Board of Retirement Regular Meeting

Sacramento County Employees' Retirement System

Agenda Item 15

MEETING DATE:	**December 11, 2024**		
SUBJECT:	**Actuarial Valuation and Review and GASB 67 Reports as of June 30, 2024**		
SUBMITTED FOR:	**___ Consent**	**_X_ Deliberation and Action**	**____ Receive and File**

RECOMMENDATION

1) Adopt the 2025-26 fiscal year employer and member contribution rates recommended by Segal;
2) Receive and file the Actuarial Valuation and Review as of June 30, 2024; and
3) Receive and file the Governmental Accounting Standards Board Statement No.67 Actuarial Valuation as of June 30, 2024.

PURPOSE

This item supports the Strategic Management Plan by maintaining prudent and effective funding policies and practices that assist in producing low contribution rate volatility and plan sustainability.

DISCUSSION

The Actuarial Valuation and Review as of June 30, 2024, was conducted to determine whether SCERS' assets and contribution rates are sufficient to provide the prescribed benefits. Staff has reviewed the reports with the actuary, Segal. Staff provides the following highlights of key components of the valuation report. Segal will attend the Board Meeting to present the report and answer any questions.

Investment Experience and Return for 2023-24 – 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 System's investment policy. The rate of return on the Market Value of Assets was 8.77% for the year ended June 30, 2024. The rate of return on the smoothed Actuarial Value of Assets was 7.45%. The actual rate of return on the Valuation Value of Assets (VVA) for the 2023-2024 plan year was 7.46%. Because the actual return on the VVA for the year was greater than the assumed return, the System experienced an actuarial gain during the year ended June 30, 2024, with regard to its investments (Refer to page 28 of the valuation report).

There is a total net unrecognized investment gain as of June 30, 2024, of $99.7 million, compared to the net unrecognized loss of $59.8 million as of June 30, 2023. This net deferred gain will be recognized in the determination of the actuarial value of assets for funding purposes over the next six years. This means if SCERS earns the 6.75% assumed investment rate of return per year on a market value basis, there will be net investment gains on the Actuarial Value of Assets in the next few years. Therefore, if the actual market return remains equal to the assumed rate of 6.75%, and all the other actuarial assumptions are met, the net employer contribution requirements will decrease in the next few years. Furthermore, the $99.7 million in unrecognized investment gain will be recognized in a non-level (uneven) pattern, unless direction is provided to Segal to combine the prior six smoothing layers into one layer and to recognize one-sixth of the $99.7 million in each of the next six valuations (Refer to pages 10 of the valuation report).

Contingency Reserve – SCERS currently has $399.3 million in the Contingency Reserve available to help mitigate future losses when smoothed earnings are insufficient to credit reserves at the assumed rate.

Funded Status and Unfunded Actuarial Accrued Liability (UAAL) – SCERS' funded status on a market value basis increased to 88.7% as of June 30, 2024, from 86.1% as of June 30, 2023. SCERS' funded status on an actuarial value of assets basis (using seven-year asset smoothing) increased to 88.1% as of June 30, 2024, from 86.5% as of June 30, 2023.

Funded Status
Dollar Amounts in Thousands

Valuation Year Ending June 30	(1) Actuarial Accrued Liability	(2) Market Value of Assets	(3) Market Value of Assets as a % of Actuarial Accrued Liability (2)/(1)	(4) Actuarial Value of Assets	(5) Actuarial Value of Assets as a % of Actuarial Accrued Liability (4)/(1)
2024	$15,002,017	$13,309,631	88.7%	$13,209,968	88.1%
2023	$14,358,854	$12,363,258	86.1%	$12,423,093	86.5%

The Unfunded Actuarial Accrued Liability (UAAL) on a market value basis decreased to $1,692.4 million as of June 30, 2024, down from $1,995.6 million as of June 30, 2023. On an actuarial value basis, the UAAL decreased to $2,191.3 million as of June 30, 2024, down from $2,306.7 million as of June 30, 2023.

Recommended Employer Contribution Rates – Contribution rates are expressed as a percentage of members' pension-eligible compensation, also known as a "percentage of payroll." The table below summarizes the impact on the average total employer contribution rate (Refer to page 34 of the valuation report).

Reconciliation of Average Recommended Employer Contribution Rates from June 30, 2023 to June 30, 2024	Rate
Average Recommended Employer Contribution Rate as of June 30, 2023 Valuation	**29.81%**
Effect of investment return greater than expected (after smoothing)	(0.46%)
Effect of actual contributions greater than expected	(0.25%)
Effect of individual salary increases higher than expected	0.48%
Effect of decrease in UAAL rate from greater than expected increase in total payroll	(0.82%)
Effect of COLA increases higher than expected	0.15%
Effect of reduced retiree and beneficiary benefits from Alameda Decision	(0.09%)
Effect of other experience (gains)/loss	(0.08%)
Total Change	(1.07%)
Average Recommended Employer Contribution Rate as of June 30, 2024 Valuation	**28.74%**

The aggregate total employer contribution rates are a combination of the normal cost rate and the UAAL rate across all member categories and benefit tiers. The contribution rate for special district employers is higher due to a higher UAAL amortization payment, unlike the County and the Superior Court, special district employers did not provide UAAL funding from pension obligation bonds in 2004 when benefit formulas were enhanced. Information regarding the UAAL amortization layers and amortization periods can be found on pages 79 - 84 of the valuation report. Below are the average total employer contribution rates (Refer to pages 36 - 41 of the valuation report).

Aggregate Total Employer Contribution Rate			
Employer	**FY 2025-26***	**FY 2024-25****	**Change**
County of Sacramento	29.29%	30.33%	(1.04%)
SacSewer	23.63%	24.72%	(1.09%)
Superior Court	23.96%	24.86%	(0.90%)
Special Districts	30.46%	31.89%	(1.43%)
All Employers Combined	**28.74%**	**29.81%**	**(1.07%)**

*Contribution rates for FY 2025-26 represent the recommended rates from the June 30, 2024, actuarial valuation report.
**Contribution rates for FY 2024-25 represent the actual effective rates from the June 30, 2023, actuarial valuation report after they have been recomposited using payrolls determined in the June 30, 2024 actuarial valuation.

Recommended Member Contribution Rates – The aggregate member contribution rate across all member categories and benefit tiers reflects a decrease from 11.36% to 11.33% primarily due to the impact of assumption changes in member demographics amongst the tiers (Refer to page 35 of the valuation report). Information regarding the base (unadjusted) member contribution rates by plan and tier can be found on pages 113 – 131 of the valuation report.

Reconciliation of Average Recommended Member Contribution Rates from June 30, 2023 to June 30, 2024	**Rate**
Average Recommended Member Contribution as of June 30, 2023, Valuation	**11.36%**
Change in Member Demographics on Normal Cost	(0.03%)
Total Change	(0.03%)
Average Recommended Member Contribution as of June 30, 2024	**11.33%**

Effects of Pension Reform and Participation Levels – The impact pension reform measures are being seen in the SCERS member's workforce and the total cost reduction resulting from reform measures is included in the current valuation and is projected to be realized in future years. As of June 30, 2024, about 62% of active members are enrolled in the CalPEPRA tiers. As a result of the implementation of the CalPEPRA tiers, the aggregate Normal Cost rate is lower by about 2.1% of payroll compared to what the aggregate Normal Cost rate would have been if all active members were enrolled in the legacy tiers (Refer to page 9 of the valuation report).

Equally important to understand the lower cost of the new tiers is the transition of the workforce from participation levels in the legacy tiers versus participation levels in the Public Employees' Pension Reform Act (PEPRA) tiers. Below is a summary of active membership as of June 30, 2024, and June 30, 2023 (Refer to pages 53 - 61 of the valuation report).

Active Membership				
Plan/Tier	**June 30, 2024**	**Percentage of Total Membership**	**June 30, 2023**	**Change From Prior Year**
Miscellaneous Tier 1	6	0.1%	7	-14.3%
Miscellaneous Tier 2	23	0.2%	28	-17.9%
Miscellaneous Tier 3	4,085	29.8%	4,449	-8.2%
Miscellaneous Tier 4	279	2.0%	292	-4.5%
Miscellaneous Tier 5	7,159	52.3%	6,285	13.9%
Safety Tier 1	11	0.1%	15	-26.7%
Safety Tier 2	667	4.9%	764	-12.7%
Safety Tier 3	119	0.8%	123	-3.3%
Safety Tier 4	1,341	9.8%	1,204	11.4%
Total	**13,690**		**13,167**	

Paying Down Unfunded Liability – Based on SCERS' funding plan, the outstanding Net UAAL balance of $2,191 million as of June 30, 2024, is projected to be eliminated by year 2041, holding all assumptions constant and assuming they are met (Refer to pages 79 - 84). Employer contributions should gradually increase through 2034 before dropping significantly as amortization layers are paid off.

Valuation Methodology – SCERS' annual actuarial valuation measures current and projected assets and liabilities, as well as determines the funded status. This information forms the basis for establishing the actuary's recommendations for the employer and member contribution rates for the upcoming fiscal year. The Board then uses the actuary's recommendations in adopting the appropriate contribution rates, which are conveyed to the Board of Supervisors for implementation.

In measuring the assets and liabilities, and determining SCERS' funded status, the actuary uses investment and actuarial experience to-date, plus various assumptions about the projected future growth in assets and liabilities. The actuarial assumptions include both economic and demographic assumptions, which are long term in nature, as opposed to the experience that might be anticipated in the next few years.

In each valuation, the previous year experience is compared to the actuarial assumptions, and to the extent there are differences, the contribution rates are adjusted. This is referred to as the "differences between expected and actual experience" and can result in either an upward or downward adjustment in the next year's contribution rate depending on whether the experience produced an "actuarial loss" or "actuarial gain". A review of demographic and economic assumptions is conducted as part of the triennial experience study.

The most recent triennial experience study prepared by Segal covered the period July 1, 2019 through June 30, 2022. The Board approved the recommended actuarial methods and assumptions changes, which have been used in preparing the annual actuarial valuations as of June 30, 2023.

Governmental Accounting Standards Board Statement No. 67 Actuarial Valuation Report as of June 30, 2024 – Attached to the funding valuation report is the GASB Statement No. 67 (GASB 67) Actuarial Valuation as of June 30, 2024. GASB 67 redefined pension liability and expense for financial reporting purposes. When measuring pension liability, GASB uses the same actuarial cost method (Entry Age method) and the same type of discount rate (long-term expected rate of return on pension plan investments) as SCERS uses for funding. As a result, the total pension liability measure for financial reporting purposes is determined on the same basis as SCERS' actuarial accrued liability measure for funding, which totals $15,002.0 million as of June 30, 2024.

The GASB Statement No. 67 Valuation Report provides additional information related to the Net Pension Liability (NPL), changes in the NPL, the discount rate used in determining the total pension liability, and the sensitivity of the NPL to changes in the discount rate, as well as other required note disclosures. SCERS' NPL decreased from $1,995.6 million as of June 30, 2023, to $1,692.4 million as of June 30, 2024. primarily a result of favorable investment return measured on Market Value of Assets (about $264 million gain than expected). Changes in these values during the last two fiscal years ending June 30, 2023, and June 30, 2024, can be found in *Section 2, Schedule of changes in Net Pension Liability* on page 20.

ATTACHMENTS

- Board Order
- Fiscal Year 2025-26 Contribution Rate Schedules
- Actuarial Valuation and Review as of June 30, 2024
- Governmental Accounting Standards Board Statement No. 67 Actuarial Valuation

Prepared by:	Reviewed by:
/S/	/S/
Margo Allen Chief Operations Officer	Eric Stern Chief Executive Officer

Retirement Board Order

Sacramento County Employees' Retirement System

Before the Board of Retirement
December 11, 2024

AGENDA ITEM:

Actuarial Valuation and Review and GASB 67 Reports as of June 30, 2024

THE BOARD OF RETIREMENT hereby accepts the recommendation of staff to adopt the 2025-26 fiscal year employer and member contribution rates recommended by Segal; receive and file the Actuarial Valuation and Review as of June 30, 2024; and receive and file the Governmental Accounting Standards Board Statement 68 Actuarial Valuation as of June 30, 2024.

I HEREBY CERTIFY that the above order was passed and adopted on December 11, 2024 by the following vote of the Board of Retirement, to wit:

AYES:

NOES:

ABSENT:

ABSTAIN:

ALTERNATES:
(Present but not voting)

James Diepenbrock
Board President

Eric Stern
Chief Executive Officer and
Board Secretary

FY 2025-26 and FY 2024-25 EMPLOYER CONTRIBUTION RATES

Sacramento County and Elected Officials

MISCELLANEOUS

	Tier 1		Tier 2		Tier 3		Tier 4		Tier 5	
	FY 2025-26	FY 2024-25	FY 2025-26	FY 2024-25	FY 2025-26	FY 2024-25	FY 2025-26	FY 2024-25	FY 2025-26	FY 2024-25
Normal Cost	11.80%	12.50%	8.12%	7.92%	10.90%	10.91%	10.47%	10.47%	9.56%	9.60%
UAAL	11.52%	12.36%	11.52%	12.36%	11.52%	12.36%	11.52%	12.36%	11.52%	12.36%
Total	**23.32%**	**24.86%**	**19.64%**	**20.28%**	**22.42%**	**23.27%**	**21.99%**	**22.83%**	**21.08%**	**21.96%**

SAFETY

	Tier 1		Tier 2		Tier 3		Tier 4	
	FY 2025-26	FY 2024-25	FY 2025-26	FY 2024-25	FY 2025-26	FY 2024-25	FY 2025-26	FY 2024-25
Normal Cost	30.78%	25.91%	21.19%	21.09%	20.51%	20.63%	14.64%	14.68%
UAAL	34.95%	36.61%	34.95%	36.61%	34.95%	36.61%	34.95%	36.61%
Total	**65.73%**	**62.52%**	**56.14%**	**57.70%**	**55.46%**	**57.24%**	**49.59%**	**51.29%**

SacSewer

MISCELLANEOUS

	Tier 2		Tier 3		Tier 4		Tier 5	
	FY 2024-25**	FY 2024-25*	FY 2024-25**	FY 2024-25*	FY 2024-25**	FY 2024-25*	FY 2024-25**	FY 2024-25*
Normal Cost	11.16%	7.92%	14.85%	10.91%	10.67%	10.47%	9.60%	9.60%
UAAL	12.36%	12.36%	12.36%	12.36%	12.36%	12.36%	12.36%	12.36%
Total	**23.52%**	**20.28%**	**27.21%**	**23.27%**	**23.03%**	**22.83%**	**21.96%**	**21.96%**

	Tier 2	Tier 3	Tier 4	Tier 5
	FY 2025-26	FY 2025-26	FY 2025-26	FY 2025-26
Normal Cost	11.60%	14.57%	10.27%	9.47%
UAAL	11.49%	11.49%	11.49%	11.49%
Total	**23.09%**	**26.06%**	**21.76%**	**20.96%**

* Due to employer separation from the County on December 15, 2024, employer contribution rates effective July 1, 2024 through December 14, 2024.

** Due to employer separation from the County on December 15, 2024, employee contribution rates effective December 15, 2024 through June 30, 2025.

Superior Court

MISCELLANEOUS

	Tier 1		Tier 2		Tier 3		Tier 5	
	FY 2025-26	FY 2024-25	FY 2025-26	FY 2024-25	FY 2025-26	FY 2024-25	FY 2025-26	FY 2024-25
Normal Cost	16.36%	17.92%	12.15%	11.73%	15.58%	15.67%	9.56%	9.60%
UAAL	11.49%	12.33%	11.49%	12.33%	11.49%	12.33%	11.49%	12.33%
Total	**27.85%**	**30.25%**	**23.64%**	**24.06%**	**27.07%**	**28.00%**	**21.05%**	**21.93%**

Special Districts

MISCELLANEOUS

Galt-Arno Cemetery and Fair Oaks Cemetery Districts

	Tier 3		Tier 5	
	FY 2025-26	FY 2024-25	FY 2025-26	FY 2024-25
Normal Cost	15.58%	15.67%	9.56%	9.60%
UAAL	14.57%	15.95%	14.57%	15.95%
Total	**30.15%**	**31.62%**	**24.13%**	**25.55%**

FY 2025-26 and FY 2024-25 EMPLOYER CONTRIBUTION RATES

Orangevale Recreation and Park District

	Tier 3		Tier 5	
	FY 2025-26	FY 2024-25	FY 2025-26	FY 2024-25
Normal Cost	10.90%	10.91%	9.56%	9.60%
UAAL	18.80%	20.26%	18.80%	20.26%
Total	**29.70%**	**31.17%**	**28.36%**	**29.86%**

Rio Linda Elverta Recreation and Park District

	Tier 5	
	FY 2025-26	FY 2024-25
Normal Cost	9.56%	9.60%
UAAL	1.81%	2.03%
Total	**11.37%**	**11.63%**

All Other Districts

	Tier 3		Tier 5	
	FY 2025-26	FY 2024-25	FY 2025-26	FY 2024-25
Normal Cost	15.58%	15.67%	9.56%	9.60%
UAAL	18.80%	20.26%	18.80%	20.26%
Total	**34.38%**	**35.93%**	**28.36%**	**29.86%**

FY 2025-26 and FY 2024-25 MEMBER CONTRIBUTION RATES

Sacramento County and Elected Officials

MISCELLANEOUS

	Tier 1**		Tier 2		Tier 3		Tier 4		Tier 5	
	FY 2025-26	FY 2024-25	FY 2025-26	FY 2024-25	FY 2025-26	FY 2024-25	FY 2025-26	FY 2024-25	FY 2025-26	FY 2024-25
All	11.96%	12.68%	8.23%	8.04%	10.80%	10.81%	10.35%	10.35%	9.56%	9.60%

SAFETY

	Tier 1**		Tier 2		Tier 3		Tier 4	
	FY 2025-26	FY 2024-25	FY 2025-26	FY 2024-25	FY 2025-26	FY 2024-25	FY 2025-26	FY 2024-25
All	21.30%	21.16%	20.93%	20.91%	20.39%	20.53%	14.64%	14.68%

SacSewer

MISCELLANEOUS

	Tier 2		Tier 3		Tier 4		Tier 5	
	FY 2025-26	FY 2024-25*	FY 2025-26	FY 2024-25*	FY 2025-26	FY 2024-25*	FY 2025-26	FY 2024-25*
All	4.75%		6.93%		10.15%		9.47%	
7/1/24-12/14/24		8.04%		10.81%		10.35%		9.60%
12/15/24-6/30/25		4.75%		6.81%		10.13%		9.60%

Superior Court

MISCELLANEOUS

	Tier 1**		Tier 2		Tier 3		Tier 5	
	FY 2025-26	FY 2024-25	FY 2025-26	FY 2024-25	FY 2025-26	FY 2024-25	FY 2025-26	FY 2024-25
All	7.33%	7.32%	4.17%	4.17%	6.05%	5.97%	9.56%	9.60%

Special Districts

MISCELLANEOUS

	Tier 3		Tier 5	
	FY 2025-26	FY 2024-25	FY 2025-26	FY 2024-25
Galt-Arno Cemetery and Fair Oaks Cemetery Districts	6.05%	5.97%	9.56%	9.60%

	Tier 3		Tier 5	
	FY 2025-26	FY 2024-25	FY 2025-26	FY 2024-25
Orangevale Recreation and Park District	10.80%	10.81%	9.56%	9.60%

	Tier 5	
	FY 2025-26	FY 2024-25
Rio Linda Elverta Recreation and Park District	9.56%	9.60%

	Tier 3		Tier 5	
	FY 2025-26	FY 2024-25	FY 2025-26	FY 2024-25
All Other Districts	6.05%	5.97%	9.56%	9.60%

Note: For legacy tiers (Miscellaneous tiers 1, 2, 3, and 4 and Safety tiers 1, 2, and 3), member rates shown are for bi-weekly salary in excess of $161 (or monthly salary in excess of $350). For PEPRA tiers (Miscellaneous tier 5 and Safety tier 4), member rates shown are for the total bi-weekly salary.

* Due to employer separation from the County on December 15, 2024, employee contribution rates change on December 15, 2024 for the remainder of FY2024-25.

** Members who enter prior to 1/1/1975 contribute on the basis of their actual entry age and all others contribute based on the basis of a single entry age of 35 for Miscellaneous members and age of 29 for Safety members.

Sacramento County Employees' Retirement System

Actuarial Valuation and Review as of June 30, 2024

This valuation report should only be copied, reproduced, or shared with other parties in its entirety as necessary for the proper administration of the Plan.

Segal

Segal

180 Howard Street
Suite 1100
San Francisco, CA 94105-6147
segalco.com
T 415.263.8200

November 4, 2024

Board of Retirement
Sacramento County Employees' Retirement System
980 9th Street, Suite 1900
Sacramento, CA 95814

Dear Board Members:

We are pleased to submit this Actuarial Valuation and Review as of June 30, 2024. It summarizes the actuarial data used in the valuation, analyzes the preceding year's experience, and establishes the funding requirements for fiscal year 2025-2026.

This report has been prepared in accordance with generally accepted actuarial principles and practices for the exclusive use and benefit of the Board of Retirement, based upon information provided by the staff of SCERS 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 Andy Yeung, ASA, MAAA, FCA 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 SCERS 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

Todd Tauzer, FSA, MAAA, FCA, CERA
Senior Vice President and Actuary

Andy Yeung, ASA, MAAA, FCA, EA
Vice President and Actuary

Molly Calcagno, ASA, MAAA, EA
Senior Actuary

ST/jl

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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 Sacramento County Employees' Retirement System ("SCERS" or "the System" or "the Plan") as of June 30, 2024. 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, inactive members and retired members and beneficiaries as of June 30, 2024, provided by SCERS;
- The assets of the Plan as of June 30, 2024, provided by SCERS;
- Economic assumptions regarding future salary increases and investment earnings adopted by the Board of Retirement for the June 30, 2024 valuation;
- Other actuarial assumptions regarding employee terminations, retirement, death, etc. adopted by the Board of Retirement for the June 30, 2024 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, 2024 for the Plan and the employers, respectively, are provided in separate reports.

One of the general goals of an actuarial valuation is to establish contributions which fully fund the 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 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 on June 19, 2013 and reaffirmed by the Board on March 17, 2021. The policy was further amended on April 17, 2024 to address when it might be appropriate to adjust the pattern of the recognition of the deferred investment gains or losses under the Board's asset smoothing method. Details of the funding policy are provided in *Section 4, Exhibit 1* starting on page 99.

The rates calculated in this report may be adopted by the Board of Retirement for the fiscal year that extends from July 1, 2025 through June 30, 2026.

Valuation highlights

Funding measures

1. The funded ratio (the ratio of actuarial value of assets to the actuarial accrued liability) increased from 86.5% to 88.1%. 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 86.1% to 88.7%. 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 43 and 44.
2. The unfunded actuarial accrued liability (the difference between the actuarial accrued liability and the valuation value of assets) decreased from $2,307 million to $2,191 million. The decrease in unfunded actuarial accrued liability (UAAL) is primarily due to an investment return on the valuation value (i.e., after asset smoothing) greater than the assumed rate of 6.75% used in the June 30, 2023 valuation, actual contributions greater than expected, and reduction in liability due to the implementation of the Alameda Decision, offset somewhat by individual salary increases for actives and cost-of-living adjustments (COLAs) for retirees and beneficiaries greater than expected. A reconciliation of the System's UAAL from the prior year is provided in *Section 2, Subsection E* on page 31.

   A schedule of the current UAAL amortization balances and payments may be found in *Section 3, Exhibit H* starting on page 79. A graphical projection of the UAAL amortization balances and payments is provided in *Section 3, Exhibit I* starting on page 85.

Actuarial experience

3. The net actuarial gain of $40.7 million, or 0.27% of actuarial accrued liability, is due to an investment gain of $86.2 million, or 0.58% of actuarial accrued liability, offset to some degree by a net loss from sources other than investments of $45.5 million, or 0.30% of the actuarial accrued liability. The loss from sources other than investments was primarily due to individual salary increases and COLAs for retirees and beneficiaries greater than expected.

4. The rate of return on the market value of assets was 8.77% for the year ending June 30, 2024. The return on the valuation value of assets was 7.46% 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, 2023 valuation. This actuarial investment gain (after asset smoothing) decreased the average employer contribution rate by 0.46% of payroll.

5. On July 30, 2020, the California Supreme Court issued a decision in the case of Alameda County Deputy Sheriffs' Association et al. v. Alameda County Employees' Retirement Association (ACERA) and Board of Retirement of ACERA. That decision affected the benefits paid by SCERS to its members and/or the contributions received by SCERS from its members. In particular, the June 30, 2024 valuation reflected refunding member contributions to active and deferred vested members associated with the excluded premium pays under the Alameda Decision, and reduced retiree and beneficiary benefits as the result of reduced final average salary calculations caused by the excluded premium pays. (These adjustments were partially reflected in the June 30, 2023 valuation. When preparing the financial and membership data provided for the June 30, 2023 valuation, SCERS had not finished refunding member contributions and reducing retiree and beneficiary benefits.) Reports prepared by SCERS show roughly $3.1 million in combined refund payments from September 2022 through June 2024 to 4,300 affected members. Those refunds were calculated without taking into account the reduction in the liabilities in the valuations through June 30, 2024, as pay elements associated with those refunds are no longer used in determining the members' benefits.

   Following the practice of the June 30, 2023 valuation, we have reflected the contribution refunds and reduced retiree and beneficiary benefits noted above as part of experience gains and losses rather than as a plan amendment. We have estimated that the reduction in the UAAL for the retirees and beneficiaries reported for this year's valuation (that were not reflected in the June 30, 2023 valuation) to be about $17 million as of June 30, 2024.[1]

Contributions

6. Effective December 15, 2024, the Sacramento Area Sewer District (SacSewer) will become a new employer of SCERS. (As of the June 30, 2024 valuation date of this report, members associated with SacSewer are still considered members of the County.) County employees currently assigned to SacSewer will separate from County employment to become employees of SacSewer. Pursuant to the terms of the Agreement between SCERS, SacSewer and the County, this valuation calculates fiscal year 2025-2026 employer and member contribution rates for SacSewer that are independent of the County's contribution rates. Based on guidance provided by SCERS for use in determining SacSewer's contribution rates effective December 15, 2024 for fiscal year 2024-2025, we understand that the member rates for Miscellaneous Tiers 1 through 4 are no more than 14% higher than the

[1] We estimated that the reduction in the UAAL prior to June 30, 2023 for the retirees and beneficiaries reported in the June 30, 2023 valuation to be about $14 million as of June 30, 2023.

applicable member full rate before the 50% normal cost sharing arrangement. The remainder of the total normal cost calculated on SacSewer's membership is paid by the employer.

Pursuant to the terms of the Agreement, the UAAL for the total Miscellaneous plan as of June 30, 2024 (excluding UAAL for previously withdrawn employers) is allocated to SacSewer based on the proportion of the SacSewer payroll to the total Miscellaneous payroll. The SacSewer member payroll has been calculated by Segal using a list provided by SCERS to Segal for the purposes of the June 30, 2024 valuation. As the list of SacSewer members has changed somewhat from a list previously provided to Segal for an earlier study as of June 30, 2022, we asked and SCERS confirmed for us that some SacSewer members have moved into or out of SacSewer to work at other County departments. Based on guidance provided by SCERS, the full liability for any transfers into or out of SacSewer prior to June 30, 2024 is assigned to the member's most recent employer as of June 30, 2024. For transfers into or out of SacSewer after June 30, 2024, we recommend that SCERS transfer assets into or out of SacSewer reserves equal to the actuarial accrued liability of the transferred members as determined in the most recent actuarial valuation immediately preceding the transfer, which Segal would calculate as of subsequent valuation dates.

