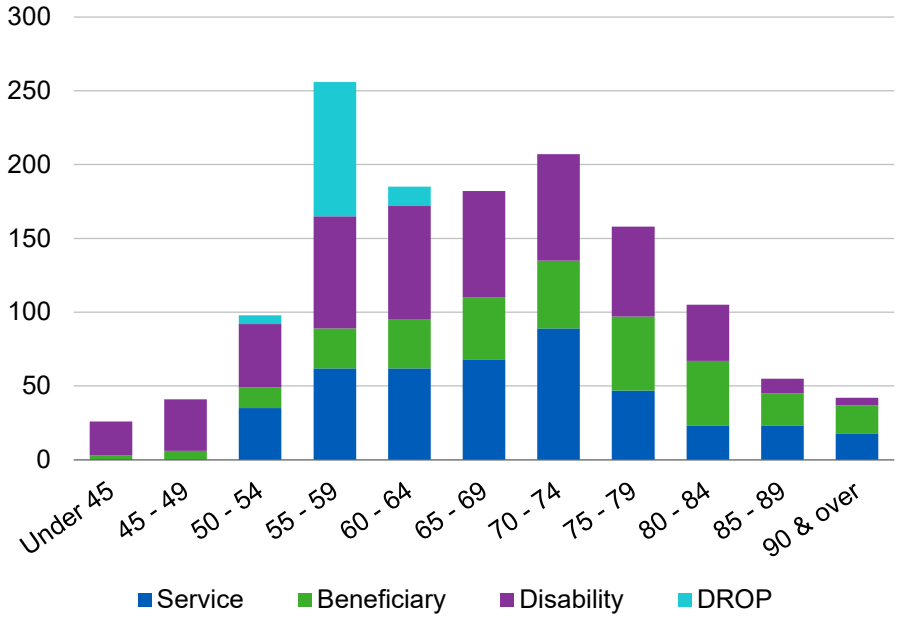
Demographic Data	As of June 30, 2025	As of June 30, 2024	Change
Retired members	939	919	2.2%
Beneficiaries	306	304	0.7%
Average age	68.3	68.0	0.3
Average monthly amount	$4,907	$4,750	3.3%
Total monthly amount	$6,109,199	$5,809,165	5.2%

Distribution of Retired Members and Beneficiaries as of June 30, 2025

By Type and Monthly Amount



By Type and Age



Historical plan population

The chart below demonstrates the progression of the active population over the last ten years. The chart also shows the growth among the retired population over the same time period.

Member Data Statistics

Active DROP and Non-DROP Members versus Retired Members and Beneficiaries (Pay Status)

As of June 30	Non-DROP Active Count	Non-DROP Active Average Age	Non-DROP Active Average Service	DROP Active Count	DROP Active Average Age	DROP Active Average Service	Pay Status Count	Pay Status Average Age	Pay Status Monthly Amount
2016	947	40.6	11.9	107	56.5	23.4	1,011	67.0	$3,580
2017	990	40.3	11.8	96	57.0	22.9	1,046	67.2	3,750
2018	1,043	40.0	11.6	90	57.4	22.8	1,066	67.0	3,827
2019	1,033	40.4	12.0	90	57.3	22.9	1,085	67.4	3,922
2020	999	40.8	12.5	96	57.3	23.3	1,107	67.7	4,018
2021	987	41.0	12.7	95	57.5	22.8	1,126	68.0	4,185
2022	1,045	40.2	12.1	89	57.6	23.1	1,154	68.0	4,352
2023	1,111	39.3	11.4	92	58.0	23.0	1,188	68.1	4,545
2024	1,148	39.0	11.2	77	57.9	23.8	1,223	68.0	4,750
2025	1,108	38.8	11.0	110	57.5	24.7	1,245	68.3	4,907

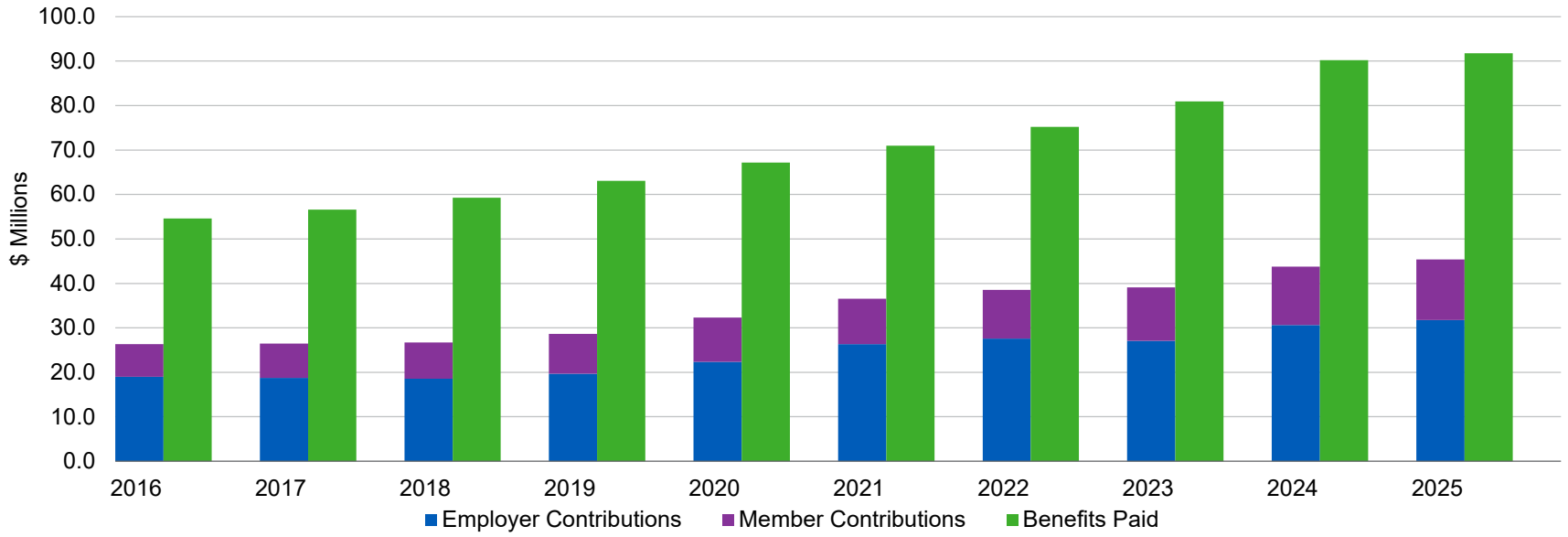
B. Financial information

Retirement plan funding anticipates that, over the long term, both contributions and investment earnings (less investment fees) will be needed to cover benefit payments and administrative expenses. Retirement plan assets change as a result of the net impact of these income and expense components.

Additional financial information, including a summary of transactions for the valuation year, is presented in *Section 3, Exhibits D, E, F and G.*

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

Comparison of Contributions Made with Benefits for Years Ended June 30



Section 2: Actuarial Valuation Results

Determination of Actuarial Value and Valuation Value of Assets for Year Ended June 30, 2025

	Step	Actual Return	Expected Return	Investment Gain/(Loss)[1]	Percent Deferred	Amount
1.	Market value of assets					$2,395,605,595
2.	**Calculation of unrecognized return**					
	a. Year ended June 30, 2021	$491,744,237	$113,187,400	$378,556,837	0%	$0
	b. Year ended June 30, 2022	(160,517,285)	144,968,761	(305,486,046)	20%	(61,097,209)
	c. Year ended June 30, 2023	198,976,002	126,155,410	72,820,592	40%	29,128,237
	d. Year ended June 30, 2024	206,468,116	136,442,461	70,025,655	60%	42,015,393
	e. Year ended June 30, 2025	241,420,183	147,067,523	94,352,660	80%	75,482,128
	f. Total deferred return[2]					$85,528,549
3.	**Actuarial value of assets: 1 − 2f**					**$2,310,077,046**
4.	Ratio of actuarial to market value: **3 ÷ 1**					96.4%
5.	**Non-valuation reserves**					
	a. DROP reserve					$160,658,000
	b. PRSB reserve					1,616,000
	c. City surplus (deficit) reserve[3]					(3,158,000)
	d. Total: Sum of 5a, 5b, and 5c					$159,116,000
6.	**Valuation value of assets: 3 – 5d**					**$2,150,961,046**

[1] Administrative expenses are treated as benefit payments and are excluded from the calculation of actual versus expected income.

[2] The total deferred return as of June 30, 2025 is recognized in each of the next four years as follows:

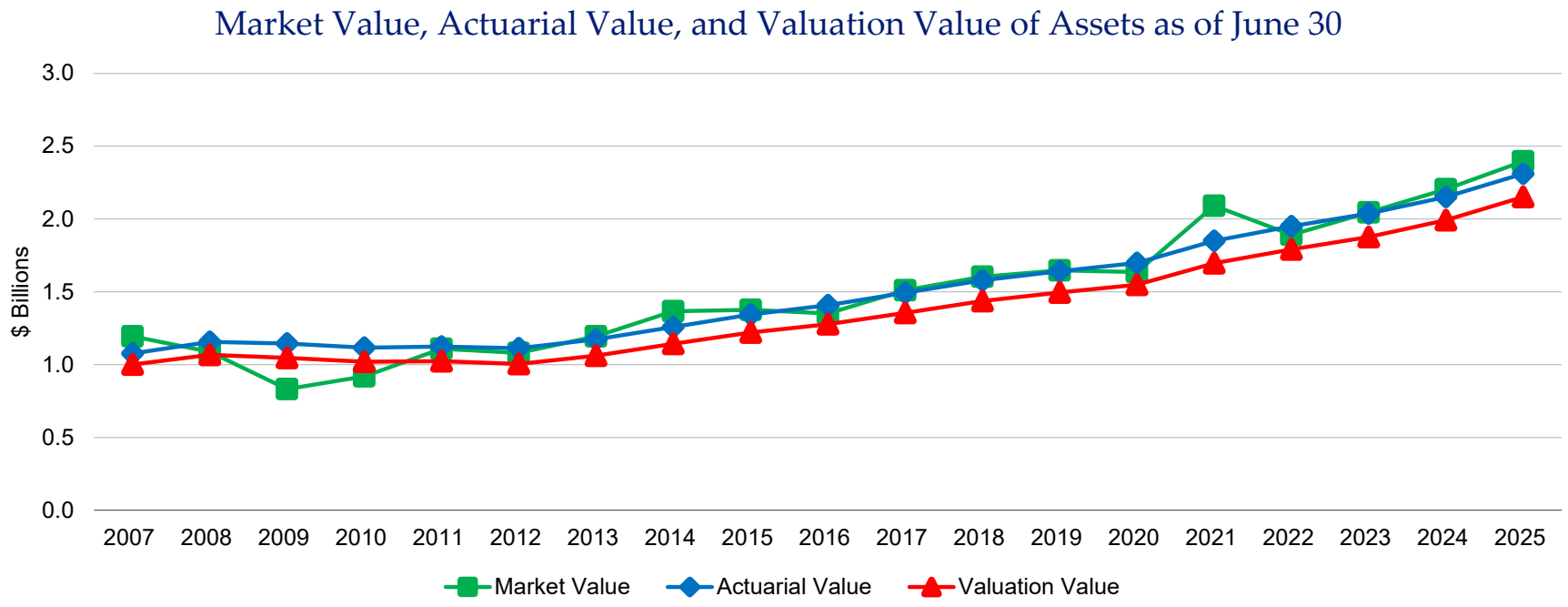
a. Amount recognized on June 30, 2026	$(13,657,427)
b. Amount recognized on June 30, 2027	47,439,781
c. Amount recognized on June 30, 2028	32,875,663
d. Amount recognized on June 30, 2029	18,870,532
e. Total unrecognized return as of June 30, 2025	$85,528,549

[3] The City Surplus (Deficit) Reserve includes the City's prior excess (shortfall) contributions due to the difference between the actual and the estimated contributions for 2024–2025. A positive balance, or surplus, is treated as a System liability, and a negative balance, or deficit, is treated as a System asset. In addition, the reserve balance as of June 30, 2025 reflects the 2024–2025 contribution shortfall arising from the City's continued application of the fiscal year 2023–2024 contribution rates that were lower than those recommended in the June 30, 2023 valuation and adopted by the Board for fiscal year 2024–2025. This difference is taken into account in developing the contribution rate requirement for 2026–2027. See Steps (4) and (12) in Table 4 of *Section 3, Exhibit H* for these calculations.