7. The average employer rate calculated in this valuation has decreased from 29.81% to 28.74% of payroll. This decrease is primarily due to the effect of amortizing the UAAL over a larger than expected projected total salary, the investment gain, actual contributions greater than expected, and a reduction in liability due to the implementation of the Alameda Decision, offset somewhat by individual salary increases for actives and COLA increases for retirees and beneficiaries greater than expected. A complete reconciliation of the System's aggregate employer rate is provided in *Section 2, Subsection F* on page 34.

8. The average member rate calculated in this valuation has decreased from 11.36% to 11.33% of payroll due to changes in active member demographics. A complete reconciliation of the System's aggregate member rate is provided in *Section 2, Subsection F* on page 35.

   The detailed member rates by cost group are provided in *Section 4, Exhibits 3, 6 and 7* of this report.

9. As of June 30, 2024, about 62% of active members are enrolled in the CalPEPRA tiers. As a result of the implementation of the CalPEPRA tiers, the aggregate normal cost rate is lower by about 2.1% of payroll compared to what the aggregate normal cost rate would have been if all active members were enrolled in the legacy tiers.

10. Rio Linda Elverta Recreation and Parks District became a participating employer effective October 1, 2017. Employees are enrolled in Miscellaneous Tier 5, regardless of any reciprocity with other retirement systems. Besides paying the normal cost rate, the employer is only responsible for its share of the UAAL rate based only on actuarial experience that occurred on or after July 1, 2017.

11. Segal strongly recommends an actuarial funding method that targets 100% funding of the actuarial accrued liability. Generally, this implies payments that are ultimately at least enough to cover normal cost, interest on the UAAL and the principal balance. The funding policy adopted by the Board of Retirement meets this standard.

Future expectations

12. The total unrecognized net investment **gain** (i.e., the difference between the market value of assets and the 'smoothed' actuarial value of assets) as of June 30, 2024 is $99.7 million as compared to an unrecognized net investment **loss** of $59.8 million in the previous valuation. This net deferred gain of $99.7 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 24.

    The net deferred gain of $99.7 million represents about 0.7% of the market value of assets. Unless offset by future investment losses or other unfavorable experience, the recognition of the $99.7 million net market gain is expected to have an impact on the System's future funded ratio and contribution rate requirements. This potential impact may be illustrated as follows:

    a. If the net deferred gain was recognized immediately in the actuarial value of assets, the funded percentage would increase from 88.1% to 88.7%.

       For comparison purposes, if the net deferred loss in the June 30, 2023 valuation had been recognized immediately in the June 30, 2023 valuation, the funded percentage would have decreased from 86.5% to 86.1%.

    b. If the net deferred gain was recognized immediately in the actuarial value of assets, the average employer contribution rate would decrease from 28.7% to 28.2% of payroll.

       For comparison purposes, if the net deferred loss in the June 30, 2023 valuation had been recognized immediately in the June 30, 2023 valuation, the average employer contribution rate would have increased from 30.0% to 30.4% of payroll.

13. The $399.3 million in the Contingency Reserve as of June 30, 2024 is available to supplement shortfall when crediting interest to the valuation reserve accounts in future valuations under the Board's Interest Crediting Policy. If that amount were applied in the June 30, 2024 valuation, the aggregate employer contribution rate would have decreased by about 2.1% of payroll.

Risk

14. It is important to note that this actuarial valuation is based on plan assets as of June 30, 2024. The Plan's funded status does not reflect short-term fluctuations of the market, but rather is based on the market values on the last day of the plan year. Segal is available to prepare projections of potential outcomes of market conditions and other demographic experience upon request.

15. 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. For this valuation cycle, 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 we have included a brief discussion of some risks that may affect the Plan in *Section 2, Subsection I*, beginning on page 46. This discussion of risk is included to satisfy the disclosure required by the Actuarial Standard of Practice No. 51 (ASOP 51).

16. 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 starting on page 48.

GASB

17. 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, 2024, 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

Average Employer Contribution Calculated as of June 30

($ in '000s)

Tier	2024 Contribution Rate	2024 Annual Amount[1]	2023 Contribution Rate	2023 Annual Amount[1]
Miscellanous				
• Miscellaneous Tier 1	24.26%	$156	25.82%	$166
• Miscellaneous Tier 2	20.66%	495	21.20%	508
• Miscellaneous Tier 3	23.52%	105,829	24.42%	109,898
• Miscellaneous Tier 4	21.97%	7,530	22.84%	7,828
• Miscellaneous Tier 5	21.39%	124,997	22.30%	130,319
Safety				
• Safety Tier 1	65.73%	1,400	62.52%	1,330
• Safety Tier 2	56.14%	66,137	57.70%	67,976
• Safety Tier 3	55.46%	11,013	57.24%	11,367
• Safety Tier 4	49.59%	73,003	51.29%	75,506
All Categories Combined	**28.74%**	**$390,560**	**29.81%**	**$404,898**

Aggregate Member Contribution Calculated as of June 30

($ in '000s)

Tier	2024 Contribution Rate	2024 Annual Amount[1]	2023 Contribution Rate	2023 Annual Amount[1]
All Categories Combined	**11.33%**	**$153,935**	**11.36%**	**$154,342**

[1] Estimated based on June 30, 2024 projected annual compensation.

Individual Member Contribution Rates[1] Calculated as of June 30

($ in '000s)

Tier	2024 Contribution Rate[2]	2024 Annual Amount[3]	2023 Contribution Rate[2]	2023 Annual Amount[3]
Miscellanous				
• Miscellaneous Tier 1	7.33%	$7,751	7.32%	$7,740
• Miscellaneous Tier 2	4.17%	4,249	4.17%	4,249
• Miscellaneous Tier 3	6.05%	6,502	5.97%	6,416
• Miscellaneous Tier 4	9.00%	10,969	8.89%	10,835
• Miscellaneous Tier 5	9.56%	7,741	9.60%	7,774
Safety				
• Safety Tier 1	16.75%	32,184	17.22%	33,087
• Safety Tier 2	16.07%	28,158	16.03%	28,088
• Safety Tier 3	15.80%	26,144	15.63%	25,863
• Safety Tier 4	14.64%	16,072	14.68%	16,116

[1] Before reflecting members in legacy tiers who agreed to contribute an additional portion of the normal cost, and excluding SacSewer members. SacSewer member contribution rates are shown in *Section 4, Exhibits 3 and 7* of this report.
[2] Based on single full-rates payable by members who enter on or after January 1, 1975.
[3] Per member amount based on June 30, 2024 average projected annual compensation for members in each respective tier, excluding SacSewer members.

Section 1: Actuarial Valuation Summary

Valuation Results as of June 30

($ in '000s)

Line Description	2024	2023
Actuarial accrued liability		
• Total actuarial accrued liability	$15,002,017	$14,358,854
– Retired members and beneficiaries	9,380,758	8,907,955
– Inactive members[1]	480,182	453,692
– Active members	5,130,327	4,985,477
– Non-valuation reserves and amounts	10,750	11,730
• Normal cost for plan year beginning June 30	317,684	297,450
Assets		
• Market value of assets (MVA)	$13,309,631	$12,363,258
• Actuarial value of assets (AVA)[2]	13,209,968	12,423,093
• Actuarial value of assets as a percentage of market value of assets	99.3%	100.5%
• Valuation value of assets (VVA)[3]	$12,799,929	$12,040,466
Funded status		
• Unfunded actuarial accrued liability on MVA basis	$1,692,386	$1,995,596
• Funded percentage on MVA basis	88.7%	86.1%
• Unfunded actuarial accrued liability on AVA basis	$1,792,049	$1,935,761
• Funded percentage on AVA basis	88.1%	86.5%
• Unfunded actuarial accrued liability on VVA basis[4]	$2,191,338	$2,306,658
• Funded percentage on VVA basis	85.4%	83.9%

[1] Includes inactive members due a refund of member contributions.
[2] Includes non-valuation reserves and amounts.
[3] Excludes non-valuation reserves and amounts.
[4] The actuarial accrued liability in this calculation excludes non-valuation reserves and amounts.

Line Description	2024	2023
Key assumptions		
• Net investment return	6.75%	6.75%
• Inflation rate	2.50%	2.50%
• "Across-the-board" salary increase	0.25%	0.25%
• Payroll growth	2.75%	2.75%
• Cost-of-living adjustments		
– Tiers with 4% maximum COLA	2.75%	2.75%
– Tiers with 2% maximum COLA	2.00%	2.00%
• Amortization period on VVA basis[1]	20 years	20 years

[1] Changes in unfunded actuarial accrued liability as a result of gains or losses for each valuation are amortized over separate 20-year periods. Details of the funding policy are provided in *Section 4, Exhibit 1*.

Demographic Data as of June 30

Demographic Data by Status	2024	2023	Change
Active members			
• Number of members	13,690	13,167	4.0%
• Average age	44.4	44.7	-0.3
• Average service	10.3	10.8	-0.5
• Total projected compensation	$1,358,649,370	$1,251,965,469	8.5%
• Average projected compensation	$99,244	$95,084	4.4%
Retired members and beneficiaries			
• Number of members	14,285	13,934	2.5%
– Service retired	11,698	11,392	2.7%
– Disability retired	704	692	1.7%
– Beneficiaries	1,883	1,850	1.8%
• Average age	70.8	70.5	0.3
• Average monthly benefit	$4,212	$4,059	3.8%
Inactive members			
• Number of members[1]	4,935	4,702	5.0%
• Average age	45.9	46.1	-0.2
Total members	**32,910**	**31,803**	**3.5%**

[1] 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 SCERS 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 SCERS upon delivery and review. SCERS 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 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	Inactive Members[1]	Retired Members and Beneficiaries (Pay Status)	Total Non-Actives	Ratio of Non-Actives to Actives	Ratio of Pay Status to Actives
2015	12,072	3,261	10,541	13,802	1.14	0.87
2016	12,393	3,301	10,960	14,261	1.15	0.88
2017	12,587	3,425	11,396	14,821	1.18	0.91
2018	12,677	3,509	11,883	15,392	1.21	0.94
2019	12,678	3,602	12,381	15,983	1.26	0.98
2020	12,650	3,791	12,732	16,523	1.31	1.01
2021	12,500	4,054	13,051	17,105	1.37	1.04
2022	12,757	4,423	13,635	18,058	1.42	1.07
2023	13,167	4,702	13,934	18,636	1.42	1.06
2024	13,690	4,935	14,285	19,220	1.40	1.04

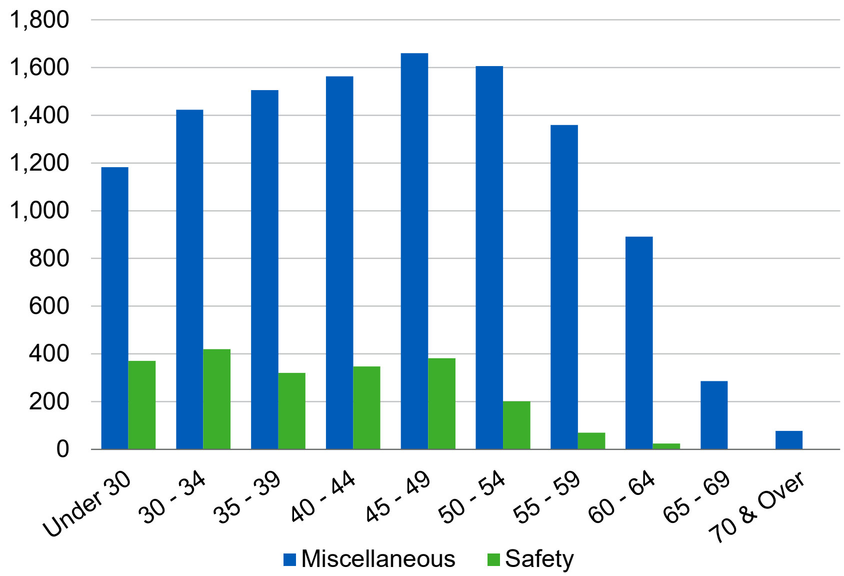
[1] Includes inactive members due a refund of member contributions.

Active members

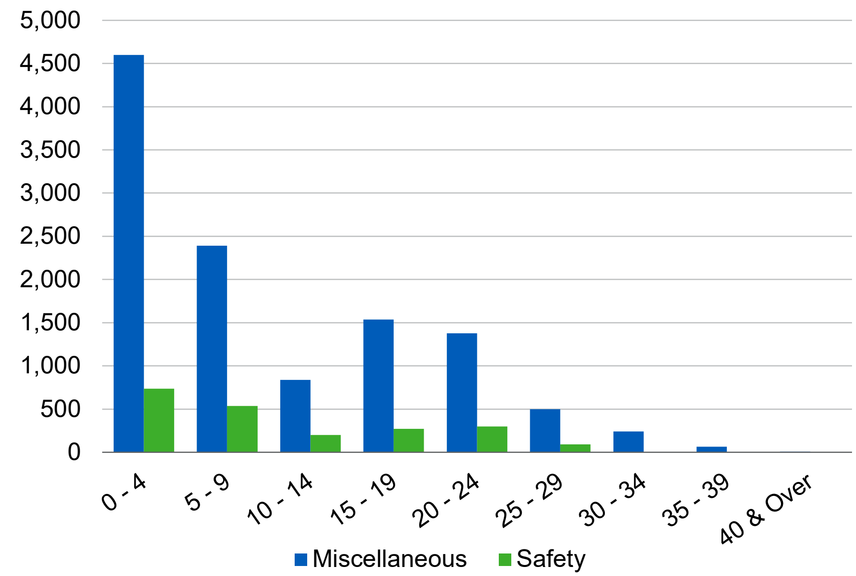
Demographic Data	As of June 30, 2024	As of June 30, 2023	Change
Active members	13,690	13,167	4.0%
Average age[1]	44.4	44.7	-0.3
Average years of service	10.3	10.8	-0.5
Average compensation	$99,244	$95,084	4.4%

Distribution of Active Members as of June 30, 2024

Actives by Age



Actives by Years of Service



Inactive members

Demographic Data	As of June 30, 2024	As of June 30, 2023	Change
Inactive members[2]	4,935	4,702	5.0%

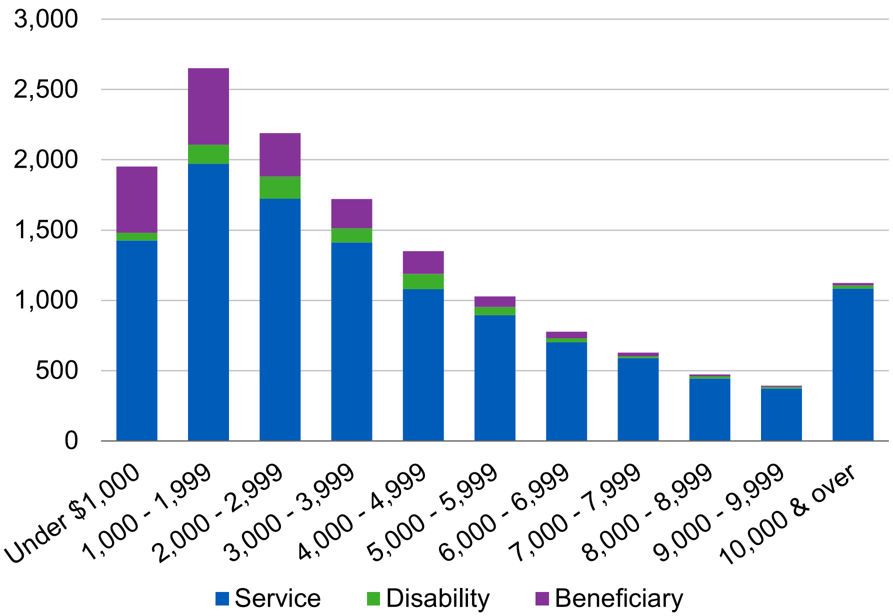
[1] Among the active members, there were none with unknown age information.
[2] Includes inactive members due a refund of member contributions.

Retired members and beneficiaries

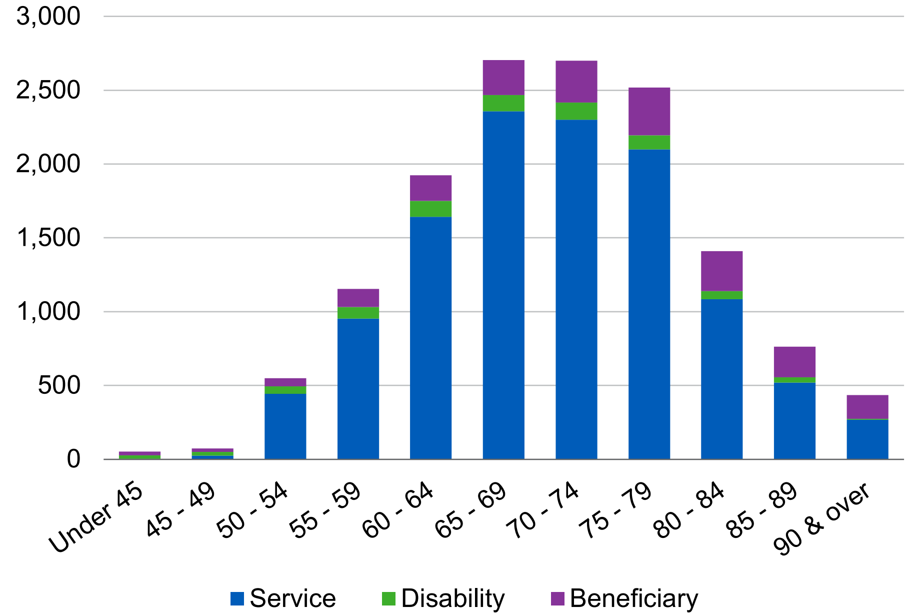
Demographic Data	As of June 30, 2024	As of June 30, 2023	Change
Retired members	12,402	12,084	2.6%
Beneficiaries	1,883	1,850	1.8%
Average age	70.8	70.5	0.3
Average monthly amount	$4,212	$4,059	3.8%
Total monthly amount	$60,162,315	$56,558,765	6.4%

Distribution of Retired Members and Beneficiaries as of June 30, 2024

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 10 years. The chart also shows the growth among the retired population over the same time period.

Historical Member Data

Active Members versus Retired Members and Beneficiaries (Pay Status)

As of June 30	Active Count	Active Average Age	Active Average Service	Pay Status Count	Pay Status Average Age	Pay Status Monthly Amount
2015	12,072	46.7	12.7	10,541	69.2	$3,072
2016	12,393	46.3	12.4	10,960	69.4	3,156
2017	12,587	46.0	12.1	11,396	69.5	3,260
2018	12,677	45.7	11.9	11,883	69.6	3,381
2019	12,678	45.7	11.9	12,381	69.8	3,521
2020	12,650	45.7	11.9	12,732	70.1	3,658
2021	12,500	45.6	11.8	13,051	70.2	3,768
2022	12,757	45.1	11.3	13,635	70.4	3,911
2023	13,167	44.7	10.8	13,934	70.5	4,059
2024	13,690	44.4	10.3	14,285	70.8	4,212

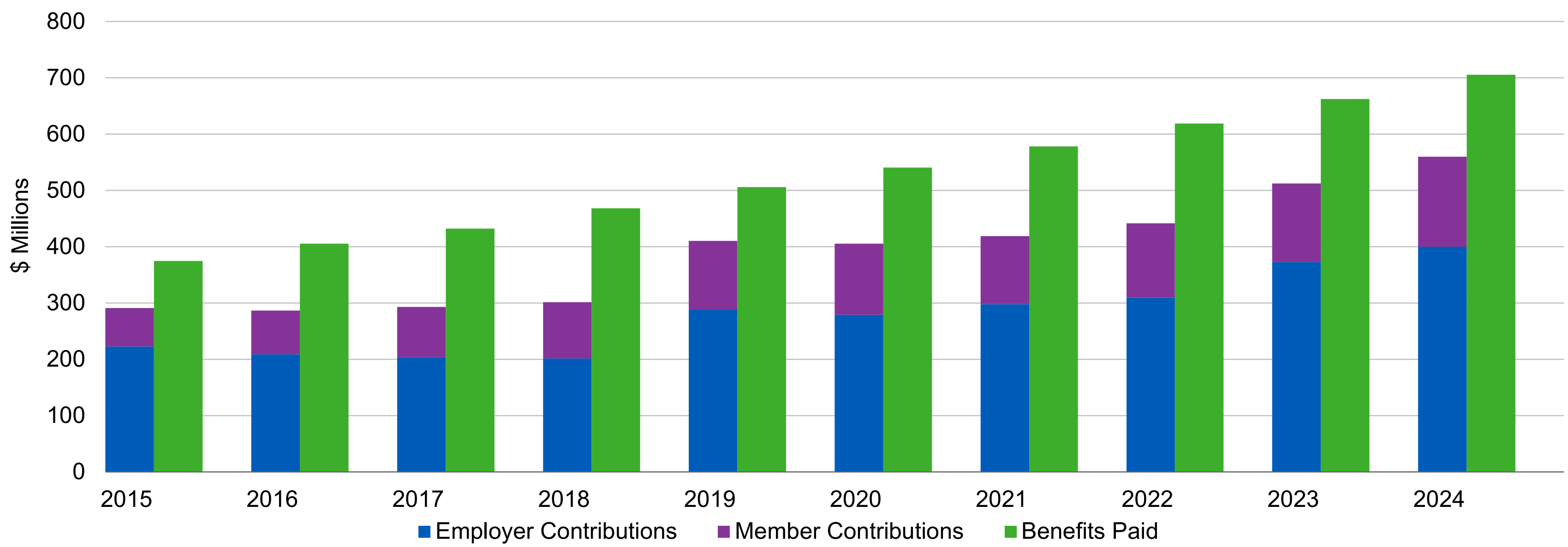
B. Financial information

Retirement plan funding anticipates that, over the long term, both contributions and investment earnings (less investment fees and administrative expenses) will be needed to cover benefit payments. 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



Determination of Actuarial Value and Valuation Value of Assets for Year Ended June 30, 2024

Step		Actual Return	Expected Return	Investment Gain/(Loss)	Percent Deferred	Amount
1.	Market value of assets					$13,309,631,420
2.	Calculation of unrecognized return					
	a. Year ended June 30, 2019	$665,185,884	$649,300,474	$15,885,410	14.3%	$2,269,344
	b. Year ended June 30, 2020	292,913,229	690,394,213	(397,480,984)	28.6%	(113,565,995)
	c. Year ended June 30, 2021	2,744,248,606	676,831,490	2,067,417,116	42.9%	886,035,907
	d. Year ended June 30, 2022	(556,708,213)	851,772,426	(1,408,480,639)	57.1%	(804,846,079)
	e. Year ended June 30, 2023	682,769,803	802,694,164	(119,924,361)	71.4%	(85,660,258)
	f. Year ended June 30, 2024	1,092,170,751	840,834,933	251,335,818	85.7%	215,430,701
	g. Total deferred return[1]					**$99,663,620**
3.	**Preliminary actuarial value of assets: 1 − 2g**					**$13,209,967,800**
4.	Adjustment to be within 30% corridor					0
5.	**Final actuarial value of assets: 3 + 4**					**$13,209,967,800**
6.	Ratio of actuarial to market value:					99.3%
7.	**Non-valuation reserves**					
	a. Contingency reserve					$399,288,943
	b. Other non-valuation reserves					0
	c. Total: 7a + 7b					**$399,288,943**
8.	**Preliminary valuation value of assets: 3 – 7c**					**$12,810,678,858**
9.	Non-valuation amounts:					
	a. Balance of transfer to offset member COLA rate[2, 3]					$10,750,000
10.	**Final Valuation Value of Assets: 8 − 9a**					**$12,799,928,858**

[1] Deferred return as of June 30, 2024 recognized in each of the next six years:

a. Amount recognized on June 30, 2025	$58,393,193	d. Amount recognized on June 30, 2028	(182,438,454)
b. Amount recognized on June 30, 2026	56,123,850	e. Amount recognized on June 30, 2029	18,773,067
c. Amount recognized on June 30, 2027	112,906,848	f. Amount recognized on June 30, 2030	35,905,116
		g. Total unrecognized return as of June 30, 2024	**$99,663,620**

[2] This amount has been applied in this valuation to offset the legacy members' COLA contribution rates over their expected remaining active working career of 7.62 years. There is a reduction in the aggregate member rate of 0.12% when expressed as a percent of payroll for all members in this valuation.

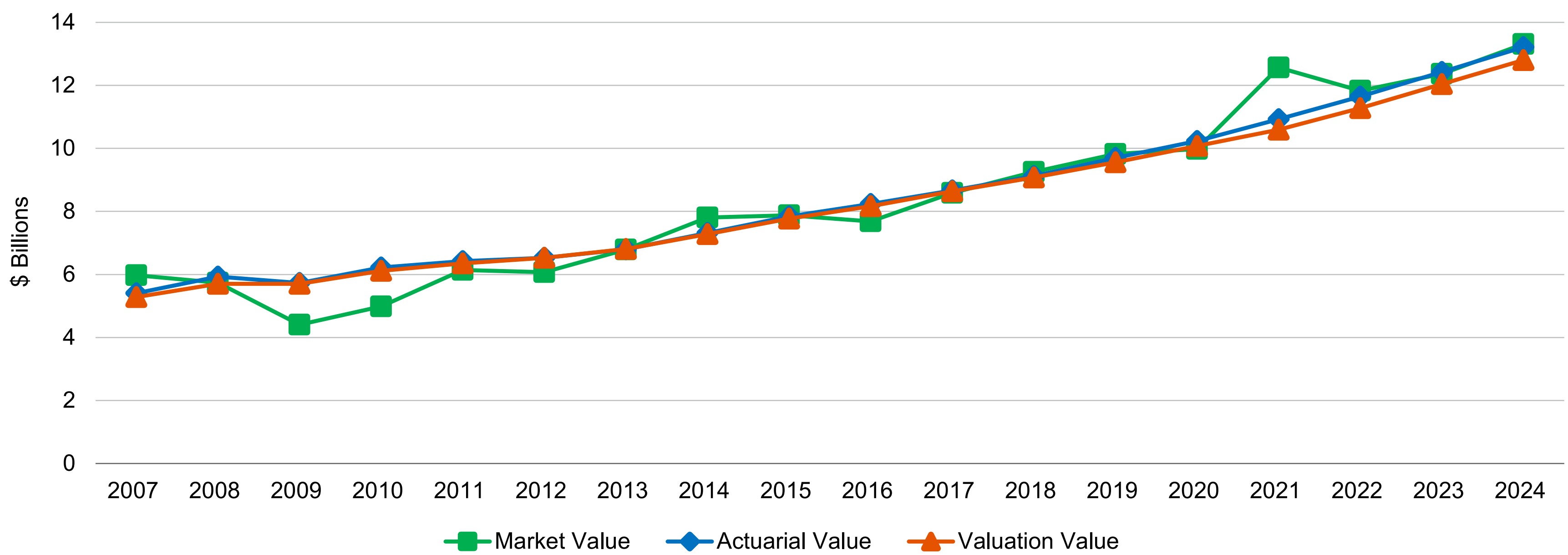
[3] Of this amount, about $508,000 may be reverted to the employer reserves to reduce the UAAL after all members in the corresponding legacy tiers have separated employment.

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 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.

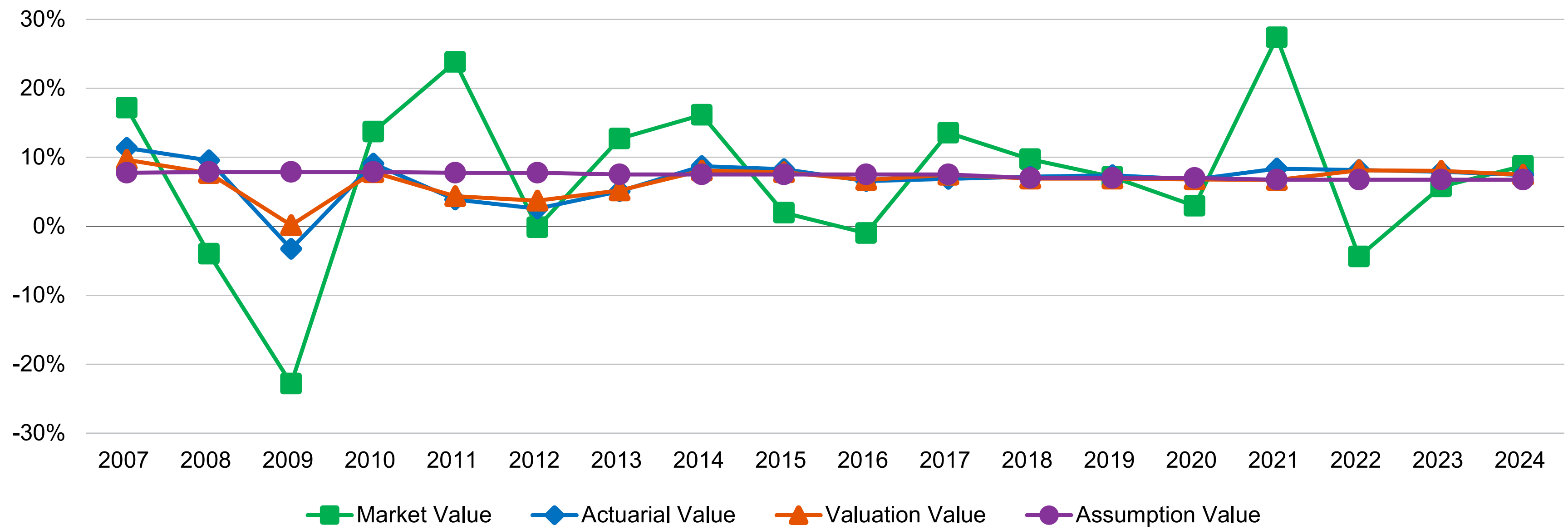
Market Value, Actuarial Value, and Valuation Value of Assets as of June 30



Section 2: Actuarial Valuation Results

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
Market rate	17.19%	(3.98%)	(22.81%)	13.71%	23.81%	(0.16%)	12.73%	16.13%	1.94%	(1.00%)	13.55%	9.73%	7.17%	2.97%	27.37%	(4.41%)	5.74%	8.77%
Actuarial rate	11.37%	9.56%	(3.27%)	9.08%	3.89%	2.57%	5.07%	8.70%	8.28%	6.57%	6.88%	7.21%	7.39%	6.79%	8.36%	8.15%	7.90%	7.45%
Valuation rate	9.65%	7.72%	0.16%	7.83%	4.37%	3.73%	5.19%	8.06%	7.82%	6.70%	7.46%	6.93%	6.91%	6.79%	6.72%	8.13%	8.02%	7.46%
Assumed rate	7.75%	7.875%	7.875%	7.875%	7.75%	7.75%	7.50%	7.50%	7.50%	7.50%	7.50%	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	7.59%	7.73%	7.42%
Most recent 10-year geometric average return	6.87%	7.50%	7.29%
Most recent 15-year geometric average return	8.87%	6.94%	6.80%

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. There are no changes in actuarial assumptions reflected in this valuation.

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, 2024

Source	Amount
1. Net (gain)/loss from investments[1]	$(86,214,000)
2. Net (gain)/loss from contributions	(46,837,000)
3. Net (gain)/loss from other experience[2]	92,327,000
4. Net experience (gain)/loss	**$(40,724,000)**

[1] Details on next page.
[2] See *Section 2, 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, 2023 valuation. The actual rate of return on a valuation basis for the 2023-2024 plan year was 7.46% 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, 2024 with regard to its investments.

Investment Experience for Year Ended June 30, 2024

Line Description	Market Value	Actuarial Value	Valuation Value
1. Net investment income	$1,092,170,000	$932,672,000	$905,260,000
2. Average value of assets	12,456,814,000	12,516,649,000	12,134,022,000
3. Rate of return: **1 ÷ 2**	8.77%	7.45%	7.46%
4. Assumed rate of return	6.75%	6.75%	6.75%
5. Expected investment income: **2 × 4**	$840,835,000	$844,874,000	$819,046,000
6. Investment gain/(loss): 1 − 5	**$251,335,000**	**$87,798,000**	**$86,214,000**

Contributions

Contributions for the year ended June 30, 2024 totaled $555.5 million, compared to the projected amount of $521.1 million. This resulted in a gain of $46.8 million for the year, when adjusted for timing. These exclude any contributions for withdrawn employers, if any.

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)
- Retiree and beneficiary COLAs higher or lower than anticipated

The net loss from this other experience for the year ended June 30, 2024 amounted to $92.3 million, which is 0.6% of the actuarial accrued liability. See *Section 2, Subsection E* for a detailed development of the unfunded actuarial accrued liability.

D. Other changes impacting the actuarial accrued liability

Actuarial assumptions and methods

The results of this valuation reflect a refinement in the method used to calculate the member COLA rate for employees paying less than 50% of the total normal cost rate, to be consistent with the calculation of the member COLA rate for employees paying 50% of the normal cost rate. The net impact of this change is to reduce the current year's total employer contributions by about $60,000 and to increase the current year's total employee contributions by the same amount.

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, 2024

	Line Description	Amount
1.	Unfunded actuarial accrued liability at beginning of year	$2,306,658,000
2.	Normal cost at middle of year	297,450,000
3.	Expected employer and member contributions[1]	(521,073,000)
4.	Interest to end of year	149,027,000
5.	**Expected unfunded actuarial accrued liability at end of year**	**$2,232,062,000**
6.	**Changes due to:**	
	a. Investment return greater than expected, after asset smoothing	$(86,214,000)
	b. Actual contributions greater than expected under funding policy[1, 2]	(46,837,000)
	c. Individual salary increases greater than expected	89,004,000
	d. COLA increases greater than expected	27,250,000
	e. Reduced retiree and beneficiary benefits from Alameda Decision	(17,135,000)
	f. Other net experience (gain)/loss	(6,792,000)
	g. Total changes	**$(40,724,000)**
7.	**Unfunded actuarial accrued liability at end of year: 5 + 6g**	**$2,191,338,000**

Note: The sum of items 6c through 6f equals the "Net (gain)/loss from other experience" shown in *Section 2, Subsection C*.

[1] Contribution from Sacramento Metropolitan Fire District is excluded from both the expected and the actual contributions.
[2] Due to the one-year lag in implementation of the contribution rates.

F. Recommended contribution

The recommended contribution is equal to the employer normal cost payment and a payment on the unfunded actuarial accrued liability. As of June 30, 2024, the average recommended employer contribution is 28.74% of payroll.

The Board sets the funding policy used to calculate the recommended contribution based on layered 20-year[1] amortization periods as a level percentage of payroll. See *Section 4, Exhibit 1* for further details on the funding policy. Based on this policy, there is no negative amortization and each amortization layer is fully funded in 20 years. As shown in the graphical projection of the UAAL amortization balances and payments found in *Section 3, Exhibit I*, before taking into consideration the deferred investment gains and/or losses that will be recognized in the next several valuations, the UAAL of the Plan is expected to be fully amortized by 2040,[2] assuming all assumptions are realized and contributions are made in accordance with the funding policy.

The current funding policy is intended to fully fund the cost of the benefits and to allocate the cost of benefits reasonably and equitably over time while minimizing the volatility of employer contributions. The recommended contribution is expected to remain level as a percent of payroll, except when any current amortization layer is fully amortized and assuming there are no future actuarial gains or losses. Furthermore, the funded ratio is expected to increase as the UAAL is methodically funded by employer contributions. The recommended contribution under the funding policy is a "Reasonable Actuarially Determined Contribution" as required under Actuarial Standard of Practice No. 4 Measuring Pension Obligations and Determining Pension Plan Costs or Contributions.

[1] Changes in UAAL due to actuarial gains or losses, or changes in actuarial assumptions or methods for each valuation are amortized over separate 20-year periods. Changes in UAAL due to plan amendments are generally amortized over separate 15-year periods.
[2] The UAAL is expected to be fully amortized earlier than the 20-year amortization period due to the current combination of charge and credit amortization layers.

Average Recommended Employer Contribution Calculated as of June 30

($ in '000s)

Line Description	2024 Amount	2024 % of Projected Compensation	2023 Amount	2023 % of Projected Compensation
1. Total normal cost	$317,684	23.38%	$297,450	23.76%
2. Expected member normal cost contributions	(153,935)	(11.33%)	(145,228)	(11.60%)
3. Employer normal cost: **1 – 2**	$163,749	12.05%	$152,222	12.16%
4. Actuarial accrued liability[1]	14,991,267		14,347,124	
5. Valuation value of assets[1]	12,799,929		12,040,466	
6. Unfunded actuarial accrued liability: **4 – 5**	$2,191,338		$2,306,658	
7. Payment on UAAL	226,811	16.69%	223,623	17.86%
8. Average recommended employer contribution: 3 + 7	**$390,560**	**28.74%**	**$375,845**	**30.02%**
9. Projected compensation	$1,358,649		$1,251,966	

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

[1] Excludes non-valuation reserves and amounts.

Reconciliation of average recommended employer contribution rate

Reconciliation from June 30, 2023 to June 30, 2024

($ in '000s)

	Item	Contribution Rate	Estimated Annual Dollar Amount[1]
1.	Average recommended employer contribution as of June 30, 2023	29.81%	$404,898
2.	**Changes due to:**		
a.	Investment return greater than expected after asset smoothing	(0.46%)	(6,250)
b.	Actual contributions greater than expected[2]	(0.25%)	(3,397)
c.	Individual salary increases greater than expected	0.48%	6,522
d.	Decrease in UAAL rate from greater than expected increase in total payroll	(0.82%)	(11,141)
e.	COLA increases greater than expected	0.15%	2,038
f.	Reduced retiree and beneficiary benefits from Alameda Decision	(0.09%)	(1,245)
g.	Other net experience (gain)/loss[3]	(0.08%)	(865)
h.	**Total change**	**(1.07%)**	**$(14,338)**
3.	**Average recommended employer contribution as of June 30, 2024: 1 + 2h**	**28.74%**	**$390,560**

[1] Based on June 30, 2024 projected annual compensation as shown on the prior page.
[2] Due to the one-year lag in implementation of the contribution rates.
[3] Includes a refinement in the method as discussed on page 30 that decreases the current year's contributions by about $60,000.

Reconciliation of average recommended member contribution rate

Reconciliation from June 30, 2023 to June 30, 2024

($ in '000s)

Item	Contribution Rate	Estimated Annual Dollar Amount[1]
1. Average recommended member contribution as of June 30, 2023	11.36%	$154,342
2. Changes due to:		
a. Change in member demographics on normal cost[2]	(0.03%)	(407)
b. Total change	**(0.03%)**	**(407)**
3. Average recommended member contribution as of June 30, 2024: 1 + 2b	**11.33%**	**$153,935**

[1] Based on June 30, 2024 projected annual compensation.

[2] Includes a refinement in the method as discussed on page 30 that increases the current year's contributions by about $60,000.

Recommended employer contribution rate

County[1] Miscellaneous — Recommended Employer Contribution Calculated as of June 30

($ in '000s)

Component by Tier	2024 Basic Contribution Rate	2024 COLA Contribution Rate	2024 Total Contribution Rate	2024 Estimated Annual Amount[2]	2023 Total Contribution Rate	2023 Estimated Annual Amount[2]
Miscellaneous – Tier 1 Members						
Normal cost	8.85%	2.95%	11.80%	$60	12.50%	$63
UAAL	10.30%	1.22%	11.52%	59	12.36%	63
Total Contribution	**19.15%**	**4.17%**	**23.32%**	**$119**	**24.86%**	**$126**
Miscellaneous – Tier 2 Members						
Normal cost	8.12%	0.00%	8.12%	$143	7.92%	$139
UAAL	10.30%	1.22%	11.52%	203	12.36%	217
Total Contribution	**18.42%**	**1.22%**	**19.64%**	**$346**	**20.28%**	**$356**
Miscellaneous – Tier 3 Members						
Normal cost	8.80%	2.10%	10.90%	$39,367	10.91%	$39,403
UAAL	10.30%	1.22%	11.52%	41,607	12.36%	44,640
Total Contribution	**19.10%**	**3.32%**	**22.42%**	**$80,974**	**23.27%**	**$84,043**
Miscellaneous – Tier 4 Members						
Normal cost	8.58%	1.89%	10.47%	$3,279	10.47%	$3,278
UAAL	10.30%	1.22%	11.52%	3,607	12.36%	3,870
Total Contribution	**18.88%**	**3.11%**	**21.99%**	**$6,886**	**22.83%**	**$7,148**
Miscellaneous – Tier 5 Members						
Normal cost	7.90%	1.66%	9.56%	$46,836	9.60%	$47,032
UAAL	10.30%	1.22%	11.52%	56,438	12.36%	60,553
Total Contribution	**18.20%**	**2.88%**	**21.08%**	**$103,274**	**21.96%**	**$107,585**
All Miscellaneous County Combined						
Normal cost	8.29%	1.85%	10.14%	$89,685	10.16%	$89,915
UAAL	10.30%	1.22%	11.52%	101,914	12.36%	109,343
Total Contribution	**18.59%**	**3.07%**	**21.66%**	**$191,599**	**22.52%**	**$199,258**

[1] Includes elected officials (Board of Supervisors, Sheriff, District Attorney and Assessor).
[2] Based on June 30, 2024 projected annual payroll, as detailed on page 42. Excludes SacSewer members.

County[1] Safety — Recommended Employer Contribution Calculated as of June 30

($ in ‘000s)

Component by Tier	2024 Basic Contribution Rate	2024 COLA Contribution Rate	2024 Total Contribution Rate	2024 Estimated Annual Amount[2]	2023 Total Contribution Rate	2023 Estimated Annual Amount[2]
Safety – Tier 1 Members						
Normal cost[3]	22.82%	7.96%	30.78%	$656	25.91%	$551
UAAL	29.56%	5.39%	34.95%	744	36.61%	779
Total Contribution	**52.38%**	**13.35%**	**65.73%**	**$1,400**	**62.52%**	**$1,330**
Safety – Tier 2 Members						
Normal cost	16.46%	4.73%	21.19%	$24,963	21.09%	$24,846
UAAL	29.56%	5.39%	34.95%	41,174	36.61%	43,130
Total Contribution	**46.02%**	**10.12%**	**56.14%**	**$66,137**	**57.70%**	**$67,976**
Safety – Tier 3 Members						
Normal cost	16.07%	4.44%	20.51%	$4,073	20.63%	$4,097
UAAL	29.56%	5.39%	34.95%	6,940	36.61%	7,270
Total Contribution	**45.63%**	**9.83%**	**55.46%**	**$11,013**	**57.24%**	**$11,367**
Safety – Tier 4 Members						
Normal cost	11.49%	3.15%	14.64%	$21,552	14.68%	$21,611
UAAL	29.56%	5.39%	34.95%	51,451	36.61%	53,895
Total Contribution	**41.05%**	**8.54%**	**49.59%**	**$73,003**	**51.29%**	**$75,506**
All Safety County Combined						
Normal cost	13.93%	3.92%	17.85%	$51,244	17.81%	$51,105
UAAL	29.56%	5.39%	34.95%	100,309	36.61%	105,074
Total Contribution	**43.49%**	**9.31%**	**52.80%**	**$151,553**	**54.42%**	**$156,179**

1 Includes elected officials (Board of Supervisors, Sheriff, District Attorney and Assessor).
2 Based on June 30, 2024 projected annual payroll, as detailed on page 42.
3 Change in Safety Tier 1 normal cost rate is primarily due to an increase in the proportion of payroll for actives with over 30 years of service when expressed as a percentage of payroll for all actives (30% at June 30, 2024 vs 16% at June 30, 2023), because Safety Tier 1 members with over 30 years of service are exempt from paying member contributions, and those contributions are paid by the employer.

County Total[1] — Recommended Employer Contribution Calculated as of June 30

($ in '000s)

Component by Tier	2024 Basic Contribution Rate	2024 COLA Contribution Rate	2024 Total Contribution Rate	2024 Estimated Annual Amount[2]	2023 Total Contribution Rate	2023 Estimated Annual Amount[2]
All Miscellaneous and Safety County Combined						
Normal cost	9.67%	2.35%	12.03%	$140,929	12.03%	$141,020
UAAL	15.02%	2.24%	17.26%	202,223	18.30%	214,417
Total Contribution	**24.69%**	**4.60%**	**29.29%**	**$343,152**	**30.33%**	**$355,437**

[1] Includes elected officials (Board of Supervisors, Sheriff, District Attorney and Assessor).
[2] Based on June 30, 2024 projected annual payroll, as detailed on page 42.

SacSewer — Recommended Employer Contribution Calculated as of June 30

($ in '000s)

Component by Tier	2024 Basic Contribution Rate	2024 COLA Contribution Rate	2024 Total Contribution Rate	2024 Estimated Annual Amount[1]	2023 Total Contribution Rate[2]	2023 Estimated Annual Amount[1]
Miscellaneous – Tier 1 Members						
Total Contribution			**N/A[3]**			
Miscellaneous – Tier 2 Members						
Normal cost	11.60%	0.00%	11.60%	$14	11.16%	$14
UAAL	10.28%	1.21%	11.49%	14	12.36%	15
Total Contribution	**21.88%**	**1.21%**	**23.09%**	**$28**	**23.52%**	**$29**
Miscellaneous – Tier 3 Members						
Normal cost	12.47%	2.10%	14.57%	$5,643	14.85%	$5,751
UAAL	10.28%	1.21%	11.49%	4,450	12.36%	4,787
Total Contribution	**22.75%**	**3.31%**	**26.06%**	**$10,093**	**27.21%**	**$10,538**
Miscellaneous – Tier 4 Members						
Normal cost	8.41%	1.86%	10.27%	$304	10.67%	$315
UAAL	10.28%	1.21%	11.49%	340	12.36%	365
Total Contribution	**18.69%**	**3.07%**	**21.76%**	**$644**	**23.03%**	**$680**
Miscellaneous – Tier 5 Members						
Normal cost	7.80%	1.67%	9.47%	$3,144	9.60%	$3,187
UAAL	10.28%	1.21%	11.49%	3,814	12.36%	4,103
Total Contribution	**18.08%**	**2.88%**	**20.96%**	**$6,958**	**21.96%**	**$7,290**
All SacSewer Combined						
Normal cost	10.24%	1.90%	12.14%	$9,105	12.36%	$9,267
UAAL	10.28%	1.21%	11.49%	8,618	12.36%	9,270
Total Contribution	**20.52%**	**3.11%**	**23.63%**	**$17,723**	**24.72%**	**$18,537**

[1] Based on June 30, 2024 projected annual payroll, as detailed on page 42. Reflects rate adjustment of -0.28% of payroll due to issuance of Pension Obligation Bonds by the County covering SacSewer when it was a County department, as shown on page 123.

[2] These contribution rates, determined before considering Pension Obligation Bonds debt service paid by SacSewer to service those Bonds, were shown in our April 25, 2024 letter and are effective from December 15, 2024 through June 30, 2025.

[3] There were no Miscellaneous Tier 1 SacSewer active members reported for the June 30, 2024 valuation.

Superior Court — Recommended Employer Contribution Calculated as of June 30

($ in '000s)

Component by Tier	2024 Basic Contribution Rate	2024 COLA Contribution Rate	2024 Total Contribution Rate	2024 Estimated Annual Amount[1]	2023 Total Contribution Rate	2023 Estimated Annual Amount[1]
Miscellaneous – Tier 1 Members						
Normal cost	13.41%	2.95%	16.36%	$22	17.92%	$24
UAAL	10.28%	1.21%	11.49%	15	12.33%	16
Total Contribution	**23.69%**	**4.16%**	**27.85%**	**$37**	**30.25%**	**$40**
Miscellaneous – Tier 2 Members						
Normal cost	12.15%	0.00%	12.15%	$62	11.73%	$60
UAAL	10.28%	1.21%	11.49%	59	12.33%	63
Total Contribution	**22.43%**	**1.21%**	**23.64%**	**$121**	**24.06%**	**$123**
Miscellaneous – Tier 3 Members						
Normal cost	13.48%	2.10%	15.58%	$5,070	15.67%	$5,099
UAAL	10.28%	1.21%	11.49%	3,739	12.33%	4,012
Total Contribution	**23.76%**	**3.31%**	**27.07%**	**$8,809**	**28.00%**	**$9,111**
Miscellaneous – Tier 5 Members						
Normal cost	7.90%	1.66%	9.56%	$3,335	9.60%	$3,349
UAAL	10.28%	1.21%	11.49%	4,008	12.33%	4,301
Total Contribution	**18.18%**	**2.87%**	**21.05%**	**$7,343**	**21.93%**	**$7,650**
All Superior Court Combined						
Normal cost	10.61%	1.86%	12.47%	$8,489	12.53%	$8,532
UAAL	10.28%	1.21%	11.49%	7,821	12.33%	8,392
Total Contribution	**20.89%**	**3.07%**	**23.96%**	**$16,310**	**24.86%**	**$16,924**

[1] Based on June 30, 2024 projected annual payroll, as detailed on page 42.

District — Recommended Employer Contribution Calculated as of June 30

($ in '000s)

Component by Tier	2024 Basic Contribution Rate	2024 COLA Contribution Rate	2024 Total Contribution Rate	2024 Estimated Annual Amount[1]	2023 Total Contribution Rate	2023 Estimated Annual Amount[1]
Miscellaneous – Tier 3 Members						
Normal cost	13.34%	2.10%	15.44%	$2,703	15.51%	$2,716
UAAL	16.60%	1.96%	18.56%	3,250	19.93%	3,490
Total Contribution	**29.94%**	**4.06%**	**34.00%**	**$5,953**	**35.44%**	**$6,206**
Miscellaneous – Tier 5 Members						
Normal cost	7.90%	1.66%	9.56%	$2,523	9.60%	$2,534
UAAL	16.60%	1.96%	18.56%	4,899	19.93%	5,260
Total Contribution	**24.50%**	**3.62%**	**28.12%**	**$7,422**	**29.53%**	**$7,794**
All Districts Combined						
Normal cost	10.07%	1.83%	11.90%	$5,226	11.96%	$5,250
UAAL	16.60%	1.96%	18.56%	8,149	19.93%	8,750
Total Contribution	**26.67%**	**3.79%**	**30.46%**	**$13,375**	**31.89%**	**$14,000**

All Employers — Recommended Employer Contribution Calculated as of June 30

($ in '000s)

Component by Tier	2024 Basic Contribution Rate	2024 COLA Contribution Rate	2024 Total Contribution Rate	2024 Estimated Annual Amount[1]	2023 Total Contribution Rate	2023 Estimated Annual Amount[1]
All Employers Combined						
Normal cost	9.76%	2.29%	12.05%	$163,749	12.08%	$164,069
UAAL	14.57%	2.12%	16.69%	226,811	17.73%	240,829
Total Contribution	**24.33%**	**4.41%**	**28.74%**	**$390,560**	**29.81%**	**$404,898**

[1] Based on June 30, 2024 projected annual payroll, as detailed on page 42.

The following June 30, 2024 projected annual payroll is used in developing employer contribution rates on the six previous pages:

Projected Annual Payroll[1]

($ in '000s)

Tier	County[2]	SacSewer	Superior Court	District	Total
Miscellaneous					
Miscellaneous Tier 1	$510	$0	$133	$0	$643
Miscellaneous Tier 2	1,758	124	514	0	2,396
Miscellaneous Tier 3	361,169	38,730	32,539	17,512	449,950
Miscellaneous Tier 4	31,313	2,956	0	0	34,269
Miscellaneous Tier 5	489,912	33,195	34,881	26,394	584,382
Subtotal	**$884,662**	**$75,005**	**$68,067**	**$43,906**	**$1,071,640**
Safety					
Safety Tier 1	$2,129	$0	$0	$0	$2,129
Safety Tier 2	117,808	0	0	0	117,808
Safety Tier 3	19,857	0	0	0	19,857
Safety Tier 4	147,214	0	0	0	147,214
Subtotal	**$287,009**	**$0**	**$0**	**$0**	**$287,009**
Total contribution	**$1,171,671**	**$75,005**	**$68,067**	**$43,906**	**$1,358,649**

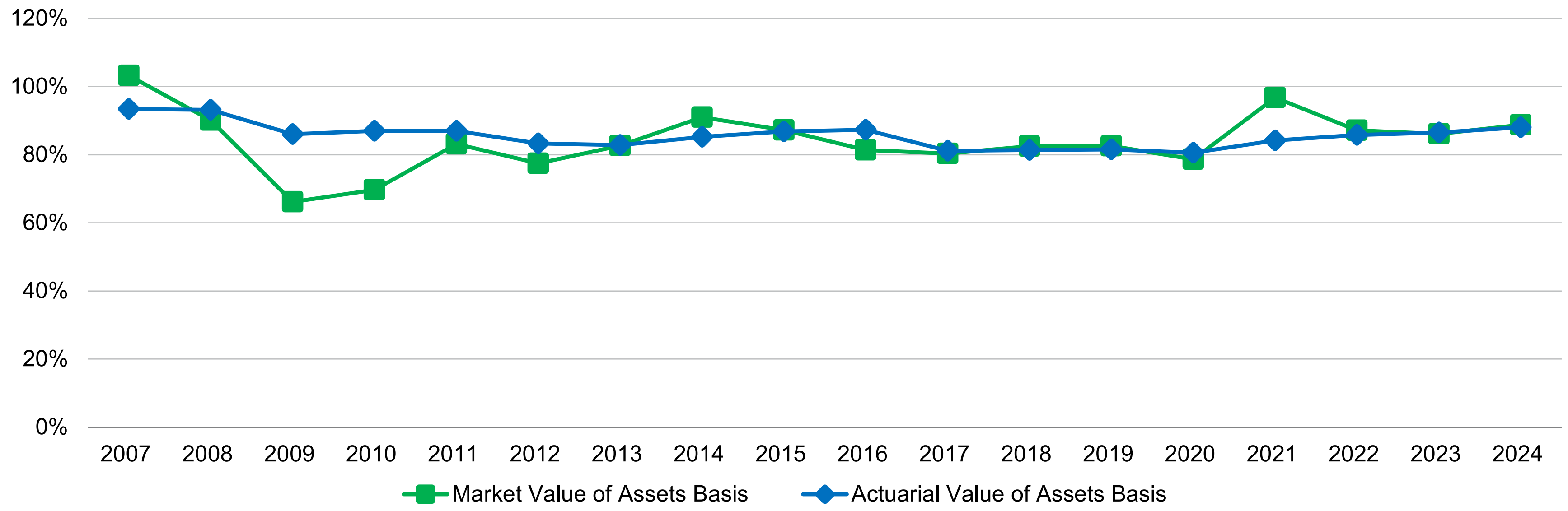
[1] Results may not total due to rounding.
[2] Excludes SacSewer members.

G. Funded status

A commonly reported piece of information regarding the Plan's financial status is the funded ratio. These ratios compare the market and actuarial 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 actuarial value of assets is used.