Asset history

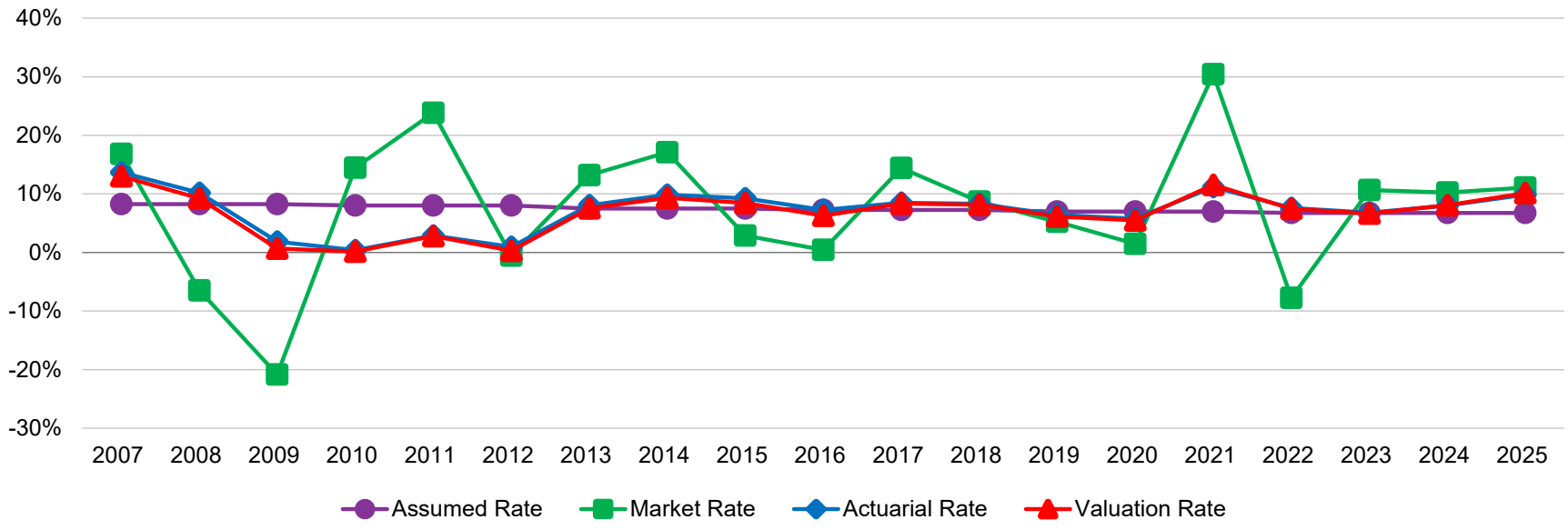
The market value, actuarial value and valuation value of assets are representations of the Plan's financial status. As investment gains and losses are gradually taken into account, the actuarial value of assets tracks the market value of assets. The valuation value of assets is generally the actuarial value, excluding any non-valuation reserves.

The valuation value of assets is significant because the Plan's liabilities are compared to these assets to determine what portion, if any, remains unfunded. Amortization of the unfunded actuarial accrued liability is an important element in determining the contribution requirement.



Historical investment returns

Market, Actuarial and Valuation Rates of Return for Years Ended June 30



Legend	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Market rate	16.81%	(6.48%)	(20.81%)	14.45%	23.84%	(0.56%)	13.19%	17.12%	2.90%	0.45%	14.41%	8.66%	5.23%	1.49%	30.41%	(7.75%)	10.65%	10.21%	11.08%
Actuarial rate	13.66%	10.19%	1.84%	0.41%	2.89%	0.97%	8.07%	9.88%	9.24%	7.26%	8.47%	8.30%	6.41%	5.78%	11.18%	7.62%	6.79%	8.03%	9.84%
Valuation rate	13.03%	9.24%	0.70%	0.16%	2.80%	0.31%	7.57%	9.35%	8.45%	6.26%	8.36%	8.17%	6.13%	5.50%	11.55%	7.44%	6.67%	8.06%	10.13%
Assumed rate	8.25%	8.25%	8.25%	8.00%	8.00%	8.00%	7.50%	7.50%	7.50%	7.25%	7.25%	7.25%	7.00%	7.00%	7.00%	6.75%	6.75%	6.75%	6.75%

Average Rates of Return	Market Value	Actuarial Value	Valuation Value
Most recent five-year geometric average return	10.26%	8.68%	8.75%
Most recent 10-year geometric average return	8.07%	7.96%	7.81%
Most recent 15-year geometric average return	9.02%	7.35%	7.08%

C. Actuarial experience

To calculate any actuarially determined contribution, assumptions are made about future events that affect the amount and timing of benefits to be paid and assets to be accumulated. Each year actual experience is measured against the assumptions. If overall experience is more favorable than anticipated (an actuarial gain), the actuarially determined contribution will decrease from the previous year. On the other hand, the actuarially determined contribution will increase if overall actuarial experience is less favorable than expected (an actuarial loss).

Taking account of experience gains or losses in one year without making a change in assumptions reflects the belief that the single year's experience was a short-term development and that, over the long term, experience will return to the original assumptions. For contribution requirements to remain stable, assumptions should approximate experience.

If assumptions are changed, the contribution requirement is adjusted to take into account a change in experience anticipated for all future years. Changes in actuarial assumptions reflected in this valuation are detailed in *Section 4, Exhibit 1*.

The actuarial experience for the year can be found below and a discussion of the major components can be found on the following pages.

Actuarial Experience for Year Ended June 30, 2025

	Source	Amount
1.	Net (gain) from investments[1]	$(66,710,000)
2.	Net loss from contributions	$5,616,000
3.	Net (gain) from other experience[2]	(13,695,000)
4.	**Net experience (gain)**	**$(74,789,000)**

[1] Details on next page.
[2] See *Subsection E* for further details. Does not include the effect of plan, method or assumption changes, if any.

Investment experience

A major component of projected asset growth is the assumed rate of return. The assumed return should represent the expected long-term rate of return, based on the Plan's investment policy.

For valuation purposes, the assumed rate of return on the valuation value of assets is 6.75% based on the June 30, 2024 valuation. The actual rate of return on a valuation basis for the 2024–2025 plan year was 10.13% after recognizing a portion of this year's investment gain and a portion of prior years' investment gains and losses. Since the actual return for the year was more than the assumed return, the Plan experienced an actuarial gain during the year ended June 30, 2025 with regard to its investments.

Investment Experience for Year Ended June 30, 2025

	Line Description	Market Value	Actuarial Value	Valuation Value
1.	Net investment income	$241,420,183	$209,121,462	$199,762,704
2.	Average value of assets	$2,178,778,114	$2,125,548,286	$1,971,157,665
3.	Rate of return: **1 ÷ 2**	11.08%	9.84%	10.13%[1]
4.	Assumed rate of return	6.75%	6.75%	6.75%
5.	Expected investment income: **2 × 4**	$147,067,523	$143,474,509	$133,053,142
6.	**Investment gain/(loss): 1 − 5**	**$94,352,660**	**$65,646,953**	**$66,709,562**

[1] The rate of return on the Valuation Value is "backed" into by using the change in the beginning of the year Valuation Value of Assets, contributions, benefit payments, and the end of year Valuation Value of Assets. The rate of return is therefore sometimes different between what we calculated for the Employees and Fire and Police Systems.

Contributions

Contributions for the year ended June 30, 2025 totaled $44.1 million, compared to the projected amount of $49.6 million. This resulted in a loss of $5.6 million for the year, when adjusted for timing.[1]

Other experience

There are other differences between the expected and the actual experience that appear when the new valuation is compared with the projections from the previous valuation. These include:

- Mortality experience (more or fewer than expected deaths)
- The extent of turnover among members
- Retirement experience (earlier or later than projected)
- The number of disability retirements (more or fewer than projected)
- Salary increases (greater or smaller than projected)
- DROP experience different than assumed
- Cost-of-living adjustments (COLAs) higher or lower than anticipated

The net gain from this other experience for the year ended June 30, 2025 amounted to $13.7 million, which is 0.7% of the actuarial accrued liability. The net gain was mainly due to individual salary increases less than expected for active members.[2] See *Section 2, Subsection E* for a detailed development of the unfunded actuarial accrued liability.

[1] The contribution loss shown is primarily due to the recommended employer contribution rates for fiscal year 2024–2025, as determined in the June 30, 2023 actuarial valuation, not being implemented by the City ($3.2 million), and to differences between the actual fiscal year 2024–2025 payroll and the payroll projected in the June 30, 2024 actuarial valuation used to develop the expected employer and member contributions ($2.4 million).

[2] The individual salary increases during fiscal year 2024-2025 of about 7.1% (on average) were actually higher than those expected by the actuarial assumptions (5.6%, on average). However, some of those higher-than-expected increases were implicitly offset by the over-reporting of salaries during fiscal year 2023-2024 for the June 30, 2024 valuations as those salaries included 27 instead of 26 pay periods.

D. Other changes impacting the actuarial accrued liability

The Actuarial Accrued Liability as of June 30, 2025 is $1.85 billion, an increase of $117.8 million, or 6.8%, from the Actuarial Accrued Liability as of the prior valuation date. The liability is expected to grow each year with Normal Cost and interest, and to decline due to benefit payments made. Additional fluctuations can occur due to actual experience that differs from expected (as discussed in the previous subsection).

Actuarial assumptions

The assumption changes reflected in this report were based on the July 1, 2021 through June 30, 2024 Actuarial Experience Study and June 30, 2025 Economic Actuarial Assumptions Report, both dated June 3, 2025.

- These changes increased the Actuarial Accrued Liability by $45.4 million and increased the employer Normal Cost rate by 1.32% of payroll.
- The assumption changes include changes to the merit and promotion salary increases, retirement from active employment, DROP election rates, length of time in DROP, pre-retirement mortality, healthy life post-retirement mortality, disabled life post-retirement mortality, termination, disability, post-retirement survivor percentages, and benefit election percentages.

Details on actuarial assumptions and methods are in *Section 4, Exhibit 1*.

Plan provisions

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

A summary of plan provisions is in *Section 4, Exhibit 2*.

E. Unfunded actuarial accrued liability

Development of Unfunded Actuarial Accrued Liability for Year Ended June 30, 2025

	Line Description	Amount
1.	Unfunded/(Prefunded) actuarial accrued liability at beginning of year	$(258,354,000)
2.	Normal cost at middle of year	52,744,000
3.	Expected employer and member contributions[1]	(49,553,000)
4.	Expected 2024–2025 PRSB Allocation, excluding draw down of the PRSB reserve and non-valuation assets	1,425,000
5.	Interest to end of year	(17,283,000)
6.	**Expected unfunded actuarial accrued liability at end of year**	**$(271,021,000)**
7.	**Changes due to:**	
a.	Actual contribution experience[2]	$5,616,000
b.	Investment return greater than expected, after asset smoothing	(66,710,000)
c.	Individual salary increases lower than expected[3]	(18,406,000)
d.	COLA increases greater than expected	4,831,000
e.	Other net experience (gain)/loss	(120,000)
f.	Impact of changes in assumptions	45,372,000
g.	**Total changes**	**$(29,417,000)**
8.	**Unfunded/(Prefunded) actuarial accrued liability at end of year: 6 + 7g**	**$(300,438,000)**

Note: The sum of items 7c through 7e equals the "Net (gain)/loss from other experience" shown in *Section 2, Subsection C*.

[1] Expected employer and member contributions reflect amount required to be paid after allocation of actuarial surplus, if any.

[2] The contribution loss shown is primarily due to the recommended employer contribution rates for fiscal year 2024–2025, as determined in the June 30, 2023 actuarial valuation, not being implemented by the City ($3.2 million), and to differences between the actual fiscal year 2024–2025 payroll and the payroll projected in the June 30, 2024 actuarial valuation used to develop the expected employer and member contributions shown in Line 3 ($2.4 million).

[3] The individual salary increases during fiscal year 2024-2025 of about 7.1% (on average) were actually higher than those expected by the actuarial assumptions (5.6%, on average). However, some of those higher-than-expected increases were implicitly offset by the over-reporting of salaries during fiscal year 2023-2024 for the June 30, 2024 valuations as those salaries included 27 instead of 26 pay periods.