Funded Ratio as of June 30



Schedule of Funding Progress

As of June 30	Actuarial Value of Assets[1] (a)	Actuarial Accrued Liability (AAL)[2] (b)	Unfunded AAL (UAAL) (b) − (a)	Funded Ratio (a) ÷ (b)	Projected Compensation (c)	UAAL as a % of Projected Compensation [(b) − (a)] ÷ (c)
2015	$7,838,825,000	$9,028,679,000	$1,189,854,000	86.8%	$897,341,000	132.6%
2016	8,236,402,000	9,436,090,000	1,199,688,000	87.3	938,555,000	127.8
2017	8,665,226,000	10,680,998,000	2,015,772,000	81.1	980,359,000	205.6
2018	9,123,004,000	11,213,263,000	2,090,259,000	81.4	1,007,815,000	207.4
2019	9,703,313,000	11,895,520,000	2,192,207,000	81.6	1,038,341,000	211.1
2020	10,229,760,000	12,693,655,000	2,463,894,000	80.6	1,070,512,000	230.2
2021[3]	10,929,549,000	13,309,706,000	2,380,157,000	82.1	1,081,961,000	220.0
2022[4]	11,647,866,000	13,578,984,000	1,931,118,000	85.8	1,131,640,000	170.6
2023[5]	12,423,093,000	14,358,854,000	1,935,761,000	86.5	1,251,966,000	154.6
2024[6]	13,209,968,000	15,002,017,000	1,792,049,000	88.1	1,358,649,000	131.9

1 Includes the Contingency Reserve and other non-valuation reserves and amounts.
2 Prior to June 30, 2022, the AAL included the Contingency Reserve and other non-valuation reserves and amounts. Starting with the June 30, 2022 valuation, the Contingency Reserve is no longer included in the AAL.
3 If as of June 30, 2021, the Contingency Reserve were not included in the AAL, the funded status would have been 84.2% measured on an AVA basis.
4 As of June 30, 2022, the UAAL on a VVA basis was $2,286,029,000 and the funded ratio on a VVA basis is 83.1%.
5 As of June 30, 2023, the UAAL on a VVA basis was $2,306,658,000 and the funded ratio on a VVA basis is 83.9%.
6 As of June 30, 2024, the UAAL on a VVA basis is $2,191,338,000 and the funded ratio on a VVA basis is 85.4%.

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, 2024

($ in '000s)

Line Description	Basic	COLA	Total
Liabilities			
Present value of benefits for retired members and beneficiaries	$5,907,338	$3,473,420	$9,380,758
Present value of benefits for inactive members[1]	393,608	86,574	480,182
Present value of benefits for active members	6,299,823	1,527,348	7,827,171
Other non-valuation reserves	0	0	0
Contingency Reserve	399,289	0	399,289
Total liabilities	**$13,000,058**	**$5,087,342**	**$18,087,400**
Current and Future Assets			
Total valuation value of assets	$8,508,899	$4,291,030	$12,799,929
Present value of future contributions by members[2]	958,144	257,205	1,215,349
Present value of future employer contributions for:			
• Entry age normal cost	1,220,141	250,604	1,470,745
• Unfunded actuarial accrued liability	1,913,585	277,753	2,191,338
Balance of transfer to offset member COLA rate[3]	0	10,750	10,750
Contingency Reserve	399,289	0	399,289
Total of current and future assets	**$13,000,058**	**$5,087,342**	**$18,087,400**

Note: Results may not total due to rounding.

[1] Includes inactive members due a refund of member contributions.
[2] Calculated assuming all legacy members pay the "full rate", as described on pages 111-112.
[3] Of this amount, about $508,000 may be reverted to the employer reserves to reduce the UAAL after all members in the corresponding legacy tiers have separated employment.

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 report 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. 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 in the plan that can inform both financial preparation and future decision-making. This assessment would enable us to work with the Board to highlight and illustrate particular risks or potential future outcomes they may be interested in discussing and could include scenario testing, sensitivity testing, stress testing 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 50, a 1% asset gain or loss (relative to the assumed investment return) translates to about 9.8% of one-year's payroll. Since actuarial gains and losses are amortized over 20 years, there would be a 0.7% of payroll decrease/(increase) in the required contribution for each 1% asset gain/(loss).

The year-by-year market value rate of return over the last 10 years has ranged from a low of -4.41% to a high of 27.37%.

- **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 Safety groups).

Some plans also carry significant contribution risk, defined as the potential for actual future contributions deviating from expected future contributions. However, the employers have a proven track-record of making the actuarially determined contributions based on the Board's Actuarial Funding Policy, so contribution risk is minimal.

Evaluation of historical trends

Past experience can help demonstrate the sensitivity of key results to the Plan's actual experience. Over the past 10 years:

- The funded percentage on the actuarial value of assets basis has increased from 86.8% to 88.1%. This is primarily due to contributions made to amortize the UAAL (i.e., amortizing each layer of UAAL over 20 years as a level percentage of pay) and average recent years' investment return on a smoothed basis greater than the assumption. For a more detailed history see *Section 2, Subsection G, Funded status* starting on page 43.
- The average geometric investment return on the actuarial value of assets over the last 10 years was 7.50%. This includes a high of 8.36% and a low of 6.57%. The average over the last five years is 7.73%. For more details see the *Section 2, Subsection B, Historical investment returns* on page 26.

- The primary source of new UAAL was the strengthening of assumptions through multiple assumption changes. In particular, the assumption changes in 2017 changed the discount rate from 7.50% to 7.00% and updated mortality tables, adding $824 million in unfunded liability. The assumption changes in 2020 changed the discount rate from 7.00% to 6.75% and updated mortality tables, adding $216 million in unfunded liability. For more details on unfunded liability changes see *Section 3, Exhibit H, Table of Amortization Bases* starting on page 79.
- The Plan's funding policy effectively deals with these unfunded liabilities over time. This can be seen most clearly in *Section 3, Exhibit I, Projection of UAAL balances and payments* starting on page 85.

Maturity measures

In the last 10 years the ratio of members in pay status to active participants has increased from 0.87 to 1.04. An increased ratio indicates that the plan has grown in maturity over time. This is to be expected, but is also informative for understanding plan sensitivity to particular risks. 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 $145.8 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. However, the Plan currently has a low level of negative cash flow and is relatively well funded (at an 88.1% funded ratio). For more details on historical cash flows see *Section 2, Subsection B, Financial information* on page 23.

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 50.

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 3.93% for use effective June 30, 2024. This is the rate used to determine the discount rate for valuing reported public pension plan liabilities in accordance with Governmental Accounting Standards when plan assets are projected to be insufficient to make projected benefit payments, and the 20-year period reasonably approximates the duration of plan liabilities. The LDROM is not used to determine a plan's funded status or actuarially determined contribution rates. The plan's expected return on assets, currently 6.75%, is used for these calculations.

As of June 30, 2024, the LDROM for the Plan is $21.96 billion.[1] The difference between the Plan's AAL of $15.00 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] For comparison purposes, as of June 30, 2023, the LDROM was $21.95 billion based on a discount rate of 3.65%, while the Plan's AAL was $14.36 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 is about 9.8. This means that a 1% asset gain or loss (relative to the assumed investment return) translates to about 9.8% of one-year's payroll. Since actuarial gains and losses are amortized over 20 years, there would be a 0.7% of payroll decrease/(increase) in the required contribution for each 1% asset gain/(loss).

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 11.0 but is 8.9 for Miscellaneous compared to 19.1 for Safety. This means, for example, that assumption changes will have a greater impact on employer contribution rates for Safety than for Miscellaneous. The total Plan LVR is about 12% higher than the AVR. Therefore, we would expect that contribution volatility will increase over the long term.

Volatility Ratios

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

As of June 30	AVR Miscellaneous	AVR Safety	AVR Total	LVR Miscellaneous	LVR Safety	LVR Total
2015	7.5	13.0	8.8	8.4	15.8	10.1
2016	7.0	12.2	8.2	8.4	15.7	10.1
2017	7.4	13.5	8.8	8.9	17.8	10.9
2018	7.8	14.0	9.2	9.1	18.0	11.1
2019	8.0	14.6	9.5	9.4	18.6	11.5
2020	7.8	14.4	9.3	9.6	18.9	11.7
2021	9.7	18.4	11.6	10.0	20.3	12.3
2022	8.7	16.8	10.5	9.7	20.0	12.0
2023	8.2	16.1	9.9	9.3	19.4	11.5
2024	8.0	16.4	9.8	8.9	19.1	11.0

Section 3: Supplemental Information

Exhibit A: Table of plan demographics

Total Plan — Demographics as of June 30

Demographic Data by Status	2024	2023	Change
Active members			
• Number	13,690	13,167	4.0%
• Average age	44.4	44.7	-0.3
• Average years of service	10.3	10.8	-0.5
• Total projected compensation[1]	$1,358,649,370	$1,251,965,469	8.5%
• Average projected compensation	$99,244	$95,084	4.4%
• Account balances	$1,096,309,392	$1,025,063,181	7.0%
• Total active vested members	8,364	8,386	-0.3%
Inactive members[2]			
• Number	4,935	4,702	5.0%
• Average age	45.9	46.1	-0.2
Retired members			
• Number	11,698	11,392	2.7%
• Average age	70.5	70.2	0.3
• Average monthly benefit	$4,532	$4,373	3.6%
Disabled members			
• Number	704	692	1.7%
• Average age	67.0	67.8	-0.8
• Average monthly benefit	$3,617	$3,438	5.2%
Beneficiaries			
• Number	1,883	1,850	1.8%
• Average age	73.9	73.5	0.4
• Average monthly benefit	$2,444	$2,360	3.6%

[1] Projected compensation was calculated by increasing the annualized compensation earned during the past fiscal year for each active member by the individual service-based salary scale assumption for the upcoming fiscal year, as shown in *Section 4, Exhibit 1*.

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

Miscellaneous Tier 1 — Demographics as of June 30

Demographic Data by Status[1]	2024	2023	Change
Active members			
• Number	6	7	-14.3%
• Average age	69.2	68.6	0.6
• Average years of service	39.5	40.0	-0.5
• Total projected compensation[2]	$642,851	$677,830	-5.2%
• Average projected compensation	$107,142	$96,833	10.6%
• Account balances	$1,306,791	$1,434,610	-8.9%
• Total active vested members	6	7	-14.3%
Inactive members[3]			
• Number	14	17	-17.6%
• Average age	71.8	73.7	-1.9
Retired members			
• Number	2,083	2,175	-4.2%
• Average age	79.1	78.4	0.7
• Average monthly benefit	$5,016	$4,767	5.2%
Disabled members			
• Number	91	99	-8.1%
• Average age	79.8	78.9	0.9
• Average monthly benefit	$3,015	$2,890	4.3%
Beneficiaries			
• Number	677	697	-2.9%
• Average age	80.4	80.0	0.4
• Average monthly benefit	$2,597	$2,483	4.6%

[1] Includes 38 members associated with SacSewer: 35 service retirees and 3 beneficiaries.

[2] Projected compensation was calculated by increasing the annualized compensation earned during the past fiscal year for each active member by the individual service-based salary scale assumption for the upcoming fiscal year, as shown in *Section 4, Exhibit 1*.

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

Miscellaneous Tier 2 — Demographics as of June 30

Demographic Data by Status[1]	2024	2023	Change
Active members			
• Number	23	28	-17.9%
• Average age	60.6	59.5	1.1
• Average years of service	31.2	31.6	-0.4
• Total projected compensation[2]	$2,396,050	$2,680,706	-10.6%
• Average projected compensation	$104,176	$95,739	8.8%
• Account balances	$3,155,234	$3,547,194	-11.0%
• Total active vested members	23	28	-17.9%
Inactive members[3]			
• Number	58	71	-18.3%
• Average age	63.5	62.3	1.2
Retired members			
• Number	395	395	0.0%
• Average age	71.4	71.2	0.2
• Average monthly benefit	$1,361	$1,299	4.8%
Disabled members			
• Number	22	23	-4.3%
• Average age	72.6	71.5	1.1
• Average monthly benefit	$975	$979	-0.4%
Beneficiaries			
• Number	68	64	6.3%
• Average age	74.6	73.8	0.8
• Average monthly benefit	$883	$883	0.0%

1 Includes 4 members associated with SacSewer: 1 active member, 1 service retiree and 2 beneficiaries.

2 Projected compensation was calculated by increasing the annualized compensation earned during the past fiscal year for each active member by the individual service-based salary scale assumption for the upcoming fiscal year, as shown in *Section 4, Exhibit 1*.

3 Includes inactive members due a refund of member contributions.

Miscellaneous Tier 3 — Demographics as of June 30

Demographic Data by Status[1]	2024	2023	Change
Active members			
• Number	4,085	4,449	-8.2%
• Average age	53.4	53.0	0.4
• Average years of service	21.1	20.5	0.6
• Total projected compensation[2]	$449,950,413	$461,425,336	-2.5%
• Average projected compensation	$110,147	$103,714	6.2%
• Account balances	$522,462,836	$518,160,244	0.8%
• Total active vested members	4,067	4,424	-8.1%
Inactive members[3]			
• Number	2,082	2,160	-3.6%
• Average age	52.2	51.6	0.6
Retired members			
• Number	6,753	6,479	4.2%
• Average age	69.7	69.2	0.5
• Average monthly benefit	$3,408	$3,265	4.4%
Disabled members			
• Number	300	301	-0.3%
• Average age	66.7	66.6	0.1
• Average monthly benefit	$2,237	$2,151	4.0%
Beneficiaries			
• Number	649	605	7.3%
• Average age	70.0	69.3	0.7
• Average monthly benefit	$1,494	$1,428	4.6%

[1] Includes 686 members associated with SacSewer: 308 active members, 46 inactive members, 299 service retirees, 11 disabled retirees and 22 beneficiaries.

[2] Projected compensation was calculated by increasing the annualized compensation earned during the past fiscal year for each active member by the individual service-based salary scale assumption for the upcoming fiscal year, as shown in *Section 4, Exhibit 1*.

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

Miscellaneous Tier 4 — Demographics as of June 30

Demographic Data by Status[1]	2024	2023	Change
Active members			
• Number	279	292	-4.5%
• Average age	48.3	47.7	0.6
• Average years of service	9.9	9.1	0.8
• Total projected compensation[2]	$34,268,560	$32,736,064	4.7%
• Average projected compensation	$122,826	$112,110	9.6%
• Account balances	$25,173,303	$22,525,351	11.8%
• Total active vested members	258	264	-2.3%
Inactive members[3]			
• Number	137	133	3.0%
• Average age	46.0	45.1	0.9
Retired members			
• Number	44	33	33.3%
• Average age	64.3	63.4	0.9
• Average monthly benefit	$1,437	$1,312	9.5%
Disabled members			
• Number	3	1	200.0%
• Average age	52.2	60.6	-8.4
• Average monthly benefit	$2,738	$3,136	-12.7%
Beneficiaries			
• Number	2	2	0.0%
• Average age	64.5	63.5	1.0
• Average monthly benefit	$1,167	$1,144	2.0%

[1] Includes 43 members associated with SacSewer: 25 active members, 10 inactive members, 7 service retirees and 1 disabled retiree.
[2] Projected compensation was calculated by increasing the annualized compensation earned during the past fiscal year for each active member by the individual service-based salary scale assumption for the upcoming fiscal year, as shown in *Section 4, Exhibit 1*.
[3] Includes inactive members due a refund of member contributions.

Miscellaneous Tier 5 — Demographics as of June 30

Demographic Data by Status[1]	2024	2023	Change
Active members			
• Number	7,159	6,285	13.9%
• Average age	40.4	40.3	0.1
• Average years of service	4.1	3.9	0.2
• Total projected compensation[2]	$584,382,609	$482,676,862	21.1%
• Average projected compensation	$81,629	$76,798	6.3%
• Account balances	$204,232,161	$160,267,712	27.4%
• Total active vested members	2,607	2,235	16.6%
Inactive members[3]			
• Number	2,200	1,886	16.6%
• Average age	39.9	39.6	0.3
Retired members			
• Number	115	76	51.3%
• Average age	65.8	65.0	0.8
• Average monthly benefit	$990	$896	10.5%
Disabled members			
• Number	7	3	133.3%
• Average age	49.8	47.8	2.0
• Average monthly benefit	$1,987	$1,845	7.7%
Beneficiaries			
• Number	6	6	0.0%
• Average age	54.7	53.7	1.0
• Average monthly benefit	$806	$790	2.0%

[1] Includes 449 members associated with SacSewer: 352 active members, 94 inactive members and 3 service retirees.

[2] Projected compensation was calculated by increasing the annualized compensation earned during the past fiscal year for each active member by the individual service-based salary scale assumption for the upcoming fiscal year, as shown in *Section 4, Exhibit 1*.

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

Safety Tier 1 — Demographics as of June 30

Demographic Data by Status	2024	2023	Change
Active members			
• Number	11	15	-26.7%
• Average age	56.9	55.4	1.5
• Average years of service	22.2	25.1	-2.9
• Total projected compensation[1]	$2,128,957	$2,873,445	-25.9%
• Average projected compensation	$193,542	$191,563	1.0%
• Account balances	$3,867,198	$5,513,376	-29.9%
• Total active vested members	9	14	-35.7%
Inactive members[2]			
• Number	9	12	-25.0%
• Average age	57.0	56.1	0.9
Retired members			
• Number	1,324	1,345	-1.6%
• Average age	69.1	68.4	0.7
• Average monthly benefit	$9,212	$8,853	4.1%
Disabled members			
• Number	165	173	-4.6%
• Average age	69.8	69.5	0.3
• Average monthly benefit	$6,136	$5,842	5.0%
Beneficiaries			
• Number	376	381	-1.3%
• Average age	73.0	72.1	0.9
• Average monthly benefit	$4,090	$3,867	5.8%

[1] Projected compensation was calculated by increasing the annualized compensation earned during the past fiscal year for each active member by the individual service-based salary scale assumption for the upcoming fiscal year, as shown in *Section 4, Exhibit 1*.

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

Safety Tier 2 — Demographics as of June 30

Demographic Data by Status	2024	2023	Change
Active members			
• Number	667	764	-12.7%
• Average age	47.4	46.9	0.5
• Average years of service	20.7	20.3	0.4
• Total projected compensation[1]	$117,808,286	$124,830,535	-5.6%
• Average projected compensation	$176,624	$163,391	8.1%
• Account balances	$215,427,858	$216,688,274	-0.6%
• Total active vested members	665	762	-12.7%
Inactive members[2]			
• Number	261	283	-7.8%
• Average age	47.2	46.7	0.5
Retired members			
• Number	953	864	10.3%
• Average age	60.5	60.4	0.1
• Average monthly benefit	$6,898	$6,616	4.3%
Disabled members			
• Number	99	87	13.8%
• Average age	56.6	56.7	-0.1
• Average monthly benefit	$4,769	$4,422	7.8%
Beneficiaries			
• Number	102	92	10.9%
• Average age	60.6	59.7	0.9
• Average monthly benefit	$2,501	$2,413	3.6%

[1] Projected compensation was calculated by increasing the annualized compensation earned during the past fiscal year for each active member by the individual service-based salary scale assumption for the upcoming fiscal year, as shown in *Section 4, Exhibit 1*.
[2] Includes inactive members due a refund of member contributions.

Safety Tier 3 — Demographics as of June 30

Demographic Data by Status	2024	2023	Change
Active members			
• Number	119	123	-3.3%
• Average age	44.6	43.9	0.7
• Average years of service	11.3	10.4	0.9
• Total projected compensation[1]	$19,857,449	$18,959,020	4.7%
• Average projected compensation	$166,869	$154,138	8.3%
• Account balances	$25,464,407	$22,242,946	14.5%
• Total active vested members	108	112	-3.6%
Inactive members[2]			
• Number	14	14	0.0%
• Average age	40.6	40.6	0.0
Retired members			
• Number	8	4	100.0%
• Average age	59.6	61.4	-1.8
• Average monthly benefit	$3,875	$2,615	48.2%
Disabled members			
• Number	3	2	50.0%
• Average age	42.6	43.8	-1.2
• Average monthly benefit	$3,819	$3,167	20.6%
Beneficiaries			
• Number	—	—	N/A
• Average age	N/A	N/A	N/A
• Average monthly benefit	N/A	N/A	N/A

[1] Projected compensation was calculated by increasing the annualized compensation earned during the past fiscal year for each active member by the individual service-based salary scale assumption for the upcoming fiscal year, as shown in *Section 4, Exhibit 1*.

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

Safety Tier 4 — Demographics as of June 30

Demographic Data by Status	2024	2023	Change
Active members			
• Number	1,341	1,204	11.4%
• Average age	35.3	34.7	0.6
• Average years of service	5.1	4.6	0.5
• Total projected compensation[1]	$147,214,196	$125,105,670	17.7%
• Average projected compensation	$109,779	$103,908	5.7%
• Account balances	$95,219,604	$74,683,476	27.5%
• Total active vested members	621	540	15.0%
Inactive members[2]			
• Number	160	126	27.0%
• Average age	35.0	35.1	-0.1
Retired members			
• Number	23	21	9.5%
• Average age	62.0	61.3	0.7
• Average monthly benefit	$1,592	$1,580	0.8%
Disabled members			
• Number	14	3	366.7%
• Average age	41.1	58.3	-17.2
• Average monthly benefit	$4,377	$4,231	3.5%
Beneficiaries			
• Number	3	3	0.0%
• Average age	42.9	41.9	1.0
• Average monthly benefit	$4,312	$4,227	2.0%

[1] Projected compensation was calculated by increasing the annualized compensation earned during the past fiscal year for each active member by the individual service-based salary scale assumption for the upcoming fiscal year, as shown in *Section 4, Exhibit 1*.

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

Exhibit B: Distribution of active members

Total Plan
Active Counts & Average Projected Compensation by Age and Years of Service as of June 30, 2024

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	356	354	2	—	—	—	—	—	—	—
	$66,193	$66,188	$67,009	—	—	—	—	—	—	—
25–29	1,197	1,118	79	—	—	—	—	—	—	—
	$78,907	$77,459	$99,388	—	—	—	—	—	—	—
30–34	1,843	1,189	620	34	—	—	—	—	—	—
	$86,648	$79,000	$99,377	$121,986	—	—	—	—	—	—
35–39	1,825	847	676	207	91	4	—	—	—	—
	$94,562	$82,663	$98,505	$119,000	$117,398	$163,789	—	—	—	—
40–44	1,910	628	498	237	431	116	—	—	—	—
	$104,647	$83,762	$98,287	$115,843	$125,783	$143,609	—	—	—	—
45–49	2,042	434	352	182	469	525	78	2	—	—
	$111,760	$82,857	$97,311	$114,449	$120,538	$127,916	$168,584	$166,875	—	—
50–54	1,808	351	283	133	333	465	217	23	3	—
	$111,953	$89,494	$97,922	$112,076	$113,537	$120,509	$145,124	$119,104	$101,822	—
55–59	1,429	257	197	116	256	297	169	116	21	—
	$106,697	$85,738	$98,038	$101,009	$108,300	$107,916	$131,261	$128,101	$123,139	—
60–64	915	115	160	85	161	202	88	75	27	2
	$100,297	$84,927	$92,280	$98,961	$105,743	$99,599	$123,694	$104,139	$103,495	$97,681
65–69	287	33	48	30	50	58	33	20	12	3
	$92,034	$81,063	$89,171	$98,370	$97,667	$82,729	$96,491	$110,717	$98,000	$83,763
70 and over	78	9	13	13	14	9	7	9	1	3
	$92,415	$88,736	$80,144	$88,985	$92,423	$101,051	$108,897	$91,170	$130,542	$98,120
Total	**13,690**	**5,335**	**2,928**	**1,037**	**1,805**	**1,676**	**592**	**245**	**64**	**8**
	$99,244	**$80,455**	**$97,849**	**$112,062**	**$116,433**	**$118,367**	**$137,933**	**$117,462**	**$109,255**	**$92,626**

Miscellaneous Tier 1
Active Counts & Average Projected Compensation by Age and Years of Service as of June 30, 2024

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	1	—	—	—	—	—	—	—	—	1
	$114,289	—	—	—	—	—	—	—	—	$114,289
65–69	2	—	—	—	—	—	1	1	—	—
	$107,056	—	—	—	—	—	$151,989	$62,121	—	—
70 and over	3	—	—	—	—	—	—	1	—	2
	$104,817	—	—	—	—	—	—	$80,013	—	$117,219
Total	**6**	**—**	**—**	**—**	**—**	**—**	**1**	**2**	**—**	**3**
	$107,142	**—**	**—**	**—**	**—**	**—**	**$151,989**	**$71,067**	**—**	**$116,242**

Miscellaneous Tier 2

Active Counts & Average Projected Compensation by Age and Years of Service as of June 30, 2024

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	2	—	—	—	—	—	—	2	—	—
	$87,341	—	—	—	—	—	—	$87,341	—	—
55–59	9	—	—	—	1	1	—	6	1	—
	$109,981	—	—	—	$70,267	$140,309	—	$109,489	$122,320	—
60–64	7	—	—	—	—	—	1	6	—	—
	$105,289	—	—	—	—	—	$92,371	$107,442	—	—
65–69	4	—	—	—	—	1	—	3	—	—
	$113,760	—	—	—	—	$86,559	—	$122,827	—	—
70 and over	1	—	—	—	1	—	—	—	—	—
	$39,480	—	—	—	$39,480	—	—	—	—	—
Total	**23**	**—**	**—**	**—**	**2**	**2**	**1**	**17**	**1**	**—**
	$104,176	**—**	**—**	**—**	**$54,874**	**$113,434**	**$92,371**	**$108,514**	**$122,320**	**—**

Miscellaneous Tier 3

Active Counts & Average Projected Compensation by Age and Years of Service as of June 30, 2024

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	1	—	—	1	—	—	—	—	—	—
	$168,656	—	—	$168,656	—	—	—	—	—	—
35–39	104	2	6	26	68	2	—	—	—	—
	$99,444	$83,797	$93,495	$98,421	$99,944	$129,208	—	—	—	—
40–44	464	6	16	77	302	63	—	—	—	—
	$107,908	$105,873	$97,212	$116,513	$107,763	$100,998	—	—	—	—
45–49	849	6	11	63	383	352	33	1	—	—
	$111,076	$117,002	$124,211	$121,583	$113,070	$105,199	$123,656	$159,336	—	—
50–54	970	1	11	49	307	403	177	19	3	—
	$115,861	$202,920	$103,033	$116,244	$111,036	$112,654	$131,938	$116,170	$101,822	—
55–59	890	1	8	59	243	287	163	109	20	—
	$112,810	$165,596	$92,731	$105,411	$105,375	$105,195	$129,232	$127,967	$123,180	—
60–64	582	2	8	32	158	199	86	69	27	1
	$104,684	$83,788	$101,663	$99,267	$104,520	$98,280	$123,904	$103,852	$103,495	$81,072
65–69	182	—	1	12	49	57	32	16	12	3
	$94,750	—	$118,830	$116,233	$97,467	$82,661	$94,757	$111,484	$98,000	$83,763
70 and over	43	—	—	5	13	9	6	8	1	1
	$95,570	—	—	$83,805	$96,495	$101,051	$99,269	$92,565	$130,542	$59,922
Total	**4,085**	**18**	**61**	**324**	**1,523**	**1,372**	**497**	**222**	**63**	**5**
	$110,147	**$113,385**	**$103,115**	**$111,927**	**$108,263**	**$105,263**	**$126,322**	**$117,140**	**$109,047**	**$78,456**

Miscellaneous Tier 4

Active Counts & Average Projected Compensation by Age and Years of Service as of June 30, 2024

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	3	—	—	3	—	—	—	—	—	—
	$94,735	—	—	$94,735	—	—	—	—	—	—
35–39	48	3	15	30	—	—	—	—	—	—
	$123,762	$155,117	$122,328	$121,344	—	—	—	—	—	—
40–44	67	5	21	40	1	—	—	—	—	—
	$117,693	$162,922	$125,878	$106,549	$165,380	—	—	—	—	—
45–49	60	3	22	32	1	1	1	—	—	—
	$121,234	$154,734	$132,157	$110,768	$62,750	$157,683	$137,412	—	—	—
50–54	40	7	17	16	—	—	—	—	—	—
	$147,918	$187,448	$164,873	$112,609	—	—	—	—	—	—
55–59	24	1	7	16	—	—	—	—	—	—
	$126,295	$140,861	$144,613	$117,370	—	—	—	—	—	—
60–64	21	1	5	15	—	—	—	—	—	—
	$113,189	$111,565	$140,618	$104,154	—	—	—	—	—	—
65–69	12	1	2	8	1	—	—	—	—	—
	$96,041	$114,179	$139,168	$81,565	$107,463	—	—	—	—	—
70 and over	4	—	1	3	—	—	—	—	—	—
	$101,765	—	$130,640	$92,140	—	—	—	—	—	—
Total	**279**	**21**	**90**	**163**	**3**	**1**	**1**	**—**	**—**	**—**
	$122,826	**$162,996**	**$136,811**	**$109,828**	**$111,864**	**$157,683**	**$137,412**	**—**	**—**	**—**

Miscellaneous Tier 5

Active Counts & Average Projected Compensation by Age and Years of Service as of June 30, 2024

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	276	274	2	—	—	—	—	—	—	—
	$57,557	$57,488	$67,009	—	—	—	—	—	—	—
25–29	906	859	47	—	—	—	—	—	—	—
	$71,071	$70,408	$83,198	—	—	—	—	—	—	—
30–34	1,419	1,007	403	9	—	—	—	—	—	—
	$79,128	$74,908	$89,397	$91,515	—	—	—	—	—	—
35–39	1,353	756	520	77	—	—	—	—	—	—
	$86,145	$80,371	$91,967	$103,509	—	—	—	—	—	—
40–44	1,032	575	387	70	—	—	—	—	—	—
	$86,609	$81,047	$92,304	$100,812	—	—	—	—	—	—
45–49	751	400	288	60	2	1	—	—	—	—
	$84,708	$79,633	$89,602	$95,001	$88,382	$79,995	—	—	—	—
50–54	594	305	237	49	3	—	—	—	—	—
	$86,574	$83,185	$90,206	$90,589	$78,569	—	—	—	—	—
55–59	436	235	162	37	2	—	—	—	—	—
	$86,198	$82,733	$92,260	$82,950	$62,407	—	—	—	—	—
60–64	280	109	137	34	—	—	—	—	—	—
	$85,421	$81,937	$87,478	$88,296	—	—	—	—	—	—
65–69	86	32	45	9	—	—	—	—	—	—
	$83,460	$80,029	$86,290	$81,515	—	—	—	—	—	—
70 and over	26	9	12	5	—	—	—	—	—	—
	$83,509	$88,736	$75,936	$92,273	—	—	—	—	—	—
Total	**7,159**	**4,561**	**2,240**	**350**	**7**	**1**	**—**	**—**	**—**	**—**
	$81,629	**$76,296**	**$90,413**	**$95,016**	**$76,755**	**$79,995**	**—**	**—**	**—**	**—**

Safety Tier 1
Active Counts & Average Projected Compensation by Age and Years of Service as of June 30, 2024

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	1	—	—	—	—	—	1	—	—	—
	$199,728	—	—	—	—	—	$199,728	—	—	—
50–54	5	—	—	—	1	—	3	1	—	—
	$178,683	—	—	—	$166,665	—	$180,898	$184,058	—	—
55–59	2	—	—	—	—	—	1	1	—	—
	$189,793	—	—	—	—	—	$125,188	$254,399	—	—
60–64	2	2	—	—	—	—	—	—	—	—
	$244,781	$244,781	—	—	—	—	—	—	—	—
65–69	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—
70 and over	1	—	—	—	—	—	1	—	—	—
	$166,665	—	—	—	—	—	$166,665	—	—	—
Total	**11**	**2**	**—**	**—**	**1**	**—**	**6**	**2**	**—**	**—**
	$193,542	**$244,781**	**—**	**—**	**$166,665**	**—**	**$172,379**	**$219,229**	**—**	**—**

Safety Tier 2
Active Counts & Average Projected Compensation by Age and Years of Service as of June 30, 2024

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	26	—	—	6	18	2	—	—	—	—
	$176,301	—	—	$161,507	$178,781	$198,370	—	—	—	—
40–44	187	1	1	12	120	53	—	—	—	—
	$175,362	$166,599	$174,875	$144,979	$170,130	$194,261	—	—	—	—
45–49	297	—	—	7	78	169	42	1	—	—
	$174,561	—	—	$169,742	$158,581	$175,113	$202,821	$174,413	—	—
50–54	124	1	1	7	19	59	36	1	—	—
	$180,020	$157,403	$154,521	$164,292	$158,347	$172,261	$208,755	$173,408	—	—
55–59	25	—	1	1	9	9	5	—	—	—
	$193,469	—	$86,762	$221,377	$201,745	$191,083	$198,625	—	—	—
60–64	8	—	—	1	3	3	1	—	—	—
	$178,501	—	—	$219,326	$170,171	$187,056	$137,004	—	—	—
65–69	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—
70 and over	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—
Total	**667**	**2**	**3**	**34**	**247**	**295**	**84**	**2**	**—**	**—**
	$176,624	**$162,001**	**$138,719**	**$161,404**	**$167,359**	**$178,749**	**$204,331**	**$173,911**	**—**	**—**

Safety Tier 3

Active Counts & Average Projected Compensation by Age and Years of Service as of June 30, 2024

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	2	—	—	2	—	—	—	—	—	—
	$179,712	—	—	$179,712	—	—	—	—	—	—
35–39	32	—	6	22	4	—	—	—	—	—
	$169,602	—	$187,997	$170,063	$139,471	—	—	—	—	—
40–44	34	4	8	19	3	—	—	—	—	—
	$164,027	$137,134	$168,155	$166,737	$171,712	—	—	—	—	—
45–49	31	6	9	10	4	1	1	—	—	—
	$169,225	$181,977	$180,609	$164,841	$126,664	$160,230	$213,345	—	—	—
50–54	16	1	5	6	1	2	1	—	—	—
	$165,624	$131,139	$181,084	$185,497	$79,624	$169,864	$81,098	—	—	—
55–59	1	—	—	1	—	—	—	—	—	—
	$87,599	—	—	$87,599	—	—	—	—	—	—
60–64	2	—	—	2	—	—	—	—	—	—
	$170,065	—	—	$170,065	—	—	—	—	—	—
65–69	1	—	—	1	—	—	—	—	—	—
	$170,153	—	—	$170,153	—	—	—	—	—	—
70 and over	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—
Total	**119**	**11**	**28**	**63**	**12**	**3**	**2**	**—**	**—**	**—**
	$166,869	**$161,049**	**$178,718**	**$168,700**	**$138,275**	**$166,653**	**$147,222**	**—**	**—**	**—**

Safety Tier 4
Active Counts & Average Projected Compensation by Age and Years of Service as of June 30, 2024

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	80	80	—	—	—	—	—	—	—	—
	$95,988	$95,988	—	—	—	—	—	—	—	—
25–29	291	259	32	—	—	—	—	—	—	—
	$103,301	$100,847	$123,166	—	—	—	—	—	—	—
30–34	418	182	217	19	—	—	—	—	—	—
	$111,474	$101,638	$117,910	$132,190	—	—	—	—	—	—
35–39	262	86	129	46	1	—	—	—	—	—
	$113,468	$100,250	$118,160	$125,070	$111,102	—	—	—	—	—
40–44	126	37	65	19	5	—	—	—	—	—
	$112,471	$103,674	$115,486	$118,780	$114,400	—	—	—	—	—
45–49	53	19	22	10	1	1	—	—	—	—
	$108,131	$97,296	$115,852	$108,880	$111,102	$133,652	—	—	—	—
50–54	57	36	12	6	2	1	—	—	—	—
	$116,554	$117,709	$111,405	$117,737	$114,533	$133,731	—	—	—	—
55–59	42	20	19	2	1	—	—	—	—	—
	$122,901	$114,297	$132,969	$120,844	$107,827	—	—	—	—	—
60–64	12	1	10	1	—	—	—	—	—	—
	$120,161	$66,708	$126,386	$111,366	—	—	—	—	—	—
65–69	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—
70 and over	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—
Total	**1,341**	**720**	**506**	**103**	**10**	**2**	**—**	**—**	**—**	**—**
	$109,779	**$101,657**	**$118,484**	**$123,009**	**$113,110**	**$133,692**	**—**	**—**	**—**	**—**

Exhibit C: Reconciliation of member data

Line Description	Active Members	Inactive Members[1]	Retired Members	Disabled Members	Beneficiaries	Total
Number as of June 30, 2023	13,167	4,702	11,392	692	1,850	31,803
New members	1,580	169	0	0	113	1,862
Terminations with vested rights	(476)	476	0	0	0	0
Contribution refunds	(160)	(196)	0	0	0	(356)
Retirements	(458)	(116)	574	0	0	0
New disabilities	(16)	(10)	(20)	46	0	0
Return to work	61	(60)	(1)	0	0	0
Died with or without beneficiary	(6)	(11)	(245)	(28)	(87)	(377)
Data adjustments[2]	(2)	(19)	(2)	(6)	7	(22)
Number as of June 30, 2024	**13,690**	**4,935**	**11,698**	**704**	**1,883**	**32,910**

[1] Includes inactive members due a refund of member contributions.
[2] Includes 8 deferred alternate payees as of June 30, 2023 in pay status as of June 30, 2024.

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

Statement of Income and Expenses for Years Ended June 30

Line Description	2024	2023
Contribution income		
• Employer contributions	$400,289,000	$373,023,000
• Member contributions	159,654,000	139,521,000
– **Net contribution income**	**$559,943,000**	**$512,543,000**
Investment income		
• Investment, dividends and other income	$322,286,000	$284,436,000
• Asset appreciation	923,264,000	503,818,000
• Less investment and administrative fees	(153,460,000)	(105,525,000)
– **Net investment income**	**$1,092,090,000**	**$682,729,000**
• Other income	$81,000	$41,000
Total income available for benefits	**$1,092,171,000**	**$1,195,314,000**
Less benefit payments		
• Benefits paid	$(698,773,000)	$(655,591,000)
• Refund of contributions	(6,967,000)	(6,815,000)
– **Net benefit payments**	**$(705,740,000)**	**$(662,407,000)**
Change in market value of assets	**$946,374,000**	**$532,907,000**
Net assets at market value at the beginning of the year	**$12,363,258,000**	**$11,830,351,000**
Net assets at market value at the end of the year	**$13,309,631,000**	**$12,363,258,000**

Note: Results may not total due to rounding.

Exhibit E: Summary statement of plan assets

Statement of Plan Assets as of June 30

Line Description	2024	2023
Cash equivalents	**$597,095,000**	**$588,578,000**
Accounts receivable		
• Accrued interest and dividends	$33,629,000	$30,450,000
• Employer contributions	45,413,000	37,869,000
• Other receivable	294,615,000	314,364,000
– **Total accounts receivable**	**$373,657,000**	**$382,683,000**
Investments		
• Equities	$7,603,467,000	$6,849,771,000
• Absolute return	840,864,000	845,895,000
• Fixed income investments	2,429,821,000	2,242,284,000
• Real assets	2,148,069,000	2,059,942,000
• Securities lending collateral	283,577,000	195,198,000
– **Total investments at market value**	**$13,305,798,000**	**$12,193,090,000**
Other assets	$6,903,000	$6,079,000
Total assets	**$14,283,453,000**	**$13,170,430,000**
Accounts payable		
• Accounts payable and other liabilities	$(11,807,000)	$(25,027,000)
• Investment trades and warrants payable	(685,855,000)	(590,580,000)
• Securities lending liability	(276,160,000)	(191,566,000)
– **Total accounts payable**	**$(973,821,000)**	**$(807,172,000)**
Net assets at market value	**$13,309,631,000**	**$12,363,258,000**
Net assets at actuarial value	**$13,209,968,000**	**$12,423,093,000**
Net assets at valuation value	**$12,799,929,000**	**$12,040,466,000**

Exhibit F: Summary of reported reserve information

Reserve Information as of June 30, 2024

Line Description	Reserves
Included in Valuation Value of Assets	
Employee Reserve	$1,194,095,850
Employer Reserve	3,422,532,749
Retiree Reserve	8,173,562,071
Death Benefit Reserve	20,488,188
Preliminary Valuation Value of Assets[1]	**$12,810,678,858**
Not Included in Valuation Value of Assets	
Contingency Reserve	399,288,943
Actuarial Value of Assets	**$13,209,967,800**
Market Stabilization Reserve	99,663,620
Market Value of Assets	**$13,309,631,420**

Note: Results may not total due to rounding.

[1] Please note that the Final Valuation Value of Assets (i.e., $12,799,928,858) as shown on page 24 is calculated by taking the Preliminary Valuation Value of Assets and adjusting for the balance of transfer to offset member COLA rate.

Change in Reserves

Line Description	Balance at June 30, 2023[1]	Interest Credit	Contributions	Benefits	Transfers	Unallocated Earnings	Balance at June 30, 2024
Employee Reserve	$1,100,473,153	$45,333,603	$159,653,961	$(6,967,217)	$(104,397,650)	$0	$1,194,095,850
Employer Reserve	3,273,279,268	214,894,259	400,289,050	(75,283)	(496,868,084)	31,013,539	3,422,532,749
Retiree Reserve	7,658,540,955	537,421,775	0	(697,731,746)	601,265,736	74,065,351	8,173,562,071
Death Benefit Reserve	19,902,302	1,365,855	0	(965,624)	0	185,655	20,488,188
Subtotal	**$12,052,195,678**	**$799,015,492**	**$559,943,011**	**$(705,739,870)**	**$2**	**$105,264,545**	**$12,810,678,858**
Contingency Reserve	370,897,726	0	0	0	0	28,391,217	399,288,943
Total Allocated Reserves	**$12,423,093,404**	**$799,015,492**	**$559,943,011**	**$(705,739,870)**	**$2**	**$133,655,762**	**$13,209,967,800**
Market Stabilization Reserve	(59,835,877)	159,499,497	0	0	0	0	99,663,620
Net Market Value of Assets	**$12,363,257,527**	**$958,514,989**	**$559,943,011**	**$(705,739,870)**	**$2**	**$133,655,762**	**$13,309,631,420**

Note: Results may not total due to rounding.

[1] Reflects adjustments by SCERS to the June 30, 2023 Employer Reserve, Retiree Reserve and Death Benefit Reserve balances.

Unallocated Earnings

Line Description	Per Interest Crediting and Unallocated Earnings Policy
Earnings from June 30, 2023 to June 30, 2024	$1,092,170,751
Amounts Credited for:	
Market Stabilization Reserve	(159,499,497)
Regular Interest Crediting	(799,015,492)
Subtotal	$(958,514,989)
Net Unallocated Earnings	**$133,655,762**
Amount Credited Under Unallocated Earnings Policy for:	
Contingency Reserve	$(28,391,217)
Employer Reserve	(31,013,539)
Retiree Reserve	(74,065,351)
Death Benefit Reserve	(185,655)
Subtotal	**$(133,655,762)**
Remaining Unallocated Earnings	**$0**

Note: Results may not total due to rounding.

Exhibit G: Development of the Plan through June 30, 2024

Year Ended June 30	Employer Contributions	Member Contributions	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
2015	$222,959,000	$68,143,000	$152,368,000	$374,657,000	$7,878,814,000	$7,838,825,000	99.5%
2016	209,020,000	77,494,000	(78,761,000)	405,702,000	7,680,865,000	8,236,402,000	107.2%
2017	203,928,000	89,489,000	1,042,009,000	432,066,000	8,584,225,000	8,665,226,000	100.9%
2018	201,631,000	99,906,000	834,484,000	468,309,000	9,251,937,000	9,123,004,000	98.6%
2019	288,581,000	121,843,000	665,186,000	505,853,000	9,821,694,000	9,703,313,000	98.8%
2020	279,168,000	126,354,000	292,913,000	540,751,000	9,979,379,000	10,229,760,000	102.5%
2021	298,345,000	120,597,000	2,744,249,000	578,421,000	12,564,149,000	10,929,549,000	87.0%
2022	309,276,000	132,526,000	(556,708,000)	618,892,000	11,830,351,000	11,647,865,000	98.5%
2023	373,023,000	139,521,000	682,770,000	662,407,000	12,363,258,000	12,423,093,000	100.5%
2024	400,289,000	159,654,000	1,092,171,000	705,740,000	13,309,631,420	13,209,968,000	99.3%

Note: Market value of assets at year-end calculated by taking previous year's market value and adjusting for cash flows may not total due to rounding.

[1] On a market value basis, net of investment and administrative expenses.

Exhibit H: Table of amortization bases

Miscellaneous County, Courts and Districts[1]

($ in '000s)

Base Type	Date Established: June 30	Initial Amount	Initial Period	Outstanding Balance	Years Remaining	Annual Payment
Restart amortization[2]	2012	$757,370	23	$648,066	11	$73,339
Actuarial loss[2]	2013	31,675	20	24,301	9	3,243
Actuarial gain[2]	2014	(116,416)	20	(94,195)	10	(11,519)
Assumption changes[2]	2014	(43,343)	20	(35,069)	10	(4,288)
Actuarial gain[2]	2015	(68,743)	20	(58,081)	11	(6,573)
Withdrawn employers[3]	2015	2,989	20	2,525	11	286
Actuarial loss[2]	2016	12,077	20	10,568	12	1,116
Actuarial loss[2]	2017	11,691	20	10,524	13	1,044
Assumption changes[2]	2017	434,180	20	390,830	13	38,768
Actuarial loss[2, 4]	2018	5,636	20	5,205	14	488
Actuarial loss[5]	2018	36,669	20	33,867	14	3,174
Actuarial loss[2, 4]	2019	5,636	20	5,313	15	473
Actuarial loss[5]	2019	47,940	20	45,203	15	4,024
Actuarial loss[2, 4]	2020	4,647	20	4,455	16	378
Actuarial loss[5]	2020	22,756	20	21,811	16	1,852
Assumption changes[5]	2020	174,598	20	167,339	16	14,207

1 Excludes SacSewer.
2 These amounts are spread over the payroll for all non-SacSewer Miscellaneous employers excluding Rio Linda Elverta Recreation and Parks District.
3 This amount reflects the net withdrawal liability for the Library Authority and Air Quality Districts and is spread over the payroll for Miscellaneous County only. See page 101 for more details.
4 These amounts are due to deferred investment losses that were established prior to July 1, 2017. The total amounts of those losses for Miscellaneous and Safety combined are: a) $9,275,175 for both June 30, 2018 and June 30, 2019, b) $7,648,231 for June 30, 2020, c) $91,838,760 for June 30, 2021, d) $29,429,469 for June 30, 2022, and e) ($66,465,826) for June 30, 2023.
5 These amounts are spread over the payroll for all non-SacSewer Miscellaneous employers including Rio Linda Elverta Recreation and Parks District.

Base Type	Date Established: June 30	Initial Amount	Initial Period	Outstanding Balance	Years Remaining	Annual Payment
Actuarial loss[1, 2]	2021	$55,806	20	$54,289	17	$4,413
Actuarial gain[3]	2021	(72,394)	20	(70,427)	17	(5,725)
Actuarial loss[1, 2]	2022	17,882	20	17,599	18	1,374
Actuarial gain[3]	2022	(58,889)	20	(57,955)	18	(4,525)
Actuarial gain[1, 2]	2023	(40,388)	20	(40,089)	19	(3,016)
Actuarial loss[3]	2023	74,321	20	73,771	19	5,550
Assumption changes[3]	2023	5,761	20	5,719	19	430
Actuarial gain[3]	2024	(13,487)	20	(13,487)	20	(980)
Subtotal				**$1,152,082**		**$117,533**

Note: Results may not total due to rounding.

[1] These amounts are spread over the payroll for all non-SacSewer Miscellaneous employers excluding Rio Linda Elverta Recreation and Parks District.

[2] These amounts are due to deferred investment losses that were established prior to July 1, 2017. The total amounts of those losses for all employers combined are: a) $9,275,175 for both June 30, 2018 and June 30, 2019, b) $7,648,231 for June 30, 2020, c) $91,838,760 for June 30, 2021, d) $29,429,469 for June 30, 2022, and e) ($66,465,826) for June 30, 2023.

[3] These amounts are spread over the payroll for all non-SacSewer Miscellaneous employers including Rio Linda Elverta Recreation and Parks District.

SacSewer

($ in '000s)

Base Type	Date Established: June 30	Initial Amount	Initial Period	Outstanding Balance	Years Remaining	Annual Payment
Restart amortization	2012	$57,030	23	$48,799	11	$5,522
Actuarial loss	2013	2,385	20	1,830	9	244
Actuarial gain	2014	(8,766)	20	(7,093)	10	(867)
Assumption changes	2014	(3,264)	20	(2,641)	10	(323)
Actuarial gain	2015	(5,176)	20	(4,374)	11	(495)
Actuarial loss	2016	909	20	796	12	84
Actuarial loss	2017	880	20	792	13	79
Assumption changes	2017	32,694	20	29,429	13	2,919
Actuarial loss[1]	2018	424	20	392	14	37
Actuarial loss	2018	2,760	20	2,549	14	239
Actuarial loss[1]	2019	424	20	400	15	36
Actuarial loss	2019	3,608	20	3,402	15	303
Actuarial loss[1]	2020	350	20	335	16	28
Actuarial loss	2020	1,713	20	1,641	16	139
Assumption changes	2020	13,140	20	12,594	16	1,069
Actuarial loss[1]	2021	4,202	20	4,088	17	332
Actuarial gain	2021	(5,448)	20	(5,300)	17	(431)
Actuarial loss[1]	2022	1,347	20	1,325	18	103
Actuarial gain	2022	(4,432)	20	(4,362)	18	(341)
Actuarial gain[1]	2023	(3,041)	20	(3,019)	19	(227)
Actuarial loss	2023	5,593	20	5,552	19	418

[1] These amounts are due to deferred investment losses that were established prior to July 1, 2017. The total amounts of those losses for Miscellaneous and Safety combined are: a) $9,275,175 for both June 30, 2018 and June 30, 2019, b) $7,648,231 for June 30, 2020, c) $91,838,760 for June 30, 2021, d) $29,429,469 for June 30, 2022, and e) ($66,465,826) for June 30, 2023.

Base Type	Date Established: June 30	Initial Amount	Initial Period	Outstanding Balance	Years Remaining	Annual Payment
Assumption changes	2023	$434	20	$430	19	$32
Actuarial gain	2024	(1,015)	20	(1,015)	20	(74)
Subtotal				**$86,550**		**$8,826**[1]

Note: Results may not total due to rounding.

[1] Before reflecting the rate adjustment of -0.28% of payroll due to issuance of Pension Obligation Bonds by the County covering SacSewer when it was a County department, as shown on page 123.

Safety

($ in '000s)

Base Type	Date Established: June 30	Initial Amount	Initial Period	Outstanding Balance	Years Remaining	Annual Payment
Restart amortization	2012	$493,928	23	$422,643	11	$47,829
Actuarial loss	2013	53,174	20	40,795	9	5,444
Actuarial gain	2014	(40,247)	20	(32,564)	10	(3,982)
Assumption changes	2014	62,388	20	50,480	10	6,173
Actuarial gain	2015	(8,318)	20	(7,028)	11	(795)
Actuarial gain	2016	(1,139)	20	(997)	12	(105)
Actuarial gain	2017	(14,836)	20	(13,356)	13	(1,325)
Assumption changes	2017	356,837	20	321,209	13	31,862
Actuarial loss	2018	44,898	20	41,468	14	3,887
Actuarial loss	2019	65,096	20	61,378	15	5,463
Actuarial loss	2020	54,193	20	51,939	16	4,410
Assumption changes	2020	28,359	20	27,180	16	2,308
Actuarial gain	2021	(23,837)	20	(23,189)	17	(1,885)
Actuarial loss	2022	877	20	863	18	67
Actuarial loss	2023	65,250	20	64,768	19	4,873
Assumption changes	2023	(26,859)	20	(26,661)	19	(2,006)
Actuarial gain	2024	(26,222)	20	(26,222)	20	(1,906)
Subtotal				**$952,706**		**$100,312**

Note: Results may not total due to rounding.