F. Recommended contribution

The recommended contribution is equal to the employer Normal Cost payment, plus a payment on the Unfunded Actuarial Accrued Liability or the employer's share of the amortization of Actuarial Surplus, plus an adjustment for any contribution excess/shortfall in the prior year. As of June 30, 2025, the recommended employer contribution is 28.46% of payroll.

The Board sets the funding policy used to calculate the recommended contribution based on layered amortization periods. See *Section 4, Exhibit 1* for further details on the funding policy.

The contribution requirement as of June 30, 2025 for fiscal year 2026–2027 is based on the data previously described, the actuarial assumptions and Plan provisions described in *Section 4*, including all changes affecting future costs adopted at the time of the actuarial valuation, actuarial gains and losses, and changes in the actuarial assumptions.

Recommended Employer Contribution Calculated as of June 30

($ in '000s)

Line Description	2025 Amount	2025 % of Projected Compensation	2024 Amount	2024 % of Projected Compensation
1. Normal cost				
a. Tier 1 normal cost	N/A	N/A	N/A	N/A
b. Tier 2 normal cost	$57,147	34.74%	$54,961	33.41%
c. All categories combined	57,147	34.74%	54,961	33.41%
2. Expected employee contributions, ignoring surplus offset[1]	(13,093)	(7.96%)	(13,637)	(8.29%)
3. Employer normal cost: **1c + 2**	$44,054	26.78%	$41,324	25.12%
4. Surplus offset	(4,255)	(2.59%)	(3,175)	(1.93%)
5. Contribution (excess)/shortfall from prior fiscal years[2]	7,032	4.27%	197	0.12%
6. Total recommended employer contribution: 3 + 4 + 5	**$46,831**	**28.46%**	**$38,346**	**23.31%**
7. Projected 2026–2027 compensation for non-DROP and DROP members	$164,505		$164,505	

Note: Contributions are assumed to be paid at the middle of the year.

[1] The offset for employee contributions is less than the aggregate member rate because it expresses the employee contribution dollar amount as a percent of projected fiscal year 2026–2027 annual payroll for all Tier 2 active members (non-DROP and DROP) of $164,505 instead of annual payroll for only Tier 2 active non-DROP members of $146,613 (dollars in thousands).

[2] The adjustment shown as of June 30, 2025 for determining the required employer contribution rate for fiscal year 2026–2027 reflects the combined effect of the employer contribution shortfall for the 2024–2025 fiscal year and the projected employer contribution shortfall for the 2025–2026 fiscal year. The individual impacts of these contribution shortfalls on the recommended employer contribution rate are illustrated on lines 4a and 4b of the reconciliation of the recommended employer contribution rate from June 30, 2024 to June 30, 2025, as shown on page 35.

Reconciliation of recommended employer contribution rate

Reconciliation from June 30, 2024 to June 30, 2025

($ in '000s)

	Item	Contribution Rate	Estimated Annual Dollar Amount[1]
1.	Recommended employer contribution as of June 30, 2024 (for fiscal year 2025–2026)	23.31%	$38,346
2.	**Changes due to:**		
a.	Reverse effect of difference between the actual and the estimated fiscal year 2023-2024 contributions (payable fiscal year 2025–2026)	0.12%	197
b.	Reverse effect of surplus allocated to the City in the June 30, 2024 valuation for fiscal year 2025–2026	(1.93%)	(3,175)
c.	**Normal Cost Rate as of June 30, 2024**	**25.12%**	**$41,324**
3.	**Actuarial experience during fiscal year 2024–2025 on Normal Cost Rate**		
a.	Changes in membership demographics among all active (DROP and non-DROP) members	0.34%	$559
b.	Effect of assumption changes on Normal Cost Rate	1.32%	2,171
c.	**Normal Cost Rate as of June 30, 2025**	**26.78%**	**$44,054**
4.	**Changes due to:**		
a.	Charge for employer contribution shortfall for fiscal year 2024–2025[2]	2.12%	$3,489
b.	Charge for projected employer contribution shortfall for fiscal year 2025–2026[2]	2.15%	3,543
c.	Credit for surplus allocated to the City in the June 30, 2025 valuation to reduce the employer's rate for fiscal year 2026–2027	(2.59%)	(4,255)
5.	**Recommended employer contribution as of June 30, 2025 (for fiscal year 2026–2027): 3c + 4a + 4b + 4c**	**28.46%**	**$46,831**

[1] Based on projected fiscal year 2026–2027 annual payroll of $164,505 for active non-DROP and DROP members (dollars in thousands).

[2] Total of items 4a and 4b equals 4.27% of pay, or $7,032,000.

Reconciliation of recommended member contribution rate

Reconciliation from June 30, 2024 to June 30, 2025

($ in '000s)

Item	Contribution Rate	Estimated Annual Dollar Amount[1]
1. Recommended member contribution as of June 30, 2024	8.97%	$13,151
2. Changes due to:		
a. Changes in member demographics among non-DROP members	(0.04%)	(58)
3. Recommended member contribution as of June 30, 2025	**8.93%**	**$13,093**

[1] Based on projected fiscal year 2026–2027 annual payroll for active non-DROP members of $146,613 (dollars in thousands).

Breakdown of total normal cost for each type of benefit

As requested by the Retirement System, we have provided a breakdown of the Normal Cost to fund each type of benefit. This breakdown is provided for **Tier 2 members only** because there are no longer any active Tier 1 members.

Breakdown of Tier 2 Normal Cost Rate for Year Ending June 30

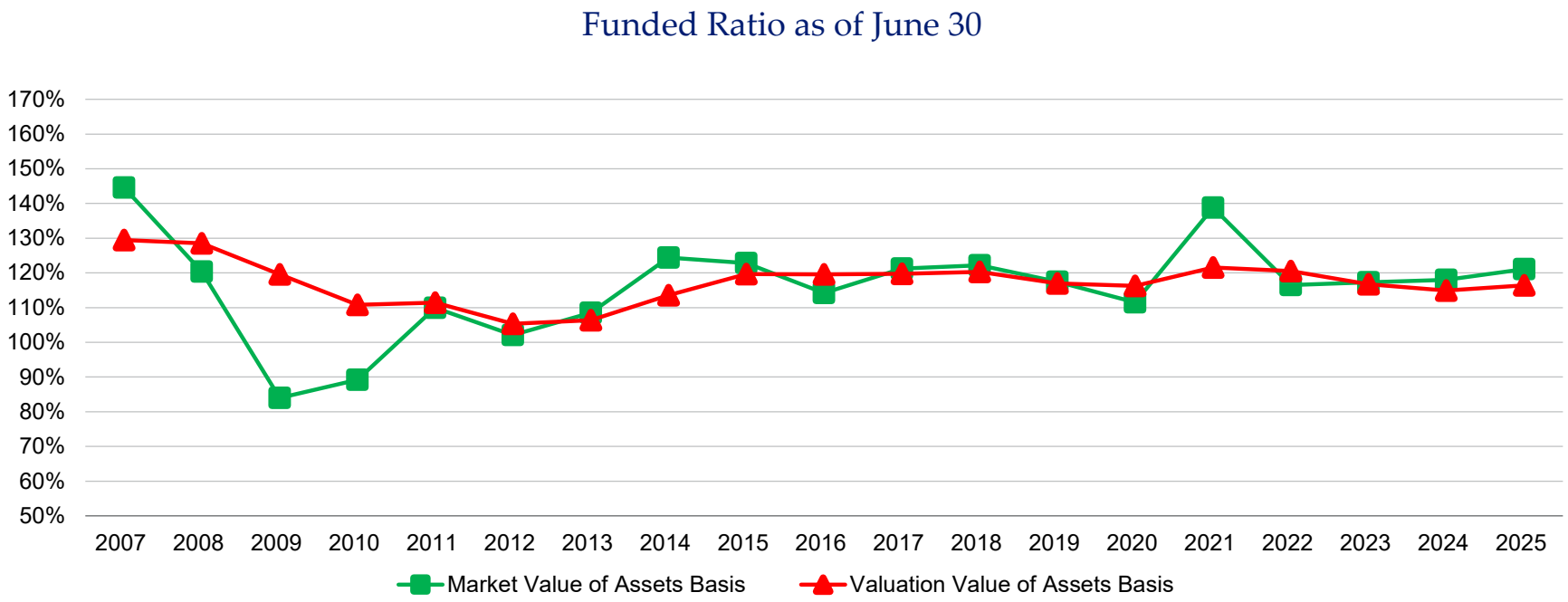
Decrement	2025	2024
Service retirement	20.12%	19.76%
Vested deferred retirement and contribution refunds	2.86%	2.68%
Death-in-service	0.48%	0.60%
Disability	11.28%	10.37%
Total employer plus employee normal cost	**34.74%**	**33.41%**
Less expected employee contributions, ignoring surplus offset[1]	(7.96%)	(8.29%)
Net Employer Normal Cost	**26.78%**	**25.12%**

[1] The offset for employee contributions is less than the aggregate member rate because it expresses the employee contribution dollar amount as a percent of projected fiscal year 2026–2027 annual payroll for all Tier 2 active members (non-DROP and DROP) of $164,505 instead of annual payroll for only Tier 2 active non-DROP members of $146,613 (dollars in thousands).

G. Funded status

A commonly reported piece of information regarding the Plan's financial status is the funded ratio. These ratios compare the market value of assets (excluding non-valuation reserves) and valuation value of assets to the actuarial accrued liability of the Plan. Higher ratios indicate a relatively well-funded plan while lower ratios may indicate recent changes to actuarial assumptions, funding of the plan below actuarial requirements, poor asset performance, or a variety of other causes.

The funded status measures shown in this valuation are appropriate for assessing the need for or amount of future contributions. However, they are not necessarily appropriate for assessing the sufficiency of Plan assets to cover the estimated cost of settling the Plan's benefit obligations. As the chart below shows, the measures are different depending on whether the market or valuation value of assets is used.



Schedule of Funding Progress ($ in '000s)

As of June 30	Valuation Value of Assets (a)	Actuarial Accrued Liability (AAL) (b)	Prefunded AAL (UAAL) (a) − (b)	Funded Ratio (a) ÷ (b)	Projected Compensation (c)	Prefunded AAL/(UAAL) as a % of Projected Compensation [(a) − (b)] ÷ (c)
2016	$1,276,604	$1,067,416	$209,188	119.6	$98,818	211.7
2017	1,354,974	1,131,348	223,626	119.8	102,679	217.8
2018	1,436,725	1,194,731	241,994	120.3	110,972	218.1
2019	1,495,023	1,277,749	217,274	117.0	115,073	188.8
2020	1,547,641	1,331,146	216,495	116.3	117,902	183.6
2021	1,695,906	1,395,140	300,766	121.6	120,177	250.3
2022	1,791,487	1,486,611	304,876	120.5	127,826	238.5
2023	1,876,149	1,607,286	268,863	116.7	141,841	189.6
2024	1,991,117	1,732,763	258,354	114.9	157,870	163.6
2025	2,150,961	1,850,523	300,438	116.2	159,715	188.1

H. Actuarial balance sheet

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

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

Actuarial Balance Sheet as of June 30, 2025

($ in '000s)

Line Description	2025	2024
Liabilities		
Present value of benefits already granted, excluding current active DROP	$1,015,285	$970,745
Present value of benefits for current active DROP	196,898	120,293
Present value of benefits to be granted	1,195,708	1,183,206
Total liabilities	**$2,407,891**	**$2,274,244**
Current and Future Assets		
Total valuation value of assets	$2,150,961	$1,991,117
Present value of future member total cost	120,795	115,867
Present value of future employer total cost	436,573	425,614
• Unfunded actuarial accrued liability	(300,438)	(258,354)
Total of current and future assets	**$2,407,891**	**$2,274,244**

I. Risk

Because the actuarial valuation results are dependent on a fixed set of assumptions and data as of a specific date, there is risk that emerging results may differ, perhaps significantly, as actual experience is fluid and will not exactly track current assumptions. This potential divergence may have a significant impact on the future financial condition of the plan.