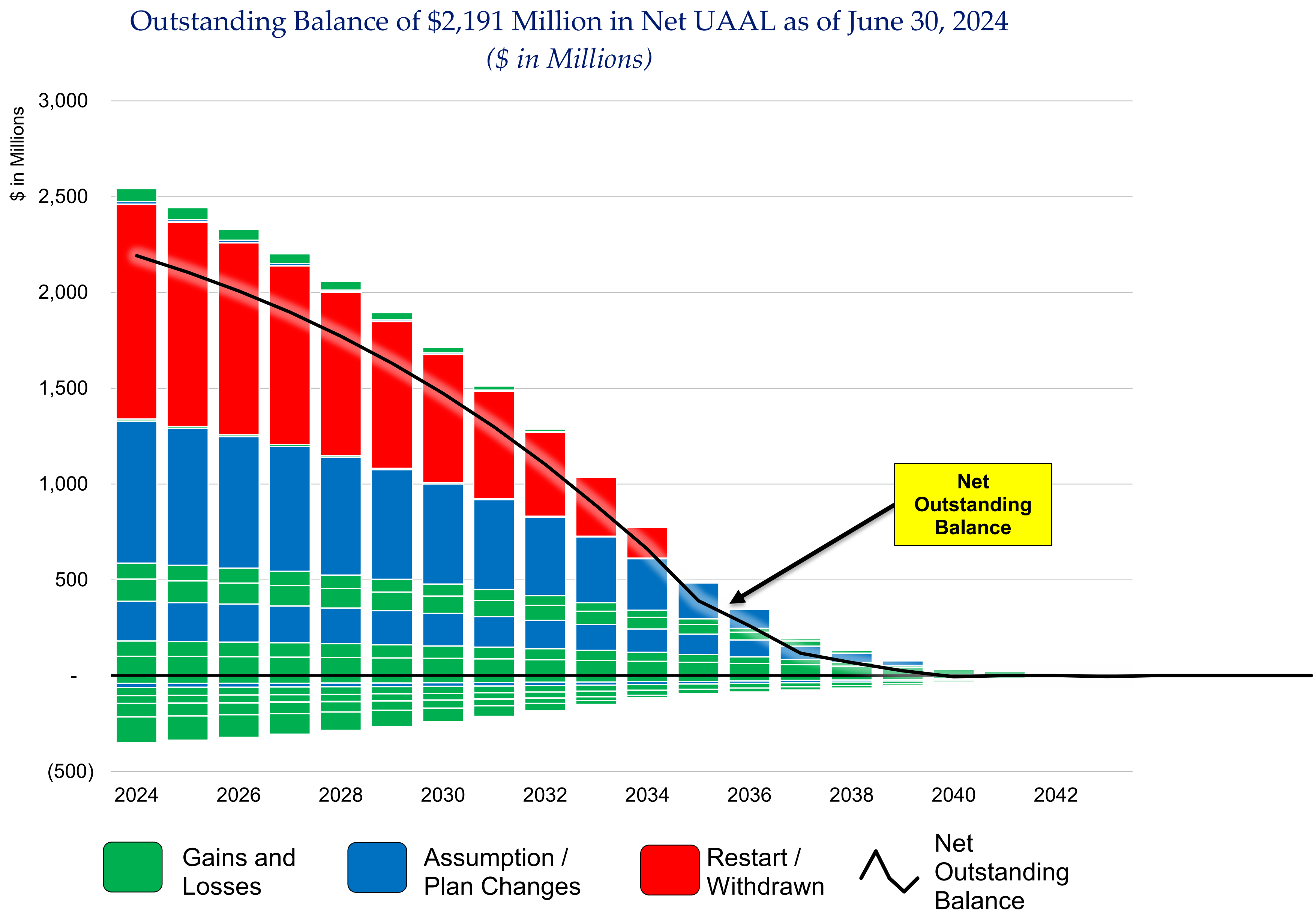
All Employers Combined

($ in '000s)

Base Type	Date Established: June 30	Initial Amount	Initial Period	Outstanding Balance	Years Remaining	Annual Payment
Restart amortization	2012	$1,308,328	23	$1,119,508	11	$126,691
Actuarial loss	2013	87,234	20	66,926	9	8,931
Actuarial gain	2014	(165,429)	20	(133,852)	10	(16,368)
Assumption changes	2014	15,781	20	12,770	10	1,561
Actuarial gain	2015	(82,237)	20	(69,483)	11	(7,863)
Withdrawn employers	2015	2,989	20	2,525	11	286
Actuarial loss	2016	11,847	20	10,367	12	1,095
Actuarial gain	2017	(2,265)	20	(2,040)	13	(202)
Assumption changes	2017	823,711	20	741,468	13	73,550
Actuarial loss	2018	90,387	20	83,481	14	7,825
Actuarial loss	2019	122,704	20	115,696	15	10,299
Actuarial loss	2020	83,659	20	80,181	16	6,807
Assumption changes	2020	216,097	20	207,113	16	17,584
Actuarial gain	2021	(41,671)	20	(40,539)	17	(3,296)
Actuarial gain	2022	(43,215)	20	(42,530)	18	(3,322)
Actuarial loss	2023	101,735	20	100,983	19	7,598
Assumption changes	2023	(20,664)	20	(20,512)	19	(1,544)
Actuarial gain	2024	(40,724)	20	(40,724)	20	(2,960)
Total				**$2,191,338**		**$226,672**

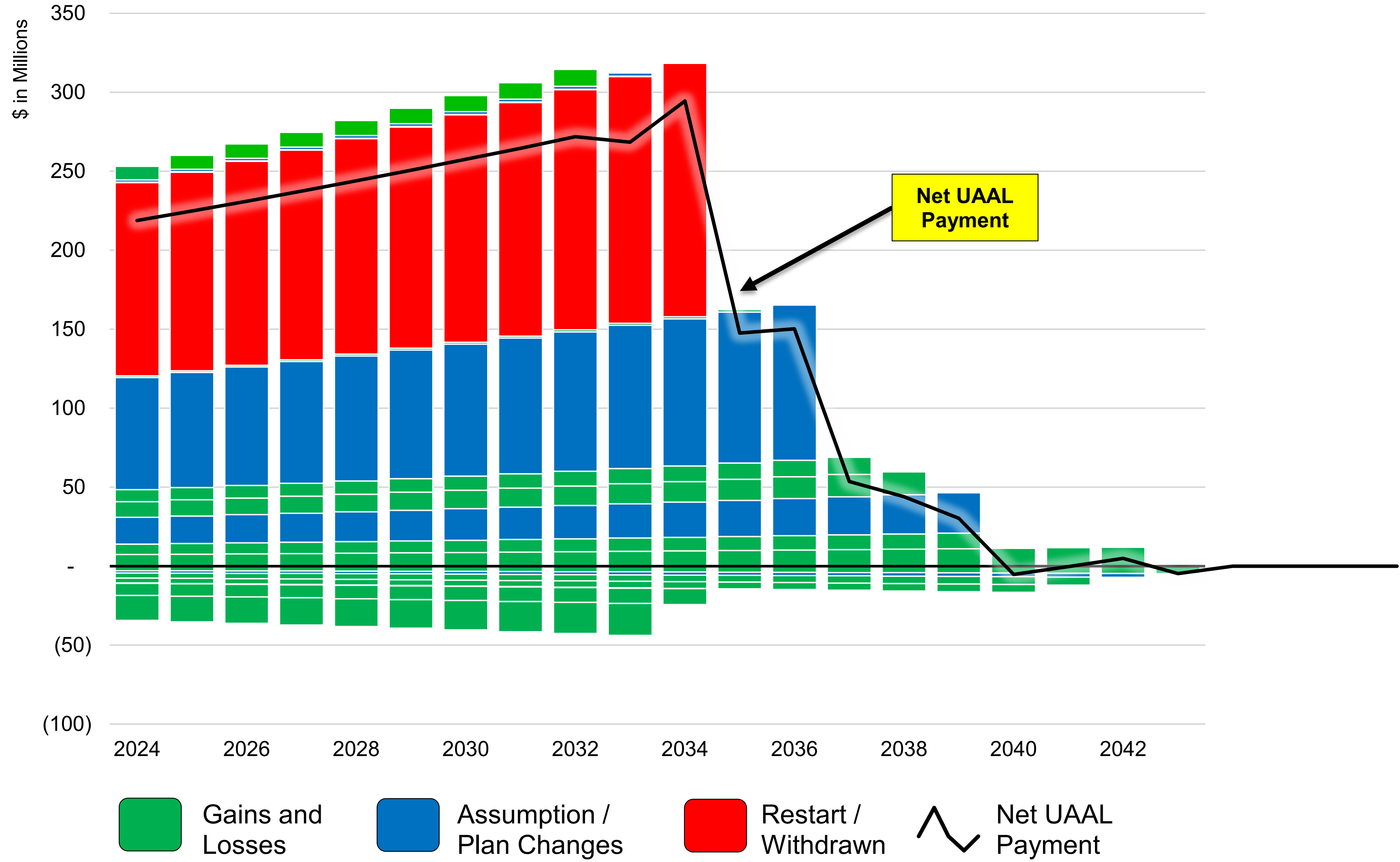
Note: Results may not total due to rounding.

Exhibit I: Projection of UAAL balances and payments



Annual Payments Required to Amortize $2,191 Million in Net UAAL as of June 30, 2024

($ in Millions)



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, 2019 through June 30, 2022 Actuarial Experience Study report dated June 13, 2023. 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 0.15% of the actuarial value of assets.

Consumer Price Index (CPI)

2.50%

Member contribution crediting rate[1]

2.50% (assumed rate of inflation), compounded semi-annually.

[1] Current policy is to credit the member contribution account with interest up to the current 5-year Treasury rate, if such earnings are available. However, the difference in earnings between the 5-year Treasury rate and the target crediting rate will be applied to the other valuation reserves so that the overall valuation reserve target crediting rate is maintained at 6.75%.

Cost of Living Adjustments (COLA)

Miscellaneous and Safety Tier 1 benefits are assumed to increase at 2.75% per year (for Tier 1 members with a sufficient COLA bank, withdrawals from the bank are assumed to be made to increase the retiree COLA up to 4% per year).

Miscellaneous Tier 3, Tier 4 and Tier 5 and Safety Tier 2, Tier 3 and Tier 4 benefits are assumed to increase at 2.00% per year.

Miscellaneous Tier 2 receive no COLA increases.

Payroll growth

Inflation of 2.50% per year plus “across the board” real salary increases of 0.25% per year, used to amortize the unfunded actuarial accrued liability as a level percentage of payroll.

Increase in Internal Revenue Code Section 401(a)(17) compensation limit

Increase of 2.50% per year from the valuation date.

Increase in Section 7522.10 compensation limit

Increase of 2.50% per year from the valuation date.

Salary increases

The annual rate of compensation increase includes:

- Inflation at 2.50%, plus
- "Across the board" salary increases of 0.25% per year, plus
- The following merit and promotion increases:

Merit and Promotion Increases (%)

Years of Service	Miscellaneous	Safety
Less than 1	6.00	7.00
1–2	6.00	6.25
2–3	5.50	6.00
3–4	5.25	5.75
4–5	4.25	5.25
5–6	3.25	4.25
6–7	2.75	4.00
7–8	2.50	3.75
8–9	2.25	3.50
9–10	2.10	3.25
10–11	2.00	3.00
11–12	1.70	3.00
12–13	1.50	3.00
13–14	1.50	3.00
14–15	1.50	3.00
15 and over	1.50	2.75

Post-retirement mortality rates

The Pub-2010 mortality tables and adjustments as shown on the next page 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

- **Miscellaneous members**
  - Pub-2010 General Healthy Retiree Amount-Weighted Above-Median Mortality Table (separate tables for males and females) with rates increased by 10% for males and increased by 5% for females, projected generationally with the two-dimensional mortality improvement scale MP-2021.
- **Safety members**
  - Pub-2010 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

- **Miscellaneous members**
  - Pub-2010 Non-Safety Disabled Retiree Amount-Weighted Mortality Table (separate tables for males and females) with rates unadjusted for males and increased by 5% for females, projected generationally with the two-dimensional mortality improvement scale MP-2021.
- **Safety members**
  - Pub-2010 Safety Disabled Retiree Amount-Weighted Mortality Table (separate tables for males and females) with rates increased by 5% for males and unadjusted for females, projected generationally with the two-dimensional mortality improvement scale MP-2021.

Beneficiary

- **Beneficiaries not currently in pay status**
  - Pub-2010 General Healthy Retiree Amount-Weighted Above-Median Mortality Table (separate tables for males and females) with rates increased by 10% for males and increased by 5% for females, projected generationally with the two-dimensional mortality improvement scale MP-2021.
- **Beneficiaries in pay status**
  - Pub-2010 General Contingent Survivor Amount-Weighted Above-Median Mortality Table (separate tables for males and females) with rates increased by 5% for males and increased by 10% for females, projected generationally with the two-dimensional mortality improvement scale MP-2021.

Pre-retirement mortality rates

- **Miscellaneous members**
  - Pub-2010 General Employee Amount-Weighted Above-Median Mortality Table (separate tables for males and females), projected generationally with the two-dimensional mortality improvement scale MP-2021.
- **Safety members**
  - Pub-2010 Safety Employee Amount-Weighted Above-Median 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	Miscellaneous Male	Miscellaneous Female	Safety Male	Safety Female
20	0.04	0.01	0.04	0.01
25	0.02	0.01	0.03	0.02
30	0.03	0.01	0.04	0.02
35	0.04	0.02	0.04	0.03
40	0.06	0.03	0.05	0.04
45	0.09	0.05	0.07	0.06
50	0.13	0.08	0.10	0.08
55	0.19	0.11	0.15	0.11
60	0.28	0.17	0.23	0.14
65	0.41	0.27	0.35	0.20

Note that generational projections beyond the base year (2010) are not reflected in the above mortality rates.

Miscellaneous pre-retirement deaths are assumed to be non-duty.

For Safety, 50% of pre-retirement deaths are assumed to be non-duty and the rest are assumed to be duty.

Mortality rates for member contributions

- **Miscellaneous members**
  - Pub-2010 General Healthy Retiree Amount-Weighted Above-Median Mortality Table (separate tables for males and females) with rates increased by 10% for males and increased by 5% for females, projected 30 years (from 2010) with the two-dimensional mortality improvement scale MP-2021, weighted 40% male and 60% female.
- **Safety members**
  - Pub-2010 Safety Healthy Retiree Amount-Weighted Above-Median Mortality Table (separate tables for males and females), projected 30 years (from 2010) with the two-dimensional mortality improvement scale MP-2021, weighted 75% male and 25% female.

Assumptions for optional form of benefits

A 6.75% per annum interest rate with a 0.00% COLA is used, along with the following mortality assumptions:

- **Miscellaneous service retirees**
  - Pub-2010 General Healthy Retiree Amount-Weighted Above-Median Mortality Table (separate tables for males and females) with rates increased by 10% for males and increased by 5% for females, projected 25 years (from 2010) with the two-dimensional mortality improvement scale MP-2021, weighted 40% male and 60% female.
- **Safety service retirees**
  - Pub-2010 Safety Healthy Retiree Amount-Weighted Above-Median Mortality Table (separate tables for males and females), projected 25 years (from 2010) with the two-dimensional mortality improvement scale MP-2021, weighted 75% male and 25% female.
- **Miscellaneous disabled retirees**
  - Pub-2010 Non-Safety Disabled Retiree Amount-Weighted Mortality Table (separate tables for males and females) with rates unadjusted for males and increased by 5% for females, projected 25 years (from 2010) with the two-dimensional mortality improvement scale MP-2021, weighted 40% male and 60% female.
- **Safety disabled retirees**
  - Pub-2010 Safety Disabled Retiree Amount-Weighted Mortality Table (separate tables for males and females) with rates increased by 5% for males and unadjusted for females, projected 25 years (from 2010) with the two-dimensional mortality improvement scale MP-2021, weighted 75% male and 25% female.

- **All Miscellaneous beneficiaries**
  - Pub-2010 General Healthy Retiree Amount-Weighted Above-Median Mortality Table (separate tables for males and females) with rates increased by 10% for males and increased by 5% for females, projected 25 years (from 2010) with the two-dimensional mortality improvement scale MP-2021, weighted 60% male and 40% female.
- **All Safety beneficiaries**
  - Pub-2010 General Healthy Retiree Amount-Weighted Above-Median Mortality Table (separate tables for males and females) with rates increased by 10% for males and increased by 5% for females, projected 25 years (from 2010) with the two-dimensional mortality improvement scale MP-2021, weighted 25% male and 75% female.

Disability incidence

Disability Incidence Rates (%)

Age	Miscellaneous	Safety
20	0.000	0.050
25	0.006	0.050
30	0.016	0.080
35	0.038	0.190
40	0.080	0.310
45	0.160	0.410
50	0.212	0.780
55	0.268	1.300
60	0.330	1.320
65	0.470	0.000
70	0.670	0.000

50% of Miscellaneous disabilities are assumed to be duty disabilities. The other 50% are assumed to be non-duty disabilities.

90% of Safety disabilities are assumed to be duty disabilities. The other 10% are assumed to be non-duty disabilities.

Termination

Termination Rates (%)

Years of Service	Miscellaneous	Safety
Less than 1	13.00	4.75
1–2	9.50	4.00
2–3	7.00	4.00
3–4	5.75	2.50
4–5	5.50	2.50
5–6	5.50	2.50
6–7	5.25	2.50
7–8	5.00	2.25
8–9	4.75	1.25
9–10	4.50	1.00
10–11	4.25	1.00
11–12	3.50	1.00
12–13	3.25	1.00
13–14	2.75	1.00
14–15	2.50	1.00
15–16	2.00	0.75
16–17	2.00	0.75
17–18	2.00	0.75
18–19	2.00	0.75
19–20	1.75	0.75
20–21	1.75	0.00
21 and over	1.50	0.00

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

45% of the Miscellaneous terminated members with less than five years of service and 45% of the Safety terminated members with less than five years of service are assumed to choose a refund of contributions. The other 55% and 55% of Miscellaneous and Safety terminated members with less than five years of service, respectively, are assumed to choose a deferred vested benefit.

20% of the Miscellaneous terminated members with five or more years of service and 15% of the Safety terminated members with five or more years of service are assumed to choose a refund of contributions. The other 80% and 85% of Miscellaneous and Safety terminated members with five or more years of service, respectively, are assumed to choose a deferred vested benefit.

Retirement rates

The following retirement rates only apply to members who are eligible to retire at the age shown.

Retirement Rates (%) — Miscellaneous

Age	Tier 1	Tiers 2 and 3: Less than 30 Years of Service	Tiers 2 and 3: 30 or More Years of Service	Tier 4	Tier 5: Less than 30 Years of Service	Tier 5: 30 or More Years of Service
50	6.00	2.50	2.50	2.50	0.00	0.00
51	4.50	2.00	2.00	2.00	0.00	0.00
52	4.50	2.00	2.00	2.00	3.50	4.00
53	4.50	2.00	2.00	2.00	1.25	2.50
54	5.50	3.50	9.00	2.50	1.50	3.00
55	12.00	4.50	12.00	3.50	1.75	3.50
56	18.00	5.50	12.00	5.00	2.00	4.00
57	18.00	7.50	15.00	6.00	4.00	6.00
58	18.00	8.00	20.00	6.00	4.50	6.50
59	20.00	8.00	25.00	6.00	4.50	6.50
60	28.00	9.00	25.00	7.50	5.00	7.00
61	35.00	15.00	30.00	12.00	8.00	11.00
62	35.00	20.00	31.00	13.00	10.00	12.00
63	35.00	18.00	25.00	12.00	9.00	11.00
64	35.00	20.00	25.00	13.00	11.00	13.00
65	35.00	30.00	30.00	25.00	22.00	24.00
66	40.00	35.00	35.00	21.00	18.00	18.00
67	40.00	30.00	30.00	21.00	18.00	18.00
68	50.00	30.00	30.00	21.00	21.00	21.00
69	60.00	30.00	30.00	23.00	23.00	23.00
70	100.00	30.00	30.00	30.00	30.00	30.00
71	100.00	30.00	30.00	30.00	30.00	30.00
72	100.00	30.00	30.00	30.00	30.00	30.00
73	100.00	30.00	30.00	30.00	30.00	30.00
74	100.00	30.00	30.00	30.00	30.00	30.00
75 and over	100.00	100.00	100.00	100.00	100.00	100.00

Retirement Rates (%) — Safety

Age	Tiers 1 and 2: Less than 25 Years of Service	Tiers 1 and 2: 25 or More Years of Service	Tier 3	Tier 4
45	2.50	2.50	1.50	0.00
46	3.00	3.00	1.50	0.00
47	4.50	4.50	1.50	0.00
48	7.00	10.00	1.50	0.00
49	16.00	35.00	4.00	0.00
50	25.00	50.00	10.00	15.00
51	20.00	40.00	12.00	10.50
52	22.00	45.00	14.00	12.00
53	16.00	45.00	16.00	14.00
54	18.00	35.00	18.00	15.50
55	20.00	30.00	50.00	40.00
56	20.00	30.00	25.00	25.00
57	20.00	30.00	25.00	25.00
58	20.00	35.00	25.00	25.00
59	30.00	30.00	30.00	25.00
60	45.00	45.00	45.00	45.00
61	50.00	50.00	55.00	55.00
62	70.00	70.00	70.00	70.00
63	70.00	70.00	70.00	70.00
64	70.00	70.00	70.00	70.00
65 and over	100.00	100.00	100.00	100.00

Inactive members

Current and Future Inactive Member Assumptions

Membership and Reciprocity	% of Future[1] Deferred Vested Members	Annual Salary Increases from Separation Date	Retirement Age (Vested)	Retirement Age (Non-Vested)
Miscellaneous with reciprocity	25%	4.25%	61	61
Miscellaneous without reciprocity	75%	N/A	59	70
Safety with reciprocity	35%	5.50%	55	55
Safety without reciprocity	65%	N/A	52	70

Future benefit accruals

1.0 year of service per year for the full-time employees. Continuation of current partial service accrual for part-time employees.

Unknown data for members

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

Definition of active members

All active members of SCERS as of the valuation date.

Form of payment

All active and inactive members are assumed to elect the unmodified option at retirement.

[1] SCERS provides the reciprocity status for current deferred vested members in the valuation census data.

Spousal assumptions

Current Active and Inactive Member Spousal Assumptions

Member Gender	% with Spouse at Retirement or Pre-Retirement Death	Spouse Age	Spouse Gender
Male member	80%	3 years younger than member	Female
Female member	60%	2 years older than member	Male

Service from unused sick leave conversion

The following assumptions for service converted from unused sick leave as a percentage of service at service (non-disabled) retirement are used:

Category	Service (Non-Disabled) Retirement
Miscellaneous	1.50%
Safety	2.25%

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.

Actuarial value of assets

Market value of assets (MVA) less unrecognized returns in each of the last seven years. Unrecognized returns are equal to the difference between the actual market return and the expected return on the market value, and are recognized over a seven-year period. The actuarial value of assets (AVA) is limited by a 30% corridor; the AVA cannot be less than 70% of MVA, nor greater than 130% of MVA.

Valuation value of assets

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

Amortization policy

The balance of the unfunded actuarial accrued liability (UAAL) as of June 30, 2012 shall be amortized separately from any future changes in UAAL over a period of 23 years from June 30, 2012.

Any new UAAL as a result of actuarial gains or losses identified in the annual valuation as of June 30 will be amortized over a period of 20 years.

Any new UAAL as a result of change in actuarial assumptions or methods will be amortized over a period of 20 years.

The change in UAAL as a result of any plan amendments will be amortized over a period of 15 years and the change in UAAL resulting from retirement incentive programs will be amortized over a period of up to 5 years.

Employer contributions

Employer contributions consist of two 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 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.

Contribution to the 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. Accumulation includes annual crediting of interest at the assumed investment earning rate. The contribution (or rate credit in the case of a negative UAAL) is calculated to remain as a level percentage of future active member payroll (including payroll for new members as they enter the 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 2.75% (i.e., 2.50% inflation plus 0.25% across-the-board salary increase).

Starting with the June 30, 2015 valuation, we have added to the Miscellaneous employer UAAL rate for the County an amount to reflect the net withdrawal liability for the Library Authority and Air Quality Districts when they terminated their affiliation with the County and became special districts.

The amortization policy is described above.

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

Employer normal cost and UAAL contribution rates are calculated assuming payments made at the end of every pay period.

Member contributions

Miscellaneous Tiers 1, 2, 3 and 4, and Safety Tiers 1, 2 and 3

Articles 6 and 6.8 of the 1937 Act define the methodology to be used in the calculation of member basic contribution rates for Miscellaneous members and Safety members, respectively, in the legacy tiers. The basic contribution rate is determined as that percentage of compensation which if paid annually from a member's first year of membership through the prescribed retirement age would accumulate to the amount necessary to fund a prescribed annuity.

The annuity is equal to:

- 1/240 of Final Average Salary per year of service at age 55 for current Miscellaneous Tier 1, Tier 2 and Tier 3 members
- 1/120 of Final Average Salary per year of service at age 60 for current Miscellaneous Tier 4 members
- 1/100 of Final Average Salary per year of service at age 50 for current Safety Tier 1, Tier 2 and Tier 3 members

In addition to their basic contributions, members in the legacy tiers pay one-half of the total normal cost necessary to fund their cost-of-living benefits. The cost to provide the cost-of-living benefits is offset somewhat by the balance available in an account maintained in the valuation to offset member's COLA rates in the legacy tiers. Accumulation includes semi-annual crediting of interest at one-half of the United States 5-year Treasury rate for the last business day of the interest crediting period.

All County and Orangevale Recreation and Park District legacy members have agreed to pay 50% of the total normal cost rate.

For Rep Unit 19 (Probation) and Rep Unit 3 (Deputy Sheriffs System) members in Safety Tiers 1, 2 and 3, the member rate for 2024–2025, 2025–2026, and 2026–2027 shall not exceed the member rate established for 2023–2024.

For SacSewer members in Miscellaneous Tiers 1 through 4, the member rates are no more than 14% higher than the applicable member full rate before the 50% normal cost sharing arrangement, or 50% of the total normal cost rate.

Miscellaneous Tier 5 and Safety Tier 4

Pursuant to Section 7522.30(a) of the Government Code, Miscellaneous Tier 5 and Safety Tier 4 members are required to contribute at least 50% of the normal cost rate. In addition, there are certain additional requirements that would have to be met such as requiring the new employees to pay the contribution rate of “similarly situated employees”, if it is greater. (reference: Section 7522.30(c)). We further understand that different rules may have to be applied for collectively bargained employees, non-represented, managerial or other supervisory employees. (reference: Section 7522.30(e)). In preparing the normal cost rates in this report, we have assumed that exactly 50% of the normal cost would be paid by the new members and we have taken into account in this valuation only the requirements of Section 7522.30(c), but not requirements of Section 7522.30(e).

The member contribution rates for all members are provided in *Section 4, Exhibits 3, 6 and 7*.

Member contributions are assumed to be made at the end of every pay period.

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 $275,000 for 2024. 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.

Non-CalPEPRA 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 have not been reduced for the Section 415 limitations. However, it is anticipated that PEPRA members will not be limited in the future due to the PEPRA compensation limit applied in the determination of their benefit. Actual limitations will result in gains as they occur.

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

The results of this valuation reflect a refinement in the method used to calculate the member COLA rate for employees paying less than 50% of the total normal cost rate, to be consistent with the calculation of the member COLA rate for employees paying 50% of the normal cost rate. The net impact of this change is to reduce the current year’s total employer contributions by about $60,000 and to increase the current year’s total employee contributions by the same amount.

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

Membership with SCERS usually begins with the employment by the County or member District as a permanent full-time or part-time employee as provided in the County Salary Resolution or the District's Salary Resolution.

Membership Tier	Plan Provision
Miscellaneous Tier 1	All Miscellaneous members hired prior to September 27, 1981.
Miscellaneous Tiers 2 and 3	All Miscellaneous members hired on or after September 27, 1981. Membership into Tier 2 or Tier 3 is determined by date of hire and by bargaining unit.
Miscellaneous Tier 4	All Miscellaneous members hired on or after January 1, 2012 as adopted by the County. Membership into Tier 4 is determined by date of hire.
Miscellaneous Tier 5	All Miscellaneous members hired on or after January 1, 2013.
Safety Tiers 1 and 2	Membership into Tier 1 or Tier 2 for Safety employee is determined by date of hire and by bargaining unit.
Safety Tier 3	All Safety members hired on or after January 1, 2012 as adopted by the County. Membership into Tier 3 is determined by date of hire.
Safety Tier 4	All Safety members hired on or after January 1, 2013.

Final compensation and service for benefit determination

Final Compensation and Service	Plan Provision
Final average compensation	
Miscellaneous and Safety Tier 1	Highest consecutive 1 year (12 months) of compensation earnable (§31462.1) (FAS1).
Miscellaneous Tiers 2, 3 and 4 Safety Tiers 2 and 3	Highest consecutive 3 years (36 months) of compensation earnable. (§31462) (FAS3).
Miscellaneous Tier 5 Safety Tier 4	Highest consecutive 3 years (36 months) of pensionable compensation. (§7522.10(c), §7522.32 and §7522.34) (FAS3).
Service	
All members	Years of service (Yrs).

Service retirement benefits

Provision by Tier	Service Retirement Plan Provision
Eligibility	
Miscellaneous Tiers 1, 2, 3 and 4	Age 50 with 10 years of service, or age 70 regardless of service, or after 30 years regardless of age (§31672).
Miscellaneous Tier 5	Age 52 with 5 years of service (§7522.20(a)) or age 70 regardless of service (§31672.3).
Safety Tiers 1, 2 and 3	Age 50 with 10 years of service, or age 70 regardless of service, or after 20 years of Safety service regardless of age (§31663.25).
Safety Tier 4	Age 50 with 5 years of service (§7522.25(d)) or age 70 regardless of service (§31672.3).
Benefit amount	
All members	The benefit formula for all members varies by membership tier and retirement age. See the tables below for a selection of benefit formulas at various ages for each membership tier.
Maximum benefit	
Miscellaneous Tiers 1, 2, 3 and 4 Safety Tiers 1, 2 and 3	100% of Highest Average Compensation (§31676.14, §31676.1, §31664.1, §31664.2).
Miscellaneous Tier 5 Safety Tier 4	None.

Service retirement benefit formula

Tier and Retirement Age	Service Retirement Benefit Formula by Tier
Miscellaneous Tier 1 (§31676.14)	
50	(1.48% × FAS1 – 1/3 × 1.48% × $350 × 12) × Yrs
55	(1.95% × FAS1 – 1/3 × 1.95% × $350 × 12) × Yrs
60	(2.44% × FAS1 – 1/3 × 2.44% × $350 × 12) × Yrs
62 and over	(2.61% × FAS1 – 1/3 × 2.61% × $350 × 12) × Yrs
Miscellaneous Tiers 2 and 3 (§31676.14)	
50	(1.48% × FAS3 – 1/3 × 1.48% × $350 × 12) × Yrs
55	(1.95% × FAS3 – 1/3 × 1.95% × $350 × 12) × Yrs
60	(2.44% × FAS3 – 1/3 × 2.44% × $350 × 12) × Yrs
62 and over	(2.61% × FAS3 – 1/3 × 2.61% × $350 × 12) × Yrs
Miscellaneous Tier 4 (§31676.1)	
50	(1.18% × FAS3 – 1/3 × 1.18% × $350 × 12) × Yrs
55	(1.49% × FAS3 – 1/3 × 1.49% × $350 × 12) × Yrs
60	(1.92% × FAS3 – 1/3 × 1.92% × $350 × 12) × Yrs
62	(2.09% × FAS3 – 1/3 × 2.09% × $350 × 12) × Yrs
65 and over	(2.43% × FAS3 – 1/3 × 2.43% × $350 × 12) × Yrs
Miscellaneous Tier 5 (§7522.20(a))	
52	1.00% × FAS3 × Yrs
55	1.30% × FAS3 × Yrs
60	1.80% × FAS3 × Yrs
62	2.00% × FAS3 × Yrs
65	2.30% × FAS3 × Yrs
67 and over	2.50% × FAS3 × Yrs

Tier and Retirement Age	Service Retirement Benefit Formula by Tier
Safety Tier 1 (§31664.1)	
50 and over	(3.00% × FAS1 – 1/3 × 3.00% × $350 × 12) × Yrs
Safety Tier 2 (§31664.1)	
50 and over	(3.00% × FAS3 – 1/3 × 3.00% × $350 × 12) × Yrs
Safety Tier 3 (§31664.2)	
50	(2.29% × FAS3 – 1/3 × 2.29% × $350 × 12) × Yrs
55 and over	(3.00% × FAS3 – 1/3 × 3.00% × $350 × 12) × Yrs
Safety Tier 4 (§7522.25(d))	
50	2.00% × FAS3 × Yrs
55	2.50% × FAS3 × Yrs
57 and over	2.70% × FAS3 × Yrs

Additional benefit information

For Miscellaneous members of the following Districts, benefits accrued before June 29, 2003 will continue to be calculated using §31676.1.

- Fair Oaks Cemetery District
- Galt Amo Cemetery District

Disability benefits

Non-duty disability

Provision by Tier	Non-Duty Disability Plan Provision
Eligibility	
All members	Five years of service (§31720).

Provision by Tier	Non-Duty Disability Plan Provision
Benefit amount	
Miscellaneous Tier 1	1.5% per year of service. If the benefit does not exceed one-third of Final Compensation, the service is projected to 65, but the total projected benefit cannot be more than one-third of Final Compensation (§31727 and §31727.2). The Service Retirement benefit is payable, if greater.
Safety Tier 1	1.8% per year of service. If the benefit does not exceed one-third of Final Compensation, the service is projected to 55, but the total projected benefit cannot be more than one-third of Final Compensation (§31727 and §31727.2). The Service Retirement benefit is payable, if greater.
Miscellaneous Tiers 2, 3, 4 and 5 Safety Tiers 2, 3 and 4	20% of Final Compensation for the first five years of service plus 2% for each year of additional service for a maximum of 40% of Final Compensation (§31727.7). The Service Retirement benefit is payable, if greater.

Line-of-duty disability

Provision by Tier	Line-of-Duty Disability Plan Provision
Eligibility	
All members	No age or service requirements (§31720).
Benefit amount	
All members	50% of the Final Compensation or 100% of Service Retirement benefit, if greater (§31727.4).

Pre-retirement death

Basic death benefit

Provision by Tier	Basic Death Benefit Plan Provision
Eligibility	
All members	No age or service requirements.
Vested members	Five years of service.

Provision by Tier	Basic Death Benefit Plan Provision
Benefit amount	
All members	Lump sum equal to refund of employee contributions with interest, plus one month's compensation for each year of service, to a maximum of six month's compensation (§31781).
Vested members	60% of the greater of Service Retirement or Non-Duty Disability Retirement benefit payable to surviving eligible spouse (§31765.1, §31781.1), in lieu of the basic lump sum benefit above.

Line-of-duty death benefit

Provision by Tier	Line-of-Duty Death Benefit Plan Provision
Eligibility	
All members	No age or service requirements.
Benefit amount	
All members	50% of Final Compensation or 100% of Service Retirement benefit, if greater, payable to spouse or minor children (§31787).

Post-retirement death

Service retirement or non-service-connected disability retirement

Unless another option was selected at retirement, 60% of member's unmodified allowance continues to eligible spouse (§31760.1) and an additional $4,000 lump sum benefit is payable to member's beneficiary (§31789.3). An eligible spouse is a surviving spouse who was married to the member at least one year prior to the date of retirement (§31760.1).

Line-of-duty disability

Unless another option was selected at retirement, 100% of member's allowance continued to eligible spouse (§31786) and an additional $4,000 lump sum benefit is payable to member's beneficiary (§31789.3). An eligible spouse is a surviving spouse who was married to the member at least one year prior to the date of retirement (§31760.1).

Withdrawal benefits

Less than five years of service

Refund of accumulated employee contributions with interest, or benefit at age 70 (§31628). A member may also elect to leave contributions on deposit in the retirement fund (§31629.5).

Five or more years of service

If contributions left on deposit, eligible for retirement benefits at any time after eligible to retire (§31700).

Post-retirement cost-of-living benefits[1]

Membership Tier	Post-Retirement Cost-of-Living Benefits Plan Provision
Miscellaneous Tier 1 Safety Tier 1	Annual adjustment based on Consumer Price Index to a maximum of 4% per year; excess "banked" (§31874.2).
Miscellaneous Tier 2	None.
Miscellaneous Tiers 3, 4 and 5 Safety Tiers 2, 3 and 4	Annual adjustment based on Consumer Price Index to a maximum of 2% per year; excess "banked" (§31870).

Member contributions

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

Tier by Contribution Type	Member Contribution Plan Provision
Miscellaneous Tier 1	
Basic contributions	Entry-age based rates that provide for an annuity at age 55 equal to 1/240 of FAS1 (§31621.3).
Cost-of-living contributions	Entry-age based rates that provide for one-half of future Cost-of-Living costs.
Miscellaneous Tier 2	
Basic contributions	Entry-age based rates that provide for an annuity at age 55 equal to 1/240 of FAS3 (§31621.3).
Cost-of-living contributions	None.

[1] Historically, SCERS has determined the increase in Consumer Price Index (CPI) by comparing the annual average CPI for the San Francisco-Oakland-Hayward Area, as published by the Bureau of Labor Statistics, in each of the past two years.

Tier by Contribution Type	Member Contribution Plan Provision
Miscellaneous Tier 3	
Basic contributions	Entry-age based rates that provide for an annuity at age 55 equal to 1/240 of FAS3 (§31621.3).
Cost-of-Living contributions	Entry-age based rates that provide for one-half of future Cost-of-Living costs.
Miscellaneous Tier 4	
Basic contributions	Entry-age based rates that provide for an annuity at age 60 equal to 1/120 of FAS3 (§31621).
Cost-of-Living contributions	Entry-age based rates that provide for one-half of future Cost-of-Living costs.
Miscellaneous Tier 5	
Contributions	50% of the total normal cost rate.
Safety Tiers 1, 2 and 3	
Basic	Entry-age based rates that provide for an annuity at age 50 equal to 1/100 of FAS1 (FAS3 for Tier 2 and Tier 3). (§31639.25).
Cost-of-Living	Entry-age based rates that provide for one-half of future Cost-of-Living costs.
Safety Tier 4	
Contributions	50% of the total normal cost rate.

Notes

- The above rates are known as full rates. For members entering the System on or after January 1, 1975, they pay a rate based on a single entry age (§31621.11 and §31639.26).
- All County and Orangevale Recreation and Park District legacy members have agreed to pay 50% of the total normal cost rate.
- For Rep Unit 19 (Probation) and Rep Unit 3 (Deputy Sheriffs System) members in Safety Tiers 1, 2, and 3, the member rate for 2024–2025, 2025–2026, and 2026–2027 shall not exceed the member rate for 2023–2024.
- For SacSewer members in Miscellaneous Tiers 1 through 4, the member rates are no more than 14% higher than the applicable member rate before the 50% normal cost sharing arrangement, or 50% of the total normal cost rate.

Other information

Safety Tiers 1, 2 and 3 members with 30 or more years of service are exempt from paying member contributions. The same applies for Miscellaneous members hired on or before March 7, 1973.

Changes in plan provisions

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

Exhibit 3: Member contribution rates

Comparison of total member rate

Comparison of Member Rate[1] from the June 30, 2023 and June 30, 2024 Valuations

Plan	2024 Basic	2024 COLA	2024 Total	2023 Basic	2023 COLA	2023 Total	Change
Miscellaneous nonSacSewer							
Tier 1	4.34%	2.99%	7.33%	4.34%	2.98%	7.32%	0.01%
Tier 2	4.17%	0.00%	4.17%	4.17%	0.00%	4.17%	0.00%
Tier 3	4.17%	1.88%	6.05%	4.17%	1.80%	5.97%	0.08%
Tier 4	7.32%	1.68%	9.00%	7.32%	1.57%	8.89%	0.11%
Tier 5	7.90%	1.66%	9.56%	7.94%	1.66%	9.60%	-0.04%
Miscellaneous SacSewer[2]							
Tier 2	4.17%	0.00%	4.17%	4.17%	0.00%	4.17%	0.00%
Tier 3	4.17%	1.88%	6.05%	4.17%	1.80%	5.97%	0.08%
Tier 4	7.32%	1.65%	8.97%	7.32%	1.57%	8.89%	0.08%
Tier 5	7.80%	1.67%	9.47%	7.94%	1.66%	9.60%	-0.13%
Safety							
Tier 1[3]	12.13%	4.62%	16.75%	12.13%	5.09%	17.22%	-0.47%
Tier 2[3]	11.51%	4.56%	16.07%	11.51%	4.52%	16.03%	0.04%
Tier 3[3]	11.51%	4.29%	15.80%	11.51%	4.12%	15.63%	0.17%
Tier 4	11.49%	3.15%	14.64%	11.52%	3.16%	14.68%	-0.04%

[1] Before reflecting members in legacy tiers agreeing to contribute an additional portion of the normal cost. Members who enter on or after 1/1/1975 contribute as indicated above and all others contribute the rate at their respective entry ages.

[2] There were no Miscellaneous Tier 1 SacSewer active members reported for the June 30, 2024 valuation.

[3] For Rep Unit 19 (Probation) and Rep Unit 3 (Deputy Sheriffs System) members in Safety Tiers 1, 2, and 3, the member rate for 2024–2025, 2025–2026, and 2026–2027 shall not exceed the member rate for 2023–2024. This provision has no impact on the member rate established in this valuation for 2025-2026.

Miscellaneous Tier 1 Members' Contribution Rates

(as a % of Monthly Payroll)

Entry Age	Basic First $350	Basic Over $350	COLA First $350	COLA Over $350	Total First $350	Total Over $350
16	2.21%	3.31%	1.52%	2.28%	3.73%	5.59%
17	2.24%	3.36%	1.54%	2.31%	3.78%	5.67%
18	2.27%	3.41%	1.57%	2.35%	3.84%	5.76%
19	2.30%	3.45%	1.59%	2.38%	3.89%	5.83%
20	2.33%	3.50%	1.61%	2.41%	3.94%	5.91%
21	2.37%	3.55%	1.63%	2.44%	4.00%	5.99%
22	2.40%	3.60%	1.65%	2.48%	4.05%	6.08%
23	2.44%	3.66%	1.68%	2.52%	4.12%	6.18%
24	2.47%	3.71%	1.71%	2.56%	4.18%	6.27%
25	2.51%	3.76%	1.73%	2.59%	4.24%	6.35%
26	2.54%	3.81%	1.75%	2.62%	4.29%	6.43%
27	2.58%	3.87%	1.78%	2.67%	4.36%	6.54%
28	2.61%	3.92%	1.80%	2.70%	4.41%	6.62%
29	2.65%	3.98%	1.83%	2.74%	4.48%	6.72%
30	2.69%	4.04%	1.85%	2.78%	4.54%	6.82%
31	2.73%	4.10%	1.88%	2.82%	4.61%	6.92%
32	2.77%	4.16%	1.91%	2.86%	4.68%	7.02%
33	2.81%	4.22%	1.94%	2.91%	4.75%	7.13%
34	2.85%	4.28%	1.97%	2.95%	4.82%	7.23%
35	2.89%	4.34%	1.99%	2.99%	4.88%	7.33%
36	2.94%	4.41%	2.03%	3.04%	4.97%	7.45%
37	2.99%	4.48%	2.06%	3.09%	5.05%	7.57%
38	3.03%	4.55%	2.09%	3.13%	5.12%	7.68%
39	3.08%	4.62%	2.12%	3.18%	5.20%	7.80%
40	3.13%	4.70%	2.16%	3.24%	5.29%	7.94%
41	3.19%	4.78%	2.19%	3.29%	5.38%	8.07%

Entry Age	Basic First $350	Basic Over $350	COLA First $350	COLA Over $350	Total First $350	Total Over $350
42	3.24%	4.86%	2.23%	3.35%	5.47%	8.21%
43	3.29%	4.94%	2.27%	3.40%	5.56%	8.34%
44	3.34%	5.01%	2.30%	3.45%	5.64%	8.46%
45	3.39%	5.08%	2.33%	3.50%	5.72%	8.58%
46	3.43%	5.15%	2.37%	3.55%	5.80%	8.70%
47	3.48%	5.22%	2.40%	3.60%	5.88%	8.82%
48	3.53%	5.29%	2.43%	3.64%	5.96%	8.93%
49	3.56%	5.34%	2.45%	3.68%	6.01%	9.02%
50	3.57%	5.35%	2.45%	3.68%	6.02%	9.03%
51	3.55%	5.33%	2.45%	3.67%	6.00%	9.00%
52	3.53%	5.30%	2.43%	3.65%	5.96%	8.95%
53	3.50%	5.25%	2.41%	3.62%	5.91%	8.87%
54	3.47%	5.20%	2.39%	3.58%	5.86%	8.78%
55	3.47%	5.20%	2.39%	3.58%	5.86%	8.78%
56	3.47%	5.20%	2.39%	3.58%	5.86%	8.78%
57	3.47%	5.20%	2.39%	3.58%	5.86%	8.78%
58	3.47%	5.20%	2.39%	3.58%	5.86%	8.78%
59 and over	3.47%	5.20%	2.39%	3.58%	5.86%	8.78%

Note: Members who enter prior to January 1, 1975 contribute on the basis of their actual entry age and all others contribute based on the basis of a single entry age of 35.

Interest:	6.75% per annum
COLA:	2.75%
Mortality:	See *Section 4, Exhibit 1*
Salary Increase:	Inflation (2.50%) + Across-the-Board Increase (0.25%) + Merit (See *Section 4, Exhibit 1*)
COLA Loading Factor:	68.87%[1]
Non-Refundability Factor:	100.00%

[1] There is no COLA offset available. The reserve carried by the Board to reduce part of the COLA contributions is fully exhausted as of June 30, 2024.

Miscellaneous[1] Tier 2 Members' Contribution Rates

(as a % of Monthly Payroll)

Entry Age	Basic First $350	Basic Over $350	COLA First $350	COLA Over $350	Total First $350	Total Over $350
35	2.78%	4.17%	0.00%	0.00%	2.78%	4.17%

Note: Members who enter on or after January 1, 1975 contribute on the basis of a single entry age of 35.

Interest:	6.75% per annum
COLA:	0.00%
Mortality:	See *Section 4, Exhibit 1*
Salary Increase:	Inflation (2.50%) + Across-the-Board Increase (0.25%) + Merit (See *Section 4, Exhibit 1*)
COLA Loading Factor:	0.00%
Non-Refundability Factor:	100.00%

Miscellaneous[1] Tier 3 Members' Contribution Rates

(as a % of Monthly Payroll)

Entry Age	Basic First $350	Basic Over $350	COLA First $350	COLA Over $350	Total First $350	Total Over $350
35	2.78%	4.17%	1.25%	1.88%	4.03%	6.05%

Note: Members who enter on or after January 1, 1975 contribute on the basis of a single entry age of 35.

Interest:	6.75% per annum
COLA:	2.00%
Mortality:	See *Section 4, Exhibit 1*
Salary Increase:	Inflation (2.50%) + Across-the-Board Increase (0.25%) + Merit (See *Section 4, Exhibit 1*)
COLA Loading Factor:	45.11%[2]
Non-Refundability Factor:	99.81%

1 Excluding SacSewer. SacSewer member contribution rates are shown in *Section 4, Exhibit 7*.
2 Factor has been adjusted to reflect a reserve carried by the Board to reduce part of the COLA contributions.

Miscellaneous[1] Tier 4 Members' Contribution Rates

(as a % of Monthly Payroll)

Entry Age	Basic First $350	Basic Over $350	COLA First $350	COLA Over $350	Total First $350	Total Over $350
35	4.88%	7.32%	1.12%	1.68%	6.00%	9.00%

Note: Members who enter on or after January 1, 1975 contribute on the basis of a single entry age of 35.

Interest:	6.75% per annum
COLA:	2.00%
Mortality:	See *Section 4, Exhibit 1*
Salary Increase:	Inflation (2.50%) + Across-the-Board Increase (0.25%) + Merit (See *Section 4, Exhibit 1*)
COLA Loading Factor:	22.97%[2]
Non-Refundability Factor:	99.18%

Miscellaneous[1] Tier 5 Members' Contribution Rates

(as a % of Monthly Payroll, paid on all Eligible Pay[3])

Entry Age	Basic	COLA	Total
All members	7.90%	1.66%	9.56%

Interest:	6.75% per annum
COLA:	2.00%
Mortality:	See *Section 4, Exhibit 1*
Salary Increase:	Inflation (2.50%) + Across-the-Board Increase (0.25%) + Merit (See *Section 4, Exhibit 1*)
COLA Loading Factor:	21.01%
Non-Refundability Factor:	97.42%

[1] Excluding SacSewer. SacSewer member contribution rates are shown in *Section 4, Exhibit 7*.
[2] Factor has been adjusted to reflect a reserve carried by the Board to reduce part of the COLA contributions.
[3] It is our understanding that in the determination of pension benefits under the CalPEPRA formulas, the compensation that can be taken into account for 2024 is equal to $151,446 (reference: Section 7522.10). This amount should be adjusted for changes to the Consumer Price Index for All Urban Consumers after 2024 (reference: Section 7522.10(d)).

Safety Tier 1 Members' Contribution Rates

(as a % of Monthly Payroll)

Entry Age	Basic First $350	Basic Over $350	COLA First $350	COLA Over $350	Total First $350	Total Over $350
18	7.45%	11.18%	2.84%	4.26%	10.29%	15.44%
19	7.51%	11.26%	2.86%	4.29%	10.37%	15.55%
20	7.56%	11.34%	2.88%	4.32%	10.44%	15.66%
21	7.61%	11.42%	2.90%	4.35%	10.51%	15.77%
22	7.67%	11.50%	2.92%	4.38%	10.59%	15.88%
23	7.73%	11.59%	2.94%	4.41%	10.67%	16.00%
24	7.78%	11.67%	2.96%	4.44%	10.74%	16.11%
25	7.84%	11.76%	2.99%	4.48%	10.83%	16.24%
26	7.90%	11.85%	3.01%	4.51%	10.91%	16.36%
27	7.96%	11.94%	3.03%	4.54%	10.99%	16.48%
28	8.03%	12.04%	3.05%	4.58%	11.08%	16.62%
29	8.09%	12.13%	3.08%	4.62%	11.17%	16.75%
30	8.16%	12.24%	3.11%	4.66%	11.27%	16.90%
31	8.23%	12.34%	3.13%	4.70%	11.36%	17.04%
32	8.30%	12.45%	3.16%	4.74%	11.46%	17.19%
33	8.37%	12.56%	3.19%	4.78%	11.56%	17.34%
34	8.45%	12.68%	3.22%	4.83%	11.67%	17.51%
35	8.51%	12.77%	3.24%	4.86%	11.75%	17.63%
36	8.58%	12.87%	3.27%	4.90%	11.85%	17.77%
37	8.65%	12.98%	3.29%	4.94%	11.94%	17.92%
38	8.73%	13.09%	3.32%	4.98%	12.05%	18.07%
39	8.81%	13.22%	3.35%	5.03%	12.16%	18.25%
40	8.89%	13.33%	3.38%	5.07%	12.27%	18.40%
41	8.95%	13.42%	3.41%	5.11%	12.36%	18.53%
42	9.00%	13.50%	3.43%	5.14%	12.43%	18.64%
43	9.04%	13.56%	3.44%	5.16%	12.48%	18.72%

Entry Age	Basic First $350	Basic Over $350	COLA First $350	COLA Over $350	Total First $350	Total Over $350
44	9.07%	13.61%	3.45%	5.18%	12.52%	18.79%
45	9.05%	13.57%	3.44%	5.16%	12.49%	18.73%
46	8.99%	13.48%	3.42%	5.13%	12.41%	18.61%
47	8.91%	13.37%	3.39%	5.09%	12.30%	18.46%
48	8.83%	13.25%	3.36%	5.04%	12.19%	18.29%
49 and over	8.71%	13.07%	3.31%	4.97%	12.02%	18.04%

Note: Members who enter prior to January 1, 1975 contribute on the basis of their actual entry age and all others contribute based on the basis of a single entry age of 29.

Interest: 6.75% per annum

COLA: 2.75%

Mortality: See *Section 4, Exhibit 1*

Salary Increase: Inflation (2.50%) + Across-the-Board Increase (0.25%) + Merit (See *Section 4, Exhibit 1*)

COLA Loading Factor: 38.06%[1]

Non-Refundability Factor: 98.67%

[1] Factor has been adjusted to reflect a reserve carried by the Board to reduce part of the COLA contributions.

Safety Tier 2 Members' Contribution Rates
(as a % of Monthly Payroll)

Entry Age	Basic First $350	Basic Over $350	COLA First $350	COLA Over $350	Total First $350	Total Over $350
29	7.67%	11.51%	3.04%	4.56%	10.71%	16.07%

Note: Members who enter on or after January 1, 1975 contribute on the basis of a single entry age of 29.

Interest:	6.75% per annum
COLA:	2.00%
Mortality:	See *Section 4, Exhibit 1*
Salary Increase:	Inflation (2.50%) + Across-the-Board Increase (0.25%) + Merit (See *Section 4, Exhibit 1*)
COLA Loading Factor:	39.63%[1]
Non-Refundability Factor:	99.96%

Safety Tier 3 Members' Contribution Rates
(as a % of Monthly Payroll)

Entry Age	Basic First $350	Basic Over $350	COLA First $350	COLA Over $350	Total First $350	Total Over $350
29	7.67%	11.51%	2.86%	4.29%	10.53%	15.80%

Note: Members who enter on or after January 1, 1975 contribute on the basis of a single entry age of 29.

Interest:	6.75% per annum
COLA:	2.00%
Mortality:	See *Section 4, Exhibit 1*
Salary Increase:	Inflation (2.50%) + Across-the-Board Increase (0.25%) + Merit (See *Section 4, Exhibit 1*)
COLA Loading Factor:	37.27%[1]
Non-Refundability Factor:	99.73%

[1] Factor has been adjusted to reflect a reserve carried by the Board to reduce part of the COLA contributions.

Safety Tier 4 Members' Contribution Rates

(as a % of Monthly Payroll, paid on all Eligible Pay[1])

Entry Age	Basic	COLA	Total
All members	11.49%	3.15%	14.64%

Interest:	6.75% per annum
COLA:	2.00%
Mortality:	See *Section 4, Exhibit 1*
Salary Increase:	Inflation (2.50%) + Across-the-Board Increase (0.25%) + Merit (See *Section 4, Exhibit 1*)
COLA Loading Factor:	27.42%
Non-Refundability Factor:	99.19%

[1] It is our understanding that in the determination of pension benefits under the CalPEPRA formulas, the compensation that can be taken into account for 2024 is equal to $151,446 (reference: Section 7522.10). This amount should be adjusted for changes to the Consumer Price Index for All Urban Consumers after 2024 (reference: Section 7522.10(d)).

Exhibit 4: Calculation of additional District rate as of June 30, 2024 for certain District employers

Additional contributions were made by the County to buy down the County (including SacSewer) and Superior Court UAAL contribution rate through the issuance of Pension Obligation Bonds (POB). As the other district employers did not participate in the POBs, their rates as calculated in this report have been increased to reflect that they did not buy down their UAAL rates and for other adjustments (Districts with All Service Improvements vs. Future Service Improvements, Rio Linda Elverta becoming a participating employer effective October 1, 2017, two-year phase-in of cost impact of actuarial assumptions). With this valuation, we are also calculating the POB rate adjustment available to SacSewer. The POB rate adjustment has been calculated as follows:

Calculation of the Additional District Rate for Certain Districts as of June 30, 2024

Description	Amount
June 30, 2023 POB adjustment amount	$28,014,319
Additional District rate in June 30, 2023 valuation	7.60%
June 30, 2023 projected District payroll[1]	$38,933,000
June 30, 2024 POB adjustment amount[2]	$26,846,514
11-year amortization factor	0.113166
June 30, 2024 projected District payroll[1]	$43,354,000
Additional District rate in June 30, 2024 valuation[3]	**7.01%**
June 30, 2024 projected SacSewer payroll	$75,005,000
June 30, 2024 projected Miscellaneous payroll[1]	$1,071,088,000
June 30, 2024 SacSewer POB adjustment credit[4]	$(1,879,979)
SacSewer POB adjustment rate in June 30, 2024 valuation[5]	**-0.28%**

1 Excluding the payroll for Rio Linda Elverta Recreation and Parks District.
2 Equal to $28,014,319 × 1.0675 − 7.60% × $38,933,000 × (1+0.0675 ÷ 2).
3 Equal to $26,846,514 × 0.113166 ÷ $43,354,000.
4 Equal to $(26,846,514) x $75,005,000 ÷ $1,071,088,000.
5 Equal to $(1,879,979) x 0.113166 ÷ $75,005,000.

Exhibit 5: Detailed District rates as of June 30, 2024

Special Districts with All Service Improvement Only as of June 30, 2024

Component by Tier	2024 Basic Contribution Rate	2024 COLA Contribution Rate	2024 Total Contribution Rate
Tier 3 – Member Pays Full Rate[1]			
Normal cost	13.48%	2.10%	15.58%
UAAL	16.81%	1.99%	18.80%
Total Contribution	**30.29%**	**4.09%**	**34.38%**
Tier 3 – Member Pays 50:50 Rate[2]			
Normal cost	8.80%	2.10%	10.90%
UAAL	16.81%	1.99%	18.80%
Total Contribution	**25.61%**	**4.09%**	**29.70%**
Tier 5[3]			
Normal cost	7.90%	1.66%	9.56%
UAAL	16.81%	1.99%	18.80%
Total Contribution	**24.71%**	**3.65%**	**28.36%**

[1] Includes Carmichael Recreation and Park District, Elk Grove Cosumnes Cemetery District, Mission Oaks Recreation and Park District, Sacramento Employment and Training Agency (S.E.T.A.), and Sunrise Recreation and Park District.