This section does not contain a detailed analysis of the potential range of future measurements, but does include a concise discussion of some of the primary risks that may affect the Plan's future financial condition. As we discussed with the Retirement System's staff, because the Plan is sufficiently well-funded (funded percentage of 116.2%), adverse experience for a short period of time is less likely to result immediately in an unfunded liability compared with plans whose funded percentage is closer to or below 100%. However, should the Plan's funded percentage fall closer to or below 100%, we will recommend that the Retirement System consider a stand-alone report with a more detailed analysis of the potential range of the impact of risk relative to the Plan's future financial condition. At that time, a more detailed assessment of the risks tailored to specific interests or concerns of the Board would provide the Board with a better understanding of the inherent risks and would further discuss and highlight information and risks particular to the Retirement System such as detailed historical experience and key events, growing plan maturity, heightened contribution sensitivity to asset and liability changes, and projected sensitivity to potential future investment returns through selected scenario or stress test and stochastic modeling.

This section provides descriptions and basic assessments of the primary risks that are likely to have an ongoing influence on the Plan's financial health, as well as a discussion of historical trends and maturity measures:

Risk assessments

- **Asset/Liability Mismatch Risk** (the potential that future plan experience does not affect asset and liability values in the same way, causing them to diverge)

  The most significant asset/liability mismatch risk to the Plan is investment risk, as discussed below. In fact, investment risk has the potential to impact asset/liability mismatch in two ways. The first is evident in annual valuations; when asset values deviate from assumptions they are typically independent from liability changes. The second can be caused when systemic asset deviations from assumptions may signal the need for an assumption change, which causes liability values and contribution rates to move in the opposite direction from any change in the expected experience of asset growth rates.

  Asset/liability mismatch can also be caused by demographic assumption risk such as longevity, which affects liabilities but has no impact on asset levels. This risk is also discussed below.

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

The investment return assumption is a long-term, static assumption for valuation purposes even though in reality market experience can be quite volatile in any given year. That volatility can cause significant changes in the financial condition of the Plan, affecting both funded status and contribution rates. The inherent year-to-year volatility is reduced by smoothing through the valuation value of assets, however investment experience can still have a sizable impact. As discussed in *Section 2, Subsection J, Volatility Ratios*, on page 45, a 1% asset gain or loss (relative to the assumed investment return) translates to about 15.0% of one-year's payroll. Since actuarial gains and losses are amortized over 15 years, there would be a 1.3% of payroll decrease/(increase) in the required contribution for each 1% asset gain/(loss) if the Retirement System has an unfunded actuarial accrued liability.

The year-by-year market value rate of return over the last 10 years has ranged from a low of -7.75% to a high of 30.41%.

- **Longevity Risk** (the risk that mortality experience will be different than expected)

  The actuarial valuation includes current life expectancy assumptions and an expectation of future improvement in life expectancy, which are significant assumptions given the relatively long duration of liabilities for pension plans. Emerging plan experience that does not match these expectations will result in increases or decreases in the actuarially determined contribution over time. This risk can be reduced by using tables appropriate for the Plan (public experience tables) that are weighted by benefit levels, and by using generational mortality projections. The Board has adopted mortality tables based on this methodology.

- **Other Risks**

  In addition to longevity, the valuation includes a variety of other assumptions that are unlikely to match future experience exactly. One example is projected salary scales over time. As salary is central to the determination of benefits paid in retirement, deviations from the projected salary scales could have a material impact on the benefits anticipated for each member. Examples of other demographic assumptions include retirement, termination and disability assumptions, and will likely vary in significance for different groups (for example, disability assumptions are typically more significant for older members).

Some plans also carry significant contribution risk, defined as the potential for actual future contributions deviating from expected future contributions. While the City has not yet implemented the contribution rates adopted by the Board for 2024–2025 nor 2025–2026, this is the first time that has happened so besides the immediate concerns for reconciliation we will wait to opine on this risk further pending future information.

Evaluation of historical trends

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

- The funded percentage on the valuation value of assets basis has ranged from a low of 114.9% in 2024 to a high of 121.6% in 2021. For a more detailed history see *Section 2, Subsection G, Funded status* starting on page 38.

- The average geometric investment return on the valuation value of assets over the last 10 years was 7.81%. This includes a high of 11.55% and a low of 5.50%. The average over the last five years is 8.75%. For more details see the *Section 2, Subsection B, Historical investment returns* on page 27.

Maturity measures

In the last 10 years the ratio of members in pay status to active participants has maintained at about 1.00, ranging from a low of 0.94 in 2018 to a high of 1.04 in 2021. This indicates that plan maturity has been relatively stable over the past ten years, and is due to an increase in the number of active members over the same period. Generally speaking, we would expect a retirement plan to become more mature over time as the number of members in pay-status increase relative to the number of active members. For more details see *Section 2, Subsection A, Member information* on page 19.

As pension plans mature, the cash needed to fulfill benefit obligations will increase over time. Therefore, cash flow projections and analysis should be performed to assure that the Plan's asset allocation is aligned to meet emerging pension liabilities. Over the past year, benefits paid were $46 million more than contributions received. Plans with high levels of negative cash flows may have a need for a larger allocation to income generating assets, which can create a drag on investment return. For more details on historical cash flows see *Section 2, Subsection B, Financial information* on page 24.

A further discussion of plan maturity measures and how they relate to changes in assets and liabilities is included in *Section 2, Subsection J, Volatility ratios* on page 45.

Low-Default-Risk Obligation Measure (LDROM)

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

The LDROM is a calculation assuming a plan's assets are invested in an all-bond portfolio, generally lowering expected long-term investment returns. The discount rate selected and used for this purpose is the Bond Buyer General Obligation 20-year Municipal Bond Index Rate, published at the end of each week. The last published rate in June of the measurement period, by The Bond Buyer, is 5.20% for use effective June 30, 2025. This is the rate used to determine the discount rate for valuing reported public pension plan liabilities in accordance with Governmental Accounting Standards when plan assets are projected to be insufficient to

make projected benefit payments, and the 20-year period reasonably approximates the duration of plan liabilities. The LDROM is not used to determine a plan's funded status or actuarially determined contribution rates. The plan's expected return on assets, currently 6.75%, is used for these calculations.

As of June 30, 2025, the LDROM for the Plan is $2.28 billion.[1] The difference between the Plan's AAL of $1.85 billion and the LDROM can be thought of as the increase in the AAL if the entire portfolio were invested in low-default-risk securities. Alternatively, this difference could also be viewed as representing the expected savings from investing in the Plan's diversified portfolio compared to investing only in low-default-risk securities.

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

[1] The LDROM is an approximation of the liability on a low-default-risk basis, and the approximation has been refined this year to more closely align with the Plan's actuarial cost method. For comparison purposes, as of June 30, 2024, the LDROM was $2.57 billion based on a discount rate of 3.93% (previously disclosed as $2.82 billion prior to this refinement), while the Plan's actuarial accrued liability was $1.74 billion.

J. Volatility ratios

Retirement plans are subject to volatility in the level of required contributions. This volatility tends to increase as retirement plans become more mature.

The Asset Volatility Ratio (AVR), which is equal to the market value of assets divided by total projected compensation, provides an indication of the potential contribution volatility for any given level of investment volatility. A higher AVR indicates that the plan is subject to a greater level of contribution volatility. This is a current measurement since it is based on the current level of assets.

The current AVR[1] is about 15.0. This means that a 1% asset gain or loss (relative to the assumed investment return) translates to about 15.0% of one-year's payroll. Since actuarial gains and losses are amortized over 15 years, there would be a 1.3% of payroll decrease/(increase) in the required contribution for each 1% asset gain/(loss) if the Retirement System has an unfunded actuarial accrued liability.

The Liability Volatility Ratio (LVR), which is equal to the actuarial accrued liability divided by total projected compensation, provides an indication of the longer-term potential for contribution volatility for any given level of investment volatility. This is because, over an extended period of time, the plan's assets should track the plan's liabilities. For example, if a plan is 50% funded on a market value basis, the liability volatility ratio would be double the asset volatility ratio and the plan sponsor should expect contribution volatility to increase over time as the plan becomes better funded.

The LVR also indicates how volatile contributions will be in response to changes in the actuarial accrued liability due to actual experience or to changes in actuarial assumptions. The current total Plan LVR is about 11.6. This is about 23% lower than the AVR.

[1] In developing the AVR, we have used the entire Market Value of Assets, including the non-valuation reserves and other adjustments.

Volatility Ratios

Asset Volatility Ratio (AVR) versus Liability Volatility Ratio (LVR)

As of June 30	Asset Volatility Ratio	Liability Volatility Ratio
2016	13.7	10.8
2017	14.7	11.0
2018	14.4	10.8
2019	14.3	11.1
2020	13.9	11.3
2021	17.4	11.6
2022	14.8	11.6
2023	14.4	11.3
2024	14.0	11.0
2025	15.0	11.6

Section 3: Supplemental Information

Exhibit A: Table of plan demographics

Tier 1 — Demographics as of June 30

Demographic Data by Status	2025	2024	Change
Active non-DROP members			
• Number	0	0	N/A
• Average age	N/A	N/A	N/A
• Average years of service	N/A	N/A	N/A
• Total projected compensation	$0	$0	N/A
• Average projected compensation	N/A	N/A	N/A
• Account balances	$0	$0	N/A
• Total active vested members	0	0	N/A
Active DROP members			
• Number	0	0	N/A
• Average age	N/A	N/A	N/A
• Average years of service	N/A	N/A	N/A
• Total projected compensation	$0	$0	N/A
• Average projected compensation	$0	$0	N/A
Inactive members			
• Number[1]	0	0	N/A
• Average age	N/A	N/A	N/A

[1] Includes inactive members due a refund of member contributions.

Section 3: Supplemental Information

Demographic Data by Status	2025	2024	Change
Retired members			
• Number	256	270	(5.2%)
• Average age	75.2	74.3	0.9
• Average monthly benefit[1]	$6,158	$6,021	2.3%
Disabled members			
• Number	278	280	(0.7%)
• Average age	73.2	72.6	0.6
• Average monthly benefit[1]	$6,155	$5,957	3.3%
Beneficiaries			
• Number	245	248	(1.2%)
• Average age	76.5	75.6	0.9
• Average monthly benefit[1]	$3,224	$3,064	5.2%

[1] Excludes supplemental benefits paid from PRSB.

Tier 2 — Demographics as of June 30

Demographic Data by Status	2025	2024	Change
Active non-DROP members			
• Number	1,108	1,148	(3.5%)
• Average age	38.8	39.0	(0.2)
• Average years of service	11.0	11.2	(0.2)
• Total projected compensation	$142,343,483	$145,885,780	(2.4%)
• Average projected compensation	$128,469	$127,078	1.1%
• Account balances	$195,630,829	$204,589,826	(4.4%)
• Total active vested members	723	765	(5.5%)
Active DROP members			
• Number	110	77	42.9%
• Average age	57.5	57.9	(0.4)
• Average years of service	24.7	23.8	0.9
• Total projected compensation	$17,371,242	$11,983,885	45.0%
• Average projected compensation	$157,920	$155,635	1.5%
Inactive members			
• Number[1]	192	185	3.8%
• Average age	40.3	41.0	(0.7)
Retired members			
• Number	171	153	11.8%
• Average age	60.3	59.9	0.4
• Average monthly benefit[2]	$4,867	$4,645	4.8%

[1] Includes inactive members due a refund of member contributions.
[2] Excludes supplemental benefits paid from PRSB.

Section 3: Supplemental Information

Demographic Data by Status	2025	2024	Change
Disabled members			
• Number	234	216	8.3%
• Average age	55.4	54.7	0.7
• Average monthly benefit[1]	$4,578	$4,320	6.0%
Beneficiaries			
• Number	61	56	8.9%
• Average age	56.8	55.0	1.8
• Average monthly benefit[1]	$2,104	$2,000	5.2%

[1] Excludes supplemental benefits paid from PRSB.

Exhibit B: Distribution of active members

Tier 1

Active Counts & Average Projected Compensation by Age and Years of Service as of June 30, 2025

Age	Total	0–4 Years	5–9 Years	10–14 Years	15–19 Years	20–24 Years	25–29 Years	30–34 Years	35–39 Years	40 Years and Over
Under 25	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—
25–29	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—
30–34	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—
35–39	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—
40–44	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—
45–49	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—
50–54	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—
55–59	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—
60–64	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—
65–69	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—
70 and over	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—

Tier 2[1]

Active Counts & Average Projected Compensation by Age and Years of Service as of June 30, 2025

Age	Total	0–4 Years	5–9 Years	10–14 Years	15–19 Years	20–24 Years	25–29 Years	30–34 Years	35–39 Years	40 Years and Over
Under 25	58	58	—	—	—	—	—	—	—	—
	$91,045	$91,045	—	—	—	—	—	—	—	—
25–29	195	168	27	—	—	—	—	—	—	—
	$104,456	$102,487	$116,712	—	—	—	—	—	—	—
30–34	223	101	116	6	—	—	—	—	—	—
	$115,942	$100,916	$127,585	$143,798	—	—	—	—	—	—
35–39	140	37	64	23	16	—	—	—	—	—
	$127,929	$101,924	$131,158	$140,462	$157,128	—	—	—	—	—
40–44	155	6	27	27	64	31	—	—	—	—
	$146,265	$128,838	$137,483	$143,947	$148,189	$155,331	—	—	—	—
45–49	141	3	11	9	45	63	10	—	—	—
	$147,200	$104,088	$134,236	$136,270	$139,183	$153,089	$183,212	—	—	—
50–54	157	4	4	1	29	60	59	—	—	—
	$152,746	$103,212	$142,348	$141,885	$144,584	$150,667	$163,118	—	—	—
55–59	29	6	2	1	10	6	4	—	—	—
	$146,032	$113,013	$124,519	$157,247	$149,308	$163,352	$169,343	—	—	—
60–64	10	2	2	1	2	2	1	—	—	—
	$128,656	$116,706	$119,352	$134,812	$124,767	$149,376	$131,343	—	—	—
65–69	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—
70 and over	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—
Total	**1,108**	**385**	**253**	**68**	**166**	**162**	**74**	**—**	**—**	**—**
	$128,469	**$100,965**	**$128,818**	**$141,770**	**$145,765**	**$152,955**	**$165,741**	**—**	**—**	**—**

[1] Excludes 110 active members in DROP with a projected average compensation of $157,920.

Exhibit C: Reconciliation of member data

Line Description	Non-DROP Active Members	DROP Members	Inactive Members	Retired Members	Disabled Members	Beneficiaries	Total
Number as of June 30, 2024	1,148[1]	77[2]	185	423	496	304	2,633
New members	77	0	0	0	0	16	93
Terminations with vested rights	(37)	0	37	0	0	0	0
Contribution refunds	(19)	0	(14)	0	0	0	(33)
DROP entry	(46)	46	0	0	0	0	0
Retirements	(16)	(13)	(5)	34	0	0	0
New disabilities	0	0	(7)	(17)	24	0	0
Return to work	3	0	(3)	0	0	0	0
Died with or without beneficiary	(2)	0	(1)	(13)	(8)	(14)	(38)
Data adjustments	0	0	0	0	0	0	0
Number as of June 30, 2025	**1,108[2]**	**110[2]**	**192**	**427**	**512**	**306**	**2,655**

[1] There was a total of 1,225 actives (including non-DROP and DROP members) at the beginning of the fiscal year.
[2] There was a total of 1,218 actives (including non-DROP and DROP members) at the end of the fiscal year.

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

Statement of Income and Expenses for Years Ended June 30

Line Description	2025	2024
Contribution income		
• Employer contributions	$31,778,983	$30,635,176
• Member contributions	13,580,439	13,107,833
• Less administrative expenses	(2,774,394)	(2,457,809)
– **Net contribution income**	**$42,585,028**	**$41,285,200**
Investment income		
• Investment, dividends and other income	$18,742,316	$18,343,982
• Asset appreciation	261,612,993	229,711,380
• Less investment fees	(38,935,126)	(41,587,246)
– **Net investment income**	**$241,420,183**	**$206,468,116**
Total income available for benefits	**$284,005,211**	**$247,753,316**
Less benefit payments		
• Benefits paid	$(88,825,126)	$(86,681,263)
• Post retirement supplemental benefits	(2,004,658)	(2,514,579)
• Refund of contributions	(940,648)	(1,023,545)
– **Net benefit payments**	**$(91,770,432)**	**$(90,219,387)**
Change in market value of assets	**$192,234,779**	**$157,533,929**
Net assets at market value at the beginning of the year	**$2,203,370,816**	**$2,045,836,887**
Net assets at market value at the end of the year	**$2,395,605,595**	**$2,203,370,816**

Note: Results may be slightly off due to rounding.

Exhibit E: Summary statement of plan assets

Statement of Plan Assets as of June 30

Line Description	2025	2024
Cash equivalents	**$795,879**	**$745,730**
Accounts receivable		
• Receivables for investments sold	$9,482,083	$5,404,168
• Interest and dividends	2,262,501	2,269,391
• Other receivables	1,189,550	866,235
– **Total accounts receivable**	**$12,934,134**	**$8,539,794**
Investments		
• Domestic and international equity	$1,059,378,187	$967,084,541
• Government and corporate bonds	298,349,862	272,386,444
• Real assets	501,672,606	464,049,233
• Collateral held for securities lent	26,403,774	30,048,536
• Other investments	534,492,919	499,195,083
– **Total investments at market value**	**$2,420,297,348**	**$2,232,763,837**
Other assets	51,107	105,115
Total assets	**$2,434,078,468**	**$2,242,154,476**
Accounts payable		
• Collateral held for securities lent	$(26,403,774)	$(30,048,536)
• Payable for investments and foreign currency purchased	(10,796,349)	(7,720,900)
• Other liabilities	(1,272,750)	(1,014,224)
– **Total accounts payable**	**$(38,472,873)**	**$(38,783,660)**
Net assets at market value	**$2,395,605,595**	**$2,203,370,816**
Net assets at actuarial value	**$2,310,077,046**	**$2,150,140,988**
Net assets at valuation value	**$2,150,961,046**	**$1,991,116,988**

Exhibit F: Summary of reported reserve information

Reserve Information as of June 30, 2025

($ in '000s)

Line Description	Reserves
Used in development of valuation value of assets	
• Employer reserves	$2,006,204
• Active member reserves	230,286
– **Subtotal**	**$2,236,490**
Not used in development of valuation value of assets	
• DROP reserves	160,658
• Reserves for PRSB	1,616
• City surplus (deficit) reserve[1]	(3,158)
– **Subtotal**	**$159,116**
Total market value of assets	**$2,395,606**

Note: Results may be slightly off due to rounding.

[1] The City Surplus (Deficit) Reserve includes the City's prior excess (shortfall) contributions due to the difference between the actual and the estimated contributions for 2024–2025. A positive balance, or surplus, is treated as a System liability, and a negative balance, or deficit, is treated as a System asset. In addition, the reserve balance as of June 30, 2025 reflects the 2024–2025 contribution shortfall arising from the City's continued application of the fiscal year 2023–2024 contribution rates that were lower than those recommended in the June 30, 2023 valuation and adopted by the Board for fiscal year 2024–2025. This difference is taken into account in developing the contribution rate requirement for 2026–2027. See Steps (4) and (12) in Table 4 of *Section 3, Exhibit H* for these calculations.

Exhibit G: Development of the Plan through June 30, 2025

Year Ended June 30	Employer Contributions	Member Contributions	Administrative Expenses	Net Investment Return[1]	Benefit Payments	Market Value of Assets at Year-End	Actuarial Value of Assets at Year-End	Actuarial Value as a Percent of Market Value
2016	$18,737,948	$7,747,808	$1,397,068	$6,063,102	$56,580,813	$1,351,288,640	$1,409,007,554	104.3%
2017	18,543,308	8,169,019	1,500,145	192,314,904	59,272,938	1,509,542,788	1,492,903,827	98.9%
2018	19,696,957	8,963,672	1,709,614	129,162,789	63,070,998	1,602,585,594	1,579,267,409	98.5%
2019	20,604,377	9,597,068	1,897,247	82,871,945	65,962,135	1,647,799,602	1,641,711,241	99.6%
2020	22,324,019	10,011,831	1,839,271	24,205,522	67,201,890	1,635,299,813	1,698,826,320	103.9%
2021	26,314,815	10,256,470	2,282,297	491,744,237	70,962,915	2,090,370,123	1,850,012,219	88.5%
2022	27,555,587	10,973,174	2,126,286	(160,517,285)	75,178,117	1,891,077,196	1,950,664,319	103.2%
2023	27,067,935	12,053,687	2,401,043	198,976,002	80,936,890	2,045,836,887	2,037,420,460	99.6%
2024	30,635,176	13,107,833	2,457,809	206,468,116	90,219,387	2,203,370,816	2,150,140,988	97.6%
2025	31,778,983	13,580,439	2,774,394	241,420,183	91,770,432	2,395,605,595	2,310,077,046	96.4%

[1] On a market value basis, net of investment fees.

Exhibit H: Allocation of actuarial surplus

Overview

Line Description	June 30, 2025	June 30, 2024
Surplus as of Date of Valuation (Table 1)	$300,438,046	$258,353,988
Actuarial Surplus (Table 1)	$115,385,746	$85,077,688
Distributable Actuarial Surplus as of date of valuation (Table 2)	$6,382,059	$4,705,701
Allocation of Distributable Surplus as of Date of Valuation:		
City Contribution Offset (Table 3)	$4,254,706	$3,137,134
PRSB Allocation (Table 3)	$2,127,353	$1,568,567
Total	**$6,382,059**	**$4,705,701**

The Allocation of Distributable Actuarial Surplus is sufficient to:

- Only partially offset the City's contribution requirement for fiscal year 2026–2027 from $44,054,551 to $39,799,845 (see Table 4);
- Provide a PRSB benefit of $136.35 per month over the 2026 calendar year (see Table 5) under the current policy of 80% distribution.

Table 1: Calculation of Actuarial Surplus

Line Description	June 30, 2025	June 30, 2024
1. Valuation Value of Assets	$2,150,961,046	$1,991,116,988
2. Actuarial Accrued Liability	$1,850,523,000	$1,732,763,000
3. Surplus: **1 − 2**, not less than zero	$300,438,046	$258,353,988
4. Contingency Reserve: 10% of **2**, not more than **3**	$185,052,300	$173,276,300
5. Actuarial Surplus: 3 − 4	**$115,385,746**	**$85,077,688**

Table 2: Determination of Distributable Actuarial Surplus

	Line Description	June 30, 2025	June 30, 2024
1.	Actuarial Surplus (Table 1)	$115,385,746	$85,077,688
2.	Amortization of Balance of Actuarial Surplus:		
	a. Amortization Period	30	30
	b. Amortization Factor	0.055311	0.055311
3.	**c) Amortization of Balance of Actuarial Surplus: 1 × 2b**	**$6,382,059**	**$4,705,701**

Table 3: Allocation of Distributable Actuarial Surplus

	Line Description	June 30, 2025	June 30, 2024
1.	Distributable Actuarial Surplus	$6,382,059	$4,705,701
2.	City Allocation: **1 × 2/3**	$4,254,706	$3,137,134
3.	**PRSB Allocation: 1 − 2**	**$2,127,353**	**$1,568,567**

The City Allocation (2) (along with any City Surplus (Deficit) Reserve and City Prepaid Contribution Accounts) is available to reduce the City's contributions for the fiscal year that commences one year following the date of the valuation.

The PRSB Allocations (along with the PRSB Reserve Account) is available to provide retirees, beneficiaries and DROP participants a monthly PRSB benefit during the calendar year that commences 6 months following the date of the valuation. The benefit is derived in Table 5.

Section 3: Supplemental Information

Table 4: City Contribution Requirements

	Line Description	2026–2027 Tier 1	2026–2027 Tier 2	2026–2027 Total	2025–2026 Tier 1	2025–2026 Tier 2	2025–2026 Total
1.	City normal cost rate	0.00%	26.78%	26.78%	0.00%	25.12%	25.12%
2.	Projected annual payroll	$0	$164,505,420	$164,505,420	$0	$159,714,000	$159,714,000
3.	City allocation of fiscal year distributable actuarial surplus	0	4,254,706	4,254,706	0	3,137,134	3,137,134
4.	City surplus (deficit) reserve account (from prior years)	0	0	0	0	(3,158,000)	(3,158,000)
5.	½ Year Interest on **4**	0	0	0	0	(106,583)	(106,583)
6.	Total Contribution Offsets Available: **3 + 4 + 5**	0	4,254,706	4,254,706	0	(127,449)	(127,449)
7.	Total Contribution Required **1 × 2**	0	44,054,551	44,054,551	0	40,120,157	40,120,157
8.	City contribution requirement prior to application of prepaid employer contribution account: **7 − 6, not less than zero**	0	39,799,845	39,799,845	0	40,247,606	40,247,606
9.	Contribution rate adopted by the city for FY 2025–2026						21.08%
10.	Projected city contributions based on rate adopted by the city: **9 × 2**				0	33,667,711	33,667,711
11.	Net additional city contribution before application of prepaid employer contribution account: **8 − 10**	0	39,799,845	39,799,845	0	6,579,895	6,579,895
12.	City's prepaid employer Contribution Account Balance (Negative Account Balance Represents Contribution Shortfall)[1]	0	(6,801,966)	(6,801,966)			0
13.	½ Year Interest on **12**	0	(229,566)	(229,566)			0
14.	City's fiscal year contribution after application of prepaid employer contribution account: **11 − 12 − 13, not less than zero**	0	46,831,378	46,831,378	0	6,579,895	6,579,895
15.	Projected residual prepaid employer contribution account at year end (negative account balance represents contribution shortfall): **12 + 13 − 11, adjusted with ½ year interest**				0	(6,801,966)	(6,801,966)

[1] Contribution excess based on the projection of the prepaid contribution account balance.

Table 5: Calculations for PRSB and PRSB Reserve Account

	Line Description	June 30, 2025	June 30, 2024
1.	PRSB allocation of distributable actuarial surplus	$2,127,353	$1,568,567
2.	Distribution percentage	80%	80%
3.	Preliminary PRSB distribution: **1 × 2**	$1,701,882	$1,254,854
4.	Number of eligible participants (Retirees, Beneficiaries & DROP Participants)	1,355	1,300
5.	Preliminary monthly PRSB benefit: **One-twelfth of 3 ÷ 4**	$104.67	$80.44
6.	Monthly retiree medical trust premium for the calendar year that commences 6 months following the date of valuation	$1,500.00	$1,500.00
7.	Benefit shortfall: **6 − 5**	$1,395.33	$1,419.56
8.	PRSB reserve account	$1,616,000	$2,159,000
9.	Estimated July 1 to December 31 PRSB payments	$1,100,802	$1,301,586
10.	Net PRSB reserve account 6 months following the date of valuation	$515,198	$857,414
11.	Draw from PRSB reserve account: **Lesser of: One-twelfth of 10 ÷ 4, or 7**	$31.68	$54.96
12.	Final monthly PRSB benefit for next calendar year: **5 + 11**	$136.35	$135.40
13.	**Estimated PRSB reserve account at the end of the next calendar year: 1 + 10 − 12 × 4 × Twelve**	**$425,500**	**$313,741**

Note: The actual, rather than the projected 2026 surplus, will be used to determine the 2027 calendar year PRSB benefit.

Exhibit I: Table of amortization bases

Type	Date Established	Initial Amount	Initial Period	Outstanding Balance	Years Remaining	Annual Payment
UAAL	June 30, 2025	N/A	N/A	N/A	N/A	N/A
Total				**N/A**		**N/A**

Section 4: Actuarial Valuation Basis

Exhibit 1: Actuarial assumptions, methods and models

Rationale for assumptions

The information and analysis used in selecting each assumption that has a significant effect on this actuarial valuation is shown in the July 1, 2021 through June 30, 2024 Actuarial Experience Study and June 30, 2025 Economic Actuarial Assumptions Report, both dated June 3, 2025. Unless otherwise noted, all actuarial assumptions and methods shown below apply to all tiers. These assumptions were adopted by the Board.

Net investment return

6.75%; net of administrative and investment expenses.

Based on the Actuarial Experience Study reference above, expected administrative and investment expenses represent about 0.30% of the Actuarial Value of Assets.

Employee contribution crediting rate

6.75%, compounded semi-annually.

Inflation

Increase of 2.50% per year.

Cost of Living Adjustments (COLA)

Tier 1 retiree COLA increases due to changes in average compensation or new salaries adopted are equal to total wage growth of 3.00% per year (composed of 2.50% CPI plus 0.50% across-the-board salary increase), limited to maximum of 5.00% per year.

Tier 2 retiree COLA increases of 2.50% due to CPI.

Payroll growth

Inflation of 2.50% per year plus real "across the board" salary increases of 0.50% per year, used to amortize the Prefunded/Unfunded Actuarial Accrued Liability as a level percentage of payroll.

Salary increase

The annual rate of compensation increase includes:

- Inflation at 2.50%, plus
- "Across-the-board" salary increase of 0.50% per year, plus
- Merit and promotion increase based on years of service:

Merit and Promotion Increases (%)

Years of Service	Rate
Less than 1	11.00
1 – 2	10.50
2 – 3	5.00
3 – 4	4.00
4 – 5	4.00
5 – 6	4.00
6 – 7	3.00
7 – 8	2.00
8 – 9	2.00
9 – 10	2.00
10 – 11	1.50
11 – 12	1.50
12 – 13	1.50
13 – 14	1.50
14 – 15	1.50

Years of Service	Rate
15 – 16	1.50
16 – 17	1.50
17 – 18	1.50
18 – 19	1.50
19 – 20	1.50
20 and over	1.25

Ongoing Pay Elements

To reflect the cash-out of holiday leave to increase salary on an ongoing basis for Fire employees, we have increased the salary for all active Tier 1 employees and Tier 2 management employees by 3.6% and we have increased the salary for all active Tier 2 non-management employees by 1.8%.

Since the salary data provided by the System already reflects the ongoing cash-out of holiday leave for Police employees, no assumption for Police employees is necessary.

Cash Out Elements

There is an additional 1.00% increase for Tier 1 Fire and Police management employees and an additional 0.25% increase for Tier 1 Fire and Police non-management employees to reflect the average leave time cash-outs for management employees to increase final average salary at retirement.

There is an additional 6.00% increase for all Fire and Police employees to reflect the conversion of sick leave to increase final average salary at retirement.

To reflect the cash-out of additional holiday leave balance to increase final average salary at retirement for non-management Tier 2 Police employees, there is an additional increase equal to the actual hours reported in an employee's holiday balance if that balance is greater than 96 hours and for those with a balance less than 96 hours the additional increase is equal to 1.5%.

Post-retirement mortality rates

The Pub-2016 mortality tables and adjustments as shown below reasonably reflect the mortality experience as of the measurement date. These mortality tables were adjusted to future years using the generational projection to reflect future mortality improvement between the measurement date and those years.

Healthy

Pub-2016 Safety Healthy Retiree Amount-Weighted Above-Median Mortality Table (separate tables for males and females), projected generationally with the two-dimensional mortality improvement scale MP-2021.

Disabled

Pub-2016 Safety Disabled Retiree Amount-Weighted Mortality Table (separate tables for males and females), projected generationally with the two-dimensional mortality improvement scale MP-2021.

Beneficiaries not currently in pay status

Pub-2016 General Healthy Retiree Amount-Weighted Above-Median Mortality Table (separate tables for males and females) with rates increased by 10%, projected generationally with the two-dimensional mortality improvement scale MP-2021.

Beneficiaries in pay status

Pub-2016 Contingent Survivor Amount-Weighted Above-Median Mortality Table (separate tables for males and females) with rates increased by 10%, projected generationally with the two-dimensional mortality improvement scale MP-2021.

Notes

The above listed Safety Healthy Retiree table only provides rates for ages 45 and older. To develop mortality rates for ages 36 through 44, we have smoothed the difference between the rates at age 45 from the Pub-2016 Safety Employee Amount-Weighted Above-Median Mortality Tables and the rates at age 45 from the Pub-2016 Safety Healthy Retiree Amount-Weighted Above-Median Mortality Tables. To develop the mortality rates before age 36, we have used the Pub-2016 Safety Employee Amount-Weighted Above-Median Mortality Tables rates.

This methodology for developing extended annuitant mortality tables is similar to the method used by the IRS to develop the base mortality table for determining minimum funding standards for single-employer defined benefit pension plans under Internal Revenue

Code Section 430. While Section 430 is not applicable to CFRS, we believe this is a reasonable method for developing annuitant mortality rates at earlier ages.

Pre-retirement mortality rates

Pub-2016 Safety Employee Amount-Weighted Mortality Table (separate tables for males and females), projected generationally with the two-dimensional mortality improvement scale MP-2021.

Pre-Retirement Mortality Rates (%) — Before Generational Projection from 2016

Age	Male	Female
20	0.02	0.01
25	0.03	0.01
30	0.04	0.02
35	0.04	0.03
40	0.05	0.04
45	0.07	0.06
50	0.10	0.09
55	0.16	0.13
60	0.27	0.20
65	0.45	0.32
70	0.84	0.50

All pre-retirement deaths are assumed to be duty.

Optional benefits

Healthy

Pub-2016 Safety Healthy Retiree Amount-Weighted Above-Median Mortality Table (separate tables for males and females), projected generationally with the two-dimensional mortality improvement scale MP-2021, weighted 90% male and 10% female.

Disabled

Pub-2016 Safety Disabled Retiree Amount-Weighted Mortality Table (separate tables for males and females), projected generationally with the two-dimensional mortality improvement scale MP-2021, weighted 90% male and 10% female.

Beneficiaries

Pub-2016 General Healthy Retiree Amount-Weighted Above-Median Mortality Table (separate tables for males and females) with rates increased by 10%, projected generationally with the two-dimensional mortality improvement scale MP-2021, weighted 10% male and 90% female.

Disability

Disability Incidence Rates (%)

Age	Tier 2 Duty	Tier 2 Ordinary
20	0.06	0.00
25	0.10	0.01
30	0.34	0.01
35	0.68	0.03
40	0.98	0.14
45	1.34	0.23
50	1.68	0.16
55	4.62	0.00
60	12.50	0.00
65	0.00	0.00

Termination

Termination Rates (%) — Less Than Five Years of Service

Years of Service	Tier 2
Less than 1	10.00
1–2	6.00
2–3	4.00
3–4	3.00
4–5	2.00

100% of members are assumed to elect a withdrawal of contributions.

No termination is assumed after a member is assumed to retire.

Termination Rates (%) — Five or More Years of Service

Age	Tier 2
20	2.00
25	2.00
30	2.00
35	2.00
40	1.50
45	1.50
50+	Not Calculated

25% of Tier 2 members with 5+ years of service are assumed to elect a withdrawal of contributions. The remaining members are assumed to elect a deferred vested benefit. No termination is assumed after a member is assumed to retire.

Retirement rates

Retirement Rates (%)

Age	Tier 2
50	4.00
51	4.00
52	4.00
53	4.00
54	4.00
55	4.00
56	4.00
57	4.00
58	4.00
59	4.00
60	30.00
61	30.00
62	30.00
63	50.00
64	50.00
65 and over	100.00

Retirement rates only apply to members that are eligible to retire at the age shown.

Drop Assumptions

DROP Member Assumed Retirement Rates (%) by Years of Service— Tier 2

Age	5–14	15–19	20 or More
50	0.00	1.00	5.00
51	0.00	1.00	5.00
52	0.00	1.00	5.00
53	0.00	1.00	5.00
54	0.00	15.00	30.00
55	0.00	35.00	70.00
56	0.00	20.00	30.00
57	0.00	20.00	20.00
58	0.00	20.00	20.00
59	0.00	20.00	20.00
60	0.00	20.00	20.00
61	0.00	20.00	20.00
62	0.00	20.00	20.00
63 and over	0.00	0.00	0.00

Members are assumed to remain in DROP for 6 years

Retirement age and benefit for inactive vested members

For current and future inactive vested members without reciprocity, retirement age assumptions are as follows:

Tier 1: N/A

Tier 2: 53

It is assumed that 45% of future inactive vested members will continue to work for a reciprocal employer. For those that continue to work for a reciprocal employer, a 4.25% compensation increase per annum is assumed.

Future benefit accruals

1.0 year of service per year of employment.

Unknown data for members

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

Inclusion of inactive vested members

All inactive vested members are included in the valuation.

Percent with survivor

80% of male members and 75% of female members.

Age and gender of spouse

For all active and inactive members, male members are assumed to have a female spouse who is 3 years younger than the member and female members are assumed to have a male spouse who is 2 years older than the member.

Election of optional forms of benefit at retirement

Rate (%)

Benefit	Male Members with Survivor	Female Members with Survivor	Members without Survivor
Unmodified	30%	50%	100%
Option 2 (A/B)	55%	25%	–
Option 3 (A/B)	15%	25%	–

Actuarial cost method

Entry Age Actuarial Cost Method. Entry Age is the age on the valuation date minus years of service. Normal Cost and Actuarial Accrued Liability are calculated on an individual basis and are based on costs allocated as a level percentage of compensation, as if the current benefit formula for each individual has always been in effect (i.e., “replacement life within a tier”).

Actuarial value of assets

Market value of assets (MVA) less unrecognized returns in each of the last four annual accounting periods. Unrecognized returns are equal to the difference between the actual market return and the expected return on the market value, and are recognized annually over a five-year period.

Valuation value of assets

The actuarial value of assets reduced by the value of the non-valuation reserves.

Amortization policy

If the Valuation Value of Assets (VVA) is greater than 110% of the Actuarial Accrued Liability (AAL), the difference (“actuarial surplus”) is amortized over a 30-year rolling amortization period.

If the VVA is less than the AAL, any new Unfunded Actuarial Accrued Liability (UAAL) resulting from plan amendments are amortized over separate decreasing 15-year periods; early retirement incentive programs (ERIPs) are amortized over separate decreasing 5-year periods; assumption and method changes are amortized over separate decreasing 25-year periods; and experience gains/losses are also amortized over separate decreasing 15-year periods.

The amortization periods include annual crediting of interest at the assumed investment earning rate. The payments (credits) are calculated to remain as a level percentage of future active member payroll (including payroll for new members as they enter the Retirement System) assuming a constant number of active members. In order to remain as a level percentage of payroll, amortization payments (credits) are scheduled to increase at the annual rate of 3.00% (i.e., 2.50% inflation plus 0.50% across-the-board salary increase).

Employer contributions

City contributions consist of three components:

Normal cost

The annual contribution rate that, if paid annually from a member's first year of membership through the year of retirement, would, together with the member's contributions, accumulate to the amount necessary to fully fund the member's retirement-related benefits. Accumulation includes annual crediting of interest at the assumed investment earning rate. The contribution rate is expressed as a level percentage of the member's compensation.

Adjustment for prepaid contributions / contribution shortfall

The accumulated difference between the City contribution rate adopted for the prior fiscal year (determined using projected annual payroll) and the required City contribution rate for that same fiscal year (determined using actual payroll), arising due to the one-year delay in implementing the City contribution rate.

Contribution to the Unfunded Actuarial Accrued Liability (UAAL) / Allocation of the Actuarial Surplus

In the case of a UAAL, the annual contribution rate that, if paid annually over the UAAL amortization period, would accumulate to the amount necessary to fully fund the UAAL.

In the case of an actuarial surplus, the City's share of the Distributable Actuarial Surplus determined pursuant to Section 3-354(f) of the Municipal Code.

The amortization policy is described on the previous page.

The recommended City contributions are provided in *Section 2, Subsection F*.

Member contributions

Tier 2

9% of pay (§3-405).

Internal Revenue Code Section 415

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

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

In particular, Section 415(b) of the IRC limits the maximum annual benefit payable at the Normal Retirement Age to a dollar limit of $160,000 indexed for inflation. That limit is $280,000 for 2025. Normal Retirement Age for these purposes is age 62. These are the limits in simplified terms. They must be adjusted based on each participant's circumstances, for such things as age at retirement, form of benefits chosen and after tax contributions.

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

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

Contribution rates determined in this valuation reflect Section 415 limitations for members who became members in the Retirement System after June 28, 1991 and are therefore ineligible to participate in the Qualified Excess Governmental Benefit Arrangement pursuant to Section 3-356 of the municipal code.

Models

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

Justification for change in actuarial assumptions, methods or models

Based on past experience and future expectations, the following actuarial assumptions were changed. Previously these assumptions were as follows:

Salary increase

The annual rate of compensation increase includes:

- Inflation at 2.50%, plus
- "Across-the-board" salary increase of 0.50% per year, plus
- Merit and promotion increase based on years of service:

Merit and Promotion Increases (%)

Years of Service	Rate
Less than 1	10.00
1–2	10.00
2–3	5.00
3–4	4.00
4–5	4.00
5–6	4.00
6–7	1.75
7–10	1.00
10 and over	1.00

Post-retirement mortality rates

The Pub-2010 mortality tables and adjustments as shown below reasonably reflect the mortality experience as of the measurement date. These mortality tables were adjusted to future years using the generational projection to reflect future mortality improvement between the measurement date and those years.

Healthy

Pub-2010 Safety Healthy Retiree Amount-Weighted Mortality Table (separate tables for males and females), projected generationally with the two-dimensional mortality improvement scale MP-2021.

Disabled

Pub-2010 Safety Disabled Retiree Amount-Weighted Mortality Table (separate tables for males and females), projected generationally with the two-dimensional mortality improvement scale MP-2021.

Beneficiaries not currently in Pay Status

Pub-2010 General Healthy Retiree Amount-Weighted Mortality Table (separate tables for males and females) with rates increased by 5%, projected generationally with the two-dimensional mortality improvement scale MP-2021.

Beneficiaries in Pay Status

Pub-2010 Contingent Survivor Amount-Weighted Mortality Table (separate tables for males and females) with rates increased by 5%, projected generationally with the two-dimensional mortality improvement scale MP-2021.

Pre-retirement mortality rates

Pub-2010 Safety Employee Amount-Weighted Mortality Table (separate tables for males and females), projected generationally with the two-dimensional mortality improvement scale MP-2021.

Pre-Retirement Mortality Rates (%) — Before Generational Projection from 2010

Age	Male	Female
25	0.04	0.02
30	0.04	0.03
35	0.05	0.04
40	0.06	0.05
45	0.08	0.07
50	0.12	0.09
55	0.18	0.12
60	0.26	0.17
65	0.41	0.23
70	0.77	0.45

Mortality rates for member contributions

Healthy

Pub-2010 Safety Healthy Retiree Amount-Weighted Mortality Table (separate tables for males and females), projected 30 years with the two-dimensional mortality improvement scale MP-2021, weighted 90% male and 10% female.

Beneficiaries

Pub-2010 General Healthy Retiree Amount-Weighted Mortality Table (separate tables for males and females) with rates increased by 5%, projected 30 years with the two-dimensional mortality improvement scale MP-2021, weighted 10% male and 90% female.

Optional benefits

Healthy

Pub-2010 Safety Healthy Retiree Amount-Weighted Mortality Table (separate tables for males and females), projected generationally with the two-dimensional mortality improvement scale MP-2021, weighted 90% male and 10% female.

Disabled

Pub-2010 Safety Disabled Retiree Amount-Weighted Mortality Table (separate tables for males and females), projected generationally with the two-dimensional mortality improvement scale MP-2021, weighted 90% male and 10% female.

Beneficiaries

Pub-2010 General Healthy Retiree Amount-Weighted Mortality Table (separate tables for males and females) with rates increased by 5%, projected generationally with the two-dimensional mortality improvement scale MP-2021, weighted 10% male and 90% female.

Disability

Disability Incidence Rates (%)

Age	Tier 1 Duty	Tier 1 Ordinary	Tier 2 Duty	Tier 2 Ordinary
20	0.02	0.00	0.06	0.00
25	0.14	0.01	0.10	0.01
30	0.26	0.01	0.40	0.01
35	0.39	0.03	0.72	0.03
40	0.60	0.12	1.04	0.14
45	0.88	0.25	1.20	0.23
50	2.80	0.20	1.32	0.16
55	8.20	0.00	3.86	0.00
60	0.00	0.00	11.38	0.00
65	0.00	0.00	0.00	0.00

Termination

Termination Rates (%) — Less Than Five Years of Service

Years of Service	Tier 1	Tier 2
Less than 1	4.47	10.00
1–2	4.47	6.00
2–3	4.47	4.00
3–4	4.47	3.00
4–5	4.47	2.00

100% of members are assumed to elect a withdrawal of contributions.

No termination is assumed after a member is assumed to retire.

Termination Rates (%) — Five or More Years of Service

Age	Tier 1 5–10 Years	Tier 1 10+ Years	Tier 2
20	2.87	3.57	2.00
25	2.87	3.57	2.00
30	1.88	2.63	2.00
35	0.87	1.44	2.00
40	0.44	0.92	1.50
45	0.19	0.63	1.50
50	0.00	0.00	0.00

100% of Tier 1 members with 5–10 years of service, 0% of Tier 1 members with 10+ years of service and 30% of Tier 2 members with 5+ years of service are assumed to elect a withdrawal of contributions. The remaining members are assumed to elect a deferred vested benefit. No termination is assumed after a member is assumed to retire.

Retirement rates

Retirement Rates (%)

Age	Tier 1	Tier 2
50	12.72	4.00
51	7.63	2.00
52	7.63	2.00
53	5.09	3.00
54	5.09	3.00
55	10.60	10.00
56	13.77	10.00
57	14.03	5.00
58	16.66	5.00
59	29.67	5.00
60	100.00	30.00
61	100.00	30.00
62	100.00	30.00
63	100.00	50.00
64	100.00	50.00
65 and over	100.00	100.00

Retirement rates only apply to members that are eligible to retire at the age shown.

DROP Member Assumed Retirement Rates (%) — Tier 1

Year Eligible	Rate
First	100.0
Second	0.0
Third	0.0
Thereafter	0.0

DROP Member Assumed Retirement Rates (%) by Years of Service— Tier 2

Age	5–14	15–19	20 or More
50	1.0	1.0	6.0
51	1.0	1.0	6.0
52	1.0	1.0	6.0
53	1.0	1.0	6.0
54	1.0	15.0	35.0
55	1.0	50.0	70.0
56	1.0	25.0	25.0
57	1.0	25.0	25.0
58	1.0	25.0	25.0
59	1.0	25.0	25.0
60	1.0	25.0	25.0
61	1.0	25.0	25.0
62	1.0	25.0	25.0
63 and over	0.0	0.0	0.0

Members are assumed to remain in DROP for 7 years

Retirement age and benefit for inactive vested members

For current and future inactive vested members without reciprocity, retirement age assumptions are as follows:

Tier 1: N/A

Tier 2: 53

It is assumed that 45% of future inactive vested members will continue to work for a reciprocal employer. For those that continue to work for a reciprocal employer, a 4.0% compensation increase per annum is assumed.

Percent with survivor

85% of male members and 75% of female members.

Election of optional forms of benefit at retirement

Rate (%)

Benefit	Male Members with Survivor	Female Members with Survivor	Members without Survivor
Unmodified	30%	45%	100%
Option 2 (A/B)	55%	25%	–
Option 3 (A/B)	15%	30%	–

Exhibit 2: Summary of plan provisions

This exhibit summarizes the major provisions of the Plan included in the valuation. It is not intended to be, nor should it be interpreted as, a complete statement of all plan provisions. If the System should find the plan summary not in accordance with the actual provisions, the System should alert the actuary so they can both be sure the proper provisions are valued.

Plan year

July 1 through June 30

Membership eligibility

All sworn Fire, Police, and Airport Public Safety personnel are eligible.

Membership Tier	Plan Provision
Tier 1	Safety members hired before August 27, 1990.
Tier 2	Safety members hired on or after August 27, 1990.

Final compensation and service for benefit determination

Final Compensation and Service	Final Compensation and Service Plan Provision
Final average compensation	
Tier 1	Final highest consecutive thirty-six months of compensation earnable calculated using the rate of pay actually earned by the member in effect at the time of retirement. Some members are also entitled to final compensation determined based on a rank average (§3-301 and §3-302).
Tier 2	Highest consecutive thirty-six months of compensation earnable during any thirty-six months of service before the date of retirement (§3-401).
Service	
All members	Years of service (Yrs)

Service retirement benefits

Provision by Tier	Service Retirement Plan Provision
Eligibility	
Tier 1	Age 50 with 10 years of service (§3-332).
Tier 2	Age 50 with 5 years of service (§3-410).
Maximum benefit	
All members	75% of FAS

Benefit formula

Tier and Retirement Age	Service Retirement Benefit Formula by Tier
Tier 1	
At least 20 years of service at retirement from active status	55% × FAS + Yrs of service in excess of 20 completed after age 50 × 2.00% × FAS
Less than 20 years of service at retirement from active status:	55% × FAS × Yrs of service ÷ 20
Retired from deferred status	55% × FAS × Yrs of service ÷ (Greater of 20 Yrs or Yrs of service member would have completed if the member had remained in City service until age 50)
Tier 2	
Age 50	2.00% × FAS × Yrs
Age 51	2.14% × FAS × Yrs
Age 52	2.28% × FAS × Yrs
Age 53	2.42% × FAS × Yrs
Age 54	2.56% × FAS × Yrs
Age 55 and over	2.70% × FAS × Yrs

Deferred Retirement Option Program (DROP)

Provision by Tier	DROP Plan Provision
Eligibility	
All members	Same as Service Retirement.
Benefit amount	
All members	DROP benefits (calculated using age, service and salary at the commencement date of participation in DROP) will be credited to a DROP account with interest at rates determined by the Board. Members will no longer be required to make member contributions. Effective March 7, 2011, active members who signed up for the DROP are required to continue their employee contributions; however, those contributions are deposited into the members' DROP accounts and therefore not available to fund the value of the retirement benefit earned up to the date of the DROP. Therefore, those contributions that will be deposited into the DROP accounts are disregarded in this valuation. Members may participate in DROP for up to ten years (§3-353 and §3-424).

Disability benefits

Ordinary disability

Provision by Tier	Ordinary Disability Plan Provision
Eligibility	
All members	Ten years of service (§3-335 and §3-412 for Tier 1 and Tier 2, respectively).
Benefit amount	
Tier 1	Greater of 1.65% × FAS × Yrs, 36.67% of FAS or Service Retirement benefit (§3-336).
Tier 2	Greater of 1.5% × FAS × Yrs, 33.00% of FAS or Service Retirement benefit (§3-413).

Duty disability

Provision by Tier	Duty Disability Plan Provision
Eligibility	
All members	No age or service requirements (§3-335 and §3-412 for Tier 1 and Tier 2, respectively).

Provision by Tier	Duty Disability Plan Provision
Benefit amount	
Tier 1	55% of FAS or Service Retirement benefit, if greater (§3-336).
Tier 2	50% of FAS or Service Retirement benefit, if greater (§3-413).

Pre-retirement death benefits

Basic death benefit

Provision by Tier	Pre-Retirement Basic Death Benefit Plan Provision
Eligibility	
All members	None.
Vested members	Ten (five for Tier 2) years of service.
Benefit amount	
All members	Refund of employee contributions with interest, plus one month's compensation for each year of service, to a maximum of six month's compensation (§3-330 and §3-408 for Tier 1 and Tier 2, respectively).
Vested members	66-2/3% of member's unmodified allowance continued to eligible spouse/domestic partner (§3-338 and §3-415 for Tier 1 and Tier 2, respectively).

Death in line of duty benefit

Provision by Tier	Pre-Retirement Service-Connected Death Benefit Plan Provision
Eligibility	
All members	None.
Benefit amount	
All members	55% (50% for Tier 2) of FAS or Service Retirement benefit, if greater and, payable to eligible spouse/domestic partner or minor children (§3-330 and 3-408 for Tier 1 and Tier 2, respectively).

Post-retirement death benefits

Service or disability retirement

66-2/3% of member's unmodified allowance continued to eligible spouse/domestic partner (§3-338 and §3-415 for Tier 1 and Tier 2, respectively).

Withdrawal benefits

Less than Five Years of Service (Ten Years for Tier 1)

Refund of accumulated employee contributions with interest.

Five or More Years of Service (Ten Years for Tier 1)

If contributions left on deposit, entitled to earned benefits commencing at any time after eligible to retire (§3-344 and §3-420 for Tier 1 and Tier 2, respectively).

Post-retirement cost-of-living benefits

Tier 1

Based on the method chosen by the employee at retirement:

For members who chose the final 3-year method, future changes based on the change in the weighted mean average compensation attached to all ranks in the department, to a maximum of 5% per year, excess banked (§3-302).

For members who chose the Career Rank method, future changes based on a recalculation of retirement based on the new salaries adopted for the current year (§3-301).

Tier 2

Future changes based on Consumer Price Index to a maximum of 3% per year, excess banked (§3-411).

Member contributions

Please refer to *Section 4, Exhibit 3* for specific rates.

Tier 1

Provide 1/3 of the funding required to pay a benefit equal to 55% of FAS at age 50 (or when a member has 20 years of service if later but not later than age 60) to a member with 66-2/3% automatic continuance payable to his/her eligible spouse/domestic partner (§3-319). The contribution will be prorated if the member has less than 20 years of service at age 60. Members who are over age 60 with at least 20 years of service do not have to make member contributions (§3-332).

Refund of contribution paid for 66-2/3% automatic continuance. Provide a refund of contributions at service or disability retirement for those members without an eligible spouse/domestic partner (§3-319).

Tier 2

9% of pensionable pay (§3-405). Members who are over age 60 with at least 10 years of service do not have to make member contributions (§3-410).

City contributions

Effective with the June 30, 2013 valuation, any new UAAL established on each subsequent valuation as a result of actuarial gains or losses or plan amendments are amortized over separate 15-year declining periods (with the exception of temporary retirement incentives which are amortized over its own declining period of up to 5 years). Any new UAAL established as a result of changes in actuarial assumptions or methods at each valuation is amortized over separate 25-year declining periods. Effective with the June 30, 2018 valuation, when there is any "actuarial surplus" (the funded ratio is over 110%) the portion of surplus in excess of 110% will be amortized over a non-declining 30-year period (prior to June 30, 2018, this was a non-declining 25-year period).

Post Retirement Supplemental Benefits (PRSB)

PSRB may be paid to active and retired DROP participants and eligible retirees and beneficiaries (§3-354). This benefit has been excluded from this valuation.

Changes in plan provisions

There have been no changes in plan provisions since the prior valuation.

Exhibit 3: Member contribution rates

Comparison of total member rate

Comparison of Member Contribution Rates Calculated in Valuation on June 30

($ in '000)

	Category	2025 Rate	2025 Estimated Annual Amount	2024 Rate	2024 Estimated Annual Amount
1.	Tier 1 members	N/A	$0	N/A	$0
2.	Tier 2 members	8.93%	$13,093	8.97%	$13,151
3.	**All member categories combined: 1 + 2**	**8.93%**	**$13,093**	**8.97%**	**$13,151**
4.	Projected 2026–2027 compensation, excluding DROP members		146,613		146,613

Appendix A: Definition of Pension Terms

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

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

Appendix A: Definition of Pension Terms

Term	Definition
Actuarial present value of future benefits	The actuarial present value of benefit amounts expected to be paid at various future times under a particular set of actuarial assumptions, taking into account such items as the effect of advancement in age, anticipated future compensation, and future service credits. The actuarial present value of future benefits includes the liabilities for active members, retired members, beneficiaries receiving benefits, and inactive members entitled to either a refund of member contributions or a future retirement benefit. Expressed another way, it is the value that would have to be invested on the valuation date so that the amount invested plus investment earnings would provide sufficient assets to pay all projected benefits and expenses when due.
Actuarial valuation	The determination, as of a valuation date, of the normal cost, actuarial accrued liability, actuarial value of assets, and related actuarial present values for a plan, as well as actuarially determined contributions.
Actuarial value of assets	The value of the Plan's assets as of a given date, used by the actuary for valuation purposes. This may be the market or fair value of plan assets, but commonly plans use a smoothed value in order to reduce the year-to-year volatility of calculated results, such as the funded ratio and the actuarially determined contribution.
Actuarially determined	Values that have been determined utilizing the principles of actuarial science. An actuarially determined value is derived by application of the appropriate actuarial assumptions to specified values determined by provisions of the Plan.
Actuarially determined contribution	The employer's contributions, expressed as a dollar amount or a percentage of covered plan compensation, determined under the Plan's funding policy. The actuarially determined contribution consists of the employer normal cost and the amortization payment.
Amortization method	A method for determining the amortization payment. The most common methods used are level dollar and level percentage of payroll. Under the level dollar method, the amortization payment is one of a stream of payments, all equal, whose actuarial present value is equal to the unfunded actuarial accrued liability. Under the level percentage of pay method, the amortization payment is one of a stream of increasing payments, whose actuarial present value is equal to the unfunded actuarial accrued liability. Under the level percentage of pay method, the stream of payments increases at the assumed rate at which total covered payroll of all active members will increase.
Amortization payment	The portion of the pension plan contribution, or actuarially determined contribution, that is intended to pay off the unfunded actuarial accrued liability.

Appendix A: Definition of Pension Terms

Term	Definition
Assumptions or actuarial assumptions	The estimates upon which the cost of the Plan is calculated, including: **Investment return** — the rate of investment yield that the Plan will earn over the long-term future; **Mortality rates** — the rate or probability of death at a given age for employees and retirees; **Retirement rates** — the rate or probability of retirement at a given age or service; **DROP entry rates** — the rate or probability of DROP entry at a given age or service; **Disability rates** — the rate or probability of disability retirement at a given age; **Withdrawal rates** — the rate or probability at which employees of various ages are expected to leave employment for reasons other than death, disability, or retirement; **Salary increase rates** — the rates of salary increase due to inflation, real wage growth and merit and promotion increases.
Closed amortization period	A specific number of years that is counted down by one each year, and therefore declines to zero with the passage of time. For example, if the amortization period is initially set at 20 years, it is 19 years at the end of one year, 18 years at the end of two years, etc. See “open amortization period.”
Decrements	Those causes/events due to which a member’s status (active-inactive-retiree-beneficiary) changes, that is: death, retirement, disability, or withdrawal.
Defined benefit plan	A retirement plan in which benefits are defined by a formula based on the member’s compensation, age and/or years of service.
Defined contribution plan	A retirement plan, such as a 401(k) plan, a 403(b) plan, or a 457 plan, in which the contributions to the plan are assigned to an account for each member, the plan’s earnings are allocated to each account, and each member’s benefits are a direct function of the account balance.
Employer normal cost	The portion of the normal cost to be paid by the employer. This is equal to the normal cost less expected member contributions.
Experience study	A periodic review and analysis of the actual experience of the Plan that may lead to a revision of one or more actuarial assumptions. Actual rates of decrement and salary increases are compared to the actuarially assumed values and modified based on recommendations from the Actuary.
Funded ratio	The ratio of the valuation value of assets to the actuarial accrued liability. Plans sometimes also calculate a market funded ratio, using the market value of assets, rather than the valuation value of assets.
GASB 67 and GASB 68	Governmental Accounting Standards Board (GASB) Statements No. 67 and No. 68. These are the governmental accounting standards that set the accounting rules for public retirement systems and the employers that sponsor or contribute to them. Statement No. 68 sets the accounting rules for the employers that sponsor or contribute to public retirement systems, while Statement No. 67 sets the rules for the systems themselves.

Appendix A: Definition of Pension Terms

Term	Definition
Investment return	The rate of earnings of the Plan from its investments, including interest, dividends and capital gain and loss adjustments, computed as a percentage of the average value of the fund. For actuarial purposes, the investment return often reflects a smoothing of the capital gains and losses to avoid significant swings in the value of assets from one year to the next.
Negative amortization	Negative amortization is a result of an increase in the unfunded actuarial accrued liability when the amortization payment is less than the interest accrued on the unfunded actuarial accrued liability.
Net pension liability	The net pension liability is equal to the total pension liability minus the plan fiduciary net position.
Normal cost	The portion of the actuarial present value of future benefits and expenses, if applicable, allocated to a valuation year by the actuarial cost method. Any payment with respect to an unfunded actuarial accrued liability is not part of the normal cost (see “amortization payment”). For pension plan benefits that are provided in part by employee contributions, normal cost refers to the total of member contributions and employer normal cost unless otherwise specifically stated.
Open amortization period	An open amortization period is one which is used to determine the amortization payment but which does not change over time. If the initial period is set as 30 years, the same 30-year period is used in each future year in determining the amortization period.
Plan fiduciary net position	Market value of assets.
Service costs	The portions of the actuarial present value of projected benefit payments that are attributed to valuation years.
Total pension liability	The actuarial accrued liability under the entry age normal cost method and based on the blended discount rate as described in GASB 67 and 68.
Unfunded actuarial accrued liability	The excess of the actuarial accrued liability over the valuation value of assets. This value may be negative, in which case it may be expressed as a negative unfunded actuarial accrued liability, also called the funding surplus or an overfunded actuarial accrued liability.
Valuation date or actuarial valuation date	The date as of which the value of assets is determined and as of which the Actuarial Present Value of Future Benefits is determined. The expected benefits to be paid in the future are discounted to this date.
Valuation value of assets	The actuarial value of assets reduced by the value of non-valuation reserves.

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