[2] Includes Orangevale Recreation and Park District only.

[3] Includes all the employers referenced in footnotes 1 and 2.

Special Districts with Future Service Improvement Only[1] as of June 30, 2024

Component by Tier	2024 Basic Contribution Rate	2024 COLA Contribution Rate	2024 Total Contribution Rate
Tier 3 – Member Pays Full Rate			
Normal cost	13.48%	2.10%	15.58%
UAAL	13.03%	1.54%	14.57%
Total Contribution	**26.51%**	**3.64%**	**30.15%**
Tier 5			
Normal cost	7.90%	1.66%	9.56%
UAAL	13.03%	1.54%	14.57%
Total Contribution	**20.93%**	**3.20%**	**24.13%**

Rio Linda Elverta Recreation and Parks District as of June 30, 2024

Component by Tier	2024 Basic Contribution Rate	2024 COLA Contribution Rate	2024 Total Contribution Rate
Tier 5			
Normal cost	7.90%	1.66%	9.56%
UAAL	1.62%	0.19%	1.81%
Total Contribution	**9.52%**	**1.85%**	**11.37%**

[1] Includes Fair Oaks Cemetery District and Galt-Arno Cemetery District.

Exhibit 6: Normal cost rates with additional member contributions under cost sharing arrangements

County and Orangevale Recreation and Park District members have agreed to pay 50% of the normal cost rate. The normal cost rates adjusted for the additional member contributions are developed in the following steps:

- Step A: Calculate the normal cost rates for the employer and the member assuming that no members contribute an additional portion of the normal cost.
- Step B: Calculate the normal cost rates for the employer and the member assuming that members pay exactly one-half of the total normal cost rate. In this step, we have adjusted the employer rate to account for the cost associated with the cessation of member contributions after 30 years of service for Miscellaneous members hired on or before March 7, 1973 and for Safety Tier 1, Tier 2 and Tier 3 members.
- Step C: Gross up the member normal cost rates developed in Step B for integration with Social Security.

These steps are presented in the following pages.

Step A: Normal cost (prior to any additional normal cost contributions by the member)

Total Normal Cost Contribution Rates (Employer and Member Normal Cost Rates): Member Paying Full Rate

(% of Payroll)

Category	Total Normal Cost	Employer Normal Cost[1]	Member Normal Cost[2]	Member COLA Offset[1]
Miscellaneous				
Tier 1[3]	23.59%	16.36%	7.33%	0.00%
Tier 2	16.24%	12.15%	4.17%	0.00%
Tier 3	21.78%	15.58%	6.05%	0.24%
Tier 4	20.93%	11.80%	9.00%	0.24%
Safety				
Tier 1[3]	48.84%	34.70%	16.75%	3.32%
Tier 2	42.11%	26.08%	16.07%	0.29%
Tier 3	41.01%	25.17%	15.80%	0.29%

1 Employer normal cost rate and member COLA offset are paid over all payroll.

2 Member normal cost rate is paid over payroll before the cessation of member contributions after 30 years of service for all Safety members and for Miscellaneous members hired on or before March 7, 1973. Member rates shown are for annual salary in excess of $4,200 (or monthly salary in excess of $350). For annual salary less than $4,200 (or monthly salary less than $350), the rates are equal to 2/3 of the rates shown. Also, the member COLA offset is a non-cash contribution item funded out of the balance of transfer to offset member COLA rate.

3 These are the single-entry age rates at age 35 and 29 for Miscellaneous and Safety, respectively.

Step B: Normal cost (assuming exactly 50:50 payment by the employer and the member) – before gross-up for integration with Social Security

Total Normal Cost Contribution Rates (Employer and Member Normal Cost Rates): Member Paying 50:50 Rate

(% of Payroll)

Category	Total Normal Cost	Employer Normal Cost[1]	Member Normal Cost[2, 3]	Member COLA Offset[1]
Miscellaneous				
Tier 1	23.59%	11.80%	11.80%	0.00%
Tier 2	16.24%	8.12%	8.12%	0.00%
Tier 3	21.78%	10.90%	10.66%	0.24%
Tier 4	20.93%	10.47%	10.23%	0.24%
Safety				
Tier 1	48.84%	30.78%[4]	21.15%	3.32%
Tier 2	42.11%	21.19%[5]	20.76%	0.29%
Tier 3	41.01%	20.51%	20.22%	0.29%

1 Employer normal cost rate and member COLA offset are paid over all payroll.

2 Member normal cost rate is paid over payroll before the cessation of member contributions after 30 years of service for all Safety members and for Miscellaneous members hired on or before March 7, 1973.

3 The member rates have not been grossed up for the rate on the first $4,200 in annual salary being 2/3 of the rate on annual salary above $4,200. Please see Step C on the following page for the member rates after the gross-up.

4 This employer rate has been adjusted by 6.31% of payroll to account for the cost associated with the cessation of member contributions after 30 years of service.

5 This employer rate has been adjusted by 0.14% of payroll to account for the cost associated with the cessation of member contributions after 30 years of service.

Step C: Normal cost (assuming exactly 50:50 payment by the employer and the member) – after gross-up for integration with Social Security

Total Normal Cost Contribution Rates (Employer and Member Normal Cost Rates): Member Paying 50:50 Rate

(% of Payroll)

Category	Total Normal Cost	Employer Normal Cost[1]	Member Basic Normal Cost[2, 3]	Member COLA Normal Cost[2, 3]	Member Total Normal Cost[2, 3]	Member COLA Offset[1]
Miscellaneous						
Tier 1	23.59%	11.80%	8.97%	2.99%	11.96%	0.00%
Tier 2	16.24%	8.12%	8.23%	0.00%	8.23%	0.00%
Tier 3	21.78%	10.90%	8.91%	1.89%	10.80%	0.24%
Tier 4	20.93%	10.47%	8.68%	1.67%	10.35%	0.24%
Safety						
Tier 1	48.84%	30.78%[4]	17.71%	3.59%	21.30%	3.32%
Tier 2	42.11%	21.19%[5]	16.48%	4.45%	20.93%	0.29%
Tier 3	41.01%	20.51%	16.21%	4.18%	20.39%	0.29%

1 Employer normal cost rate and member COLA offset are paid over all payroll.

2 Member normal cost rate is paid over payroll before the cessation of member contributions after 30 years of service for all Safety members and for Miscellaneous members hired on or before March 7, 1973. Member rates shown are for annual salary in excess of $4,200 (or monthly salary in excess of $350). For annual salary less than $4,200 (or monthly salary less than $350), the rates are equal to 2/3 of the rates shown. Also, the member COLA offset is a non-cash contribution item funded out of the balance of transfer to offset member COLA rate.

3 For Rep Unit 19 (Probation) and Rep Unit 3 (Deputy Sheriffs System) members in Safety Tiers 1, 2, and 3, the member rate for 2024–2025, 2025–2026, and 2026–2027 shall not exceed the member rate for 2023–2024. This provision has no impact on the member rate established in this valuation for 2025–2026.

4 This employer rate has been adjusted by 6.31% of payroll to account for the cost associated with the cessation of member contributions after 30 years of service.

5 This employer rate has been adjusted by 0.14% of payroll to account for the cost associated with the cessation of member contributions after 30 years of service.

Exhibit 7: SacSewer normal cost rates

SacSewer members in Miscellaneous Tiers 1 through 4, have agreed to pay 114% of the applicable full member rate, but no more than 50% of the total normal cost rate. The normal cost rates adjusted for the additional member contributions are developed in the following steps:

- Step A: Calculate the normal cost rates for the employer and the member assuming that no members contribute an additional portion of the normal cost.
- Step B: Calculate the normal cost rates for the employer and the member assuming that members pay 114% of the applicable member rate, but no more than 50% of the total normal cost rate.

These steps are presented in the following pages. Tier 1 rates are not shown because there were no Miscellaneous Tier 1 SacSewer active members reported for the June 30, 2024 valuation. Tier 5 rates are the same in both Step A and Step B as they do not require any adjustment for additional member contributions.

Step A: Normal cost (prior to any additional normal cost contributions by the member)

Total Normal Cost Contribution Rates (Employer and Member Normal Cost Rates): Member Paying Full or 50:50 Rate

(% of Payroll)

Category	Total Normal Cost	Employer Normal Cost[1]	Member Normal Cost[2, 3]	Member COLA Offset[1]
Miscellaneous				
Tier 2	16.30%	12.18%	4.17%	0.00%
Tier 3	21.66%	15.44%	6.05%	0.24%
Tier 4	20.53%	11.40%	8.97%	0.24%
Tier 5	18.94%	9.47%	9.47%	0.00%

[1] Employer normal cost rate and member COLA offset are paid over all payroll.

[2] Member rates shown for Tiers 2, 3 and 4 are for annual salary in excess of $4,200 (or monthly salary in excess of $350). For annual salary less than $4,200 (or monthly salary less than $350), the rates are equal to 2/3 of the rates shown. Also, the member COLA offset is a non-cash contribution item funded out of the balance of transfer to offset member COLA rate.

[3] Member rates shown for Tier 5 are for all eligible compensation. It is our understanding that in the determination of pension benefits under the CalPEPRA formulas, the compensation that can be taken into account for 2024 is equal to $151,446 (reference: Section 7522.10). This amount should be adjusted for changes to the Consumer Price Index for All Urban Consumers after 2024 (reference: Section 7522.10(d)).

Step B: Normal cost (assuming legacy members pay 114% of the applicable member rate)

Total Normal Cost Contribution Rates (Employer and Member Normal Cost Rates): Member Paying 114% or 50:50 Rate
(% of Payroll)

Category	Total Normal Cost	Employer Normal Cost[1]	Member Basic Normal Cost[2, 3]	Member COLA Normal Cost[2, 3]	Member Total Normal Cost[2, 3]	Member COLA Offset[1]
Miscellaneous						
Tier 2	16.30%	11.60%	4.75%	0.00%	4.75%	0.00%
Tier 3	21.66%	14.57%	5.05%	1.88%	6.93%	0.24%
Tier 4	20.53%	10.27%	8.51%	1.64%	10.15%	0.24%
Tier 5	18.94%	9.47%	7.80%	1.67%	9.47%	0.00%

1 Employer normal cost rate and member COLA offset are paid over all payroll.

2 Member rates shown for Tiers 2, 3 and 4 are for annual salary in excess of $4,200 (or monthly salary in excess of $350). For annual salary less than $4,200 (or monthly salary less than $350), the rates are equal to 2/3 of the rates shown. Also, the member COLA offset is a non-cash contribution item funded out of the balance of transfer to offset member COLA rate.

3 Member rates shown for Tier 5 are for all eligible compensation. It is our understanding that in the determination of pension benefits under the CalPEPRA formulas, the compensation that can be taken into account for 2024 is equal to $151,446 (reference: Section 7522.10). This amount should be adjusted for changes to the Consumer Price Index for All Urban Consumers after 2024 (reference: Section 7522.10(d)).

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; **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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Sacramento County Employees' Retirement System

Governmental Accounting Standards Board Statement No. 67 (GASBS 67) Actuarial Valuation as of June 30, 2024

Segal

Segal

180 Howard Street
Suite 1100
San Francisco, CA 94105-6147
segalco.com
T 415.263.8200

October 16, 2024

Board of Retirement
Sacramento County Employees' Retirement System
980 9th Street, Suite 1900
Sacramento, CA 95814

Dear Board Members:

We are pleased to submit this Governmental Accounting Standards Board Statement No. 67 (GASBS 67) Actuarial Valuation as of June 30, 2024 for the Sacramento County Employees' Retirement System ("SCERS" or "the Plan"). It contains various information that will need to be disclosed in order to comply with GASBS 67. Please refer to SCERS' Actuarial Valuation and Review as of June 30, 2024 for the data, assumptions, and plan of benefits underlying these calculations.

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

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; and changes in plan provisions or applicable law.

The actuarial calculations were completed under the supervision of Andy Yeung, ASA, MAAA, FCA, 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 the actuarial valuation is complete and accurate. The assumptions used in this actuarial valuation were selected by the Board based upon our analysis and recommendations. In our opinion, the assumptions are reasonable and take into account the experience of SCERS 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 with you and to answering any questions.

Sincerely,

Segal

Todd Tauzer, FSA, MAAA, FCA, CERA
Senior Vice President and Actuary

Andy Yeung, ASA, MAAA, FCA, EA
Vice President and Actuary

Molly Calcagno, ASA, MAAA, EA
Senior Actuary

ST/jl

Table of Contents

Section 1: Actuarial Valuation Summary

Purpose and basis

This report has been prepared by Segal to present certain disclosure information required by Governmental Accounting Standards Board Statement No. 67 (GASBS 67) as of June 30, 2024. This report is based on:

- The benefit provisions of SCERS, as administered by the Board;
- The characteristics of covered active, inactive, and retired members and beneficiaries as of June 30, 2024, provided by SCERS;
- The assets of the Plan as of June 30, 2024, provided by SCERS;
- Economic assumptions regarding future salary increases and investment earnings adopted by the Board for the June 30, 2024 funding valuation; and
- Other actuarial assumptions, regarding employee terminations, retirement, death, etc. adopted by the Board for the June 30, 2024 funding valuation.

General observations on a GASBS 67 actuarial valuation

1. The Governmental Accounting Standards Board (GASB) rules only define pension liability and expense for financial reporting purposes, they do not apply to contribution amounts for pension funding purposes. Employers and plans should continue to develop and adopt funding policies under current practices.
2. When measuring pension liability, GASB uses the same actuarial cost method (Entry Age method) and the same type of discount rate (expected return on assets) as SCERS uses for funding. This means that the Total Pension Liability (TPL) measure for financial reporting shown in this report is generally determined on the same basis as SCERS' Actuarial Accrued Liability (AAL) measure for funding. We note that the same is generally true for the service cost for financial reporting shown in this report and the normal cost component of the annual plan cost for funding.
3. The Net Pension Liability (NPL) is equal to the difference between the TPL and the Plan Fiduciary Net Position (FNP). The Plan FNP is equal to the fair value of assets and therefore, the NPL measure is very similar to an Unfunded Actuarial Accrued Liability (UAAL) on a market value basis.

Highlights of the valuation

1. The reporting date for the Plan is June 30, 2024 and the NPL was measured as of the same date. The TPL was determined based upon the actuarial valuation as of June 30, 2024 and the Plan FNP was also valued as of the measurement date.
2. The NPL decreased from $1,995.6 million as of June 30, 2023 to $1,692.4 million as of June 30, 2024 primarily due to a return on the market value of assets of 8.8% during fiscal year 2023-2024 that was more than the assumption of 6.75% used in the June 30, 2023 valuation (a gain of about $264 million[1]). Changes in these values during the last two fiscal years can be found in *Section 2, Exhibit 3 - Schedule of changes in Net Pension Liability* on page 20.
3. The discount rate used to measure the TPL and NPL as of June 30, 2024 was 6.75%, following the same assumptions used by SCERS in the actuarial funding valuation as of June 30, 2024. The detailed calculations used in the derivation of the 6.75% discount rate can be found in *Appendix A*. Various other information that is required to be disclosed can be found throughout *Section 2*.
4. The Plan Fiduciary Net Position as of June 30, 2024 includes $10.8 million that is available to offset a portion of the legacy. members' future COLA contribution rates. Since the $10.8 million can only be used in the future to reduce contribution rates for the legacy employees, we have included a liability of the same amount so that the employer's net NPL is unchanged by the availability of this amount.
5. On July 30, 2020, the California Supreme Court issued a decision in the case of Alameda County Deputy Sheriffs' Association et al. v. Alameda County Employees' Retirement Association (ACERA) and Board of Retirement of ACERA. That decision affected the benefits paid by SCERS to its members and/or the contributions received by SCERS from its members. In particular, the June 30, 2024 valuation reflected refunding member contributions to active and deferred vested members associated with the excluded premium pays under the Alameda Decision, and reduced retiree and beneficiary benefits as the result of reduced final average salary calculations caused by the excluded premium pays. (These adjustments were partially reflected in the June 30, 2023 valuation. When preparing the financial and membership data provided for the June 30, 2023 valuation, SCERS had not finished refunding member contributions and reducing retiree and beneficiary benefits.)

   Following the practice in the June 30, 2023 valuation, we have reflected the contribution refunds and reduced retiree and beneficiary benefits noted above as part of experience gains and losses rather than as a plan amendment. We have estimated that the reduction in the TPL for the retirees and beneficiaries reported for this year's valuation (that were not reflected in the June 30, 2023 valuation) to be about $17 million as of June 30, 2024.[2]

[1] Equal to about $251 million investment gain net of investment expenses but gross of about $12 million in administrative expenses.
[2] We estimated that the reduction in the TPL prior to June 30, 2023 for the retirees and beneficiaries reported in the June 30, 2023 valuation to be about $14 million as of June 30, 2023.

Summary of key valuation results

Line Description	Current Year	Prior Year
Reporting and Measurement Date	June 30, 2024	June 30, 2023
Disclosure elements		
Service cost[1]	$287,892,288	$270,739,734
Total Pension Liability	15,002,017,000	14,358,854,000
Plan Fiduciary Net Position	13,309,631,000	12,363,258,000
Net Pension Liability	1,692,386,000	1,995,596,000
Schedule of contributions		
Actuarially determined contributions[2]	$395,853,306	$360,673,968
Actual contributions	395,853,306	360,673,968
Contribution deficiency / (excess)	0	0
Demographic data		
Number of retired members and beneficiaries	14,285	13,934
Number of inactive members[3]	4,935	4,702
Number of active members	13,690	13,167
Key assumptions		
Investment rate of return	6.75%	6.75%
Inflation rate	2.50%	2.50%
"Across-the-board" salary increase	0.25%	0.25%
Projected salary increases[4]	4.25% to 9.75%	4.25% to 9.75%
Cost-of-living adjustments	Miscellaneous and Safety Tier 1: 2.75% Miscellaneous Tier 2: 0.00% All other Tiers: 2.00%	Miscellaneous and Safety Tier 1: 2.75% Miscellaneous Tier 2: 0.00% All other Tiers: 2.00%

[1] The service cost is based on the previous year's valuation, meaning the service cost as of the June 30, 2024 and June 30, 2023 measurement dates are based on the valuations as of June 30, 2023 and June 30, 2022, respectively. The June 30, 2024 service cost has been calculated using the assumptions shown in the Prior Year column, while the June 30, 2023 service cost has been calculated using the assumptions from the June 30, 2022 valuation. Please refer to the note on the next page for the assumptions used for the June 30, 2023 service cost.

[2] These amounts exclude $2,127,362 and $10,573,829 in receivable contributions due from Sacramento Metropolitan Fire (SMF) in the 2024 and 2023 valuations, respectively. (This represents the change in the withdrawal liability for SMF as a result of our annual update.)

[3] Includes inactive members with member contributions on deposit.

[4] Includes inflation at 2.50% plus "across-the-board" salary increase of 0.25% plus merit and promotion increases that vary by service.

Note to footnote 1 from prior page

The June 30, 2023 service cost has been calculated using the following assumptions as of June 30, 2022:

- Investment rate of return: 6.75%
- Inflation rate 2.75%
- "Across-the-board" salary increase 0.25%
- Projected salary increases: 4.25% to 10.50%
  - Projected salary increases include inflation at 2.75% plus across-the-board increase of 0.25% plus merit and promotion increases that vary by service.
- Cost-of-living adjustments

Cost-of-living adjustments	Miscellaneous and Safety Tier 1:	2.75%
	Miscellaneous Tier 2:	0.00%
	All other Tiers:	2.00%

Important information about actuarial valuations

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 (as well as the plan summary included in our funding valuation 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 SCERS. 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	The valuation is based on the fair value of assets as of the measurement date, as provided by SCERS.
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 any). 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.
Actuarial 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. Deterministic cost projections are based on a proprietary forecasting model. 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. The discount rate used for calculating Total Pension Liability is based on a model developed by our Actuarial Technology and Systems unit, comprised of both actuaries and programmers. The model allows the client team, under the supervision of the responsible actuary, control over the entry of future expected contribution income, benefit payments and administrative expenses. The projection of fiduciary net position and the discounting of benefits is part of the model.

Section 1: Actuarial Valuation Summary

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

- The actuarial valuation is prepared at the request of the Board. 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 SCERS 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 Board should look to their other advisors for expertise in these areas.
- While Segal maintains extensive quality assurance procedures, an actuarial valuation involves complex computer models and numerous inputs. In the event that an inaccuracy is discovered after presentation of Segal's valuation, Segal may revise that valuation or make an appropriate adjustment in the next valuation.
- Segal's report shall be deemed to be final and accepted by SCERS upon delivery and review. SCERS should notify Segal immediately of any questions or concerns about the final content.

Section 2: GASBS 67 Information

General information about the pension plan

Plan administration

The Sacramento County Employees' Retirement System (SCERS) was established by the County of Sacramento in 1941. SCERS is administered by the Board of Retirement and governed by the County Employees' Retirement Law of 1937 (California Government Code Section 31450 et. seq). SCERS is a cost-sharing multiple employer public employee retirement system whose main function is to provide service retirement, disability, death and survivor benefits to the Safety and Miscellaneous members employed by the County of Sacramento.[1] SCERS also provides retirement benefits to the employee members of the Superior Court of California (County of Sacramento) and nine Special Districts.

The management of SCERS is vested with the Sacramento County Board of Retirement. The Board consists of nine members and two alternates.

- Four members are appointed by the Board of Supervisors;
- Two members are elected by the Miscellaneous membership;
- One member and one alternate are elected by the Safety membership;
- One member and one alternate are elected by the retired members of the System;
- The County Director of Finance serves as ex officio member.

All members of the Board of Retirement serve terms of three years except for the County Director of Finance whose term runs concurrent with their term as Director of Finance.

[1] Effective December 15, 2024, the Sacramento Area Sewer District (SacSewer) will become a new employer of SCERS. However, as of the June 30, 2024 reporting and measurement date in this report, members associated with SacSewer are still considered members of the County.

Plan membership

At June 30, 2024, pension plan membership consisted of the following:

Membership	Count
Retired members and beneficiaries	14,285
Inactive members[1]	4,935
Active members	13,690
Total	**32,910**

Benefits provided

SCERS provides service retirement, disability, death and survivor benefits to eligible employees. All permanent full-time or part-time employees of the County of Sacramento or contracting district become members of SCERS upon employment.

There are separate retirement plans for Safety and Miscellaneous members. Safety membership is extended to those involved in active law enforcement, fire suppression, and certain other classifications.

There are four tiers applicable to Safety members.

- Tier 1 includes all members who entered prior to June 25, 1995.
- Tier 2 includes members who entered on or after June 25, 1995 but prior to January 1, 2012.
- Tier 3 includes County employees who entered on or after January 1, 2012 but prior to January 1, 2013.
- Tier 4 includes any new Safety employee who becomes a member on or after January 1, 2013 and is subject to the provisions of the California Public Employees' Pension Reform Act of 2013 (PEPRA), California Government Code 7522 et seq. and Assembly Bill (AB) 197. These members are designated as PEPRA Safety.

All other employees are classified as Miscellaneous members. There are five tiers applicable to Miscellaneous members.

- Tier 1 includes all members who entered prior to September 27, 1981.
- Tier 2 and Tier 3 include members who were hired on or after September 27, 1981 and June 27, 1993, respectively, but prior to January 1, 2012 for County members and January 1, 2013 for contracting districts.
- Tier 4 includes County employees who entered on or after January 1, 2012 but prior to January 1, 2013.

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

- Tier 5 includes any new Miscellaneous employee who becomes a member on or after January 1, 2013 and is subject to the provisions of PEPRA, California Government Code 7522 et seq. and AB 197. These members are designated as PEPRA Miscellaneous.

The retirement benefit the member will receive is based upon age at retirement, final average compensation, years of retirement service credit, and retirement plan and tier.

- Final average compensation consists of the highest 12 consecutive months for a Tier 1 Safety or Tier 1 Miscellaneous member and the highest 36 consecutive months for a Tier 2, Tier 3, Tier 4 or Tier 5 member.
- For members with membership dates before January 1, 2013, the maximum monthly retirement allowance is 100% of final compensation. There is no maximum for members with membership dates on or after January 1, 2013.

The member may elect an unmodified retirement allowance or choose an optional retirement allowance. The unmodified retirement allowance provides the highest monthly benefit and a 60% continuance to an eligible surviving spouse. An eligible surviving spouse is one married to the member one year prior to the effective retirement date. There are four optional retirement allowances the member may choose. Each of the optional retirement allowances requires a reduction in the unmodified retirement allowance in order to allow the member the ability to provide certain benefits to a surviving spouse or named beneficiary having an insurable interest in the life of the member.

SCERS provides an annual cost-of-living benefit to Safety Tier 1, Tier 2, Tier 3 and Tier 4 members and Miscellaneous Tier 1, Tier 3, Tier 4 and Tier 5 members. The cost-of-living adjustment, based upon the ratio of the past two Consumer Price Indices for the San Francisco-Oakland-Hayward area, is capped at 4.0% for Tier 1 members and 2.0% for all other members eligible for a cost-of-living adjustment.

Safety member benefit

Safety members hired prior to January 1, 2013, are eligible to retire once they attain the age of 50 and have acquired 10 or more years of retirement service credit. A member with 20 years of service is eligible to retire regardless of age. Safety members who are first hired on or after January 1, 2013, are eligible to retire once they have attained the age of 50 and have acquired five years of retirement service credit, or upon attainment of age 70.

Safety member benefits for Tier 1 and Tier 2 are calculated pursuant to the provisions of California Government Code Section 31664.1. Safety member benefits for Tier 3 are calculated pursuant to the provision of California Government Code Section 31664.2. The monthly allowance is equal to 2% of the first $350 of final compensation, plus 3% of the excess final compensation times years of accrued retirement service credit times age factor from either Section 31664.1 (Tier 1 and 2) or 31664.2 (Tier 3). Safety member benefits for those who are first hired on or after January 1, 2013, are calculated pursuant to the provision of

California Government Code Section 7522.25(d). The monthly allowance is equal to the final compensation multiplied by years of accrued retirement credit multiplied by the age factor from Section 7522.25(d).

Miscellaneous member benefits

Miscellaneous members hired prior to January 1, 2013, are eligible to retire once they attain the age of 50 and have acquired 10 or more years of retirement service credit. A member with 30 years of service is eligible to retire regardless of age. Miscellaneous members who are first hired on or after January 1, 2013, are eligible to retire once they have attained the age of 52 and have acquired five years of retirement service credit, or upon attainment of age 70.

Miscellaneous member benefits for Tier 1, Tier 2 and Tier 3 are calculated pursuant to the provisions of California Government Code Section 31676.14. Miscellaneous member benefits for Tier 4 are calculated pursuant to the provisions of California Government Code Section 31676.1. The monthly allowance is equal to 1/90th of the first $350 of final compensation, plus 1/60th of the excess final compensation times years of accrued retirement service credit times age factor from either Section 31676.14 (Tier 1, Tier 2 and Tier 3) or Section 31676.1 (Tier 4). Miscellaneous member benefits for those who are first hired on or after January 1, 2013, are calculated pursuant to the provision of California Government Code Section 7522.20(a). The monthly allowance is equal to the final compensation multiplied by years of accrued retirement credit multiplied by the age factor from Section 7522.20(a).

Contributions

The County of Sacramento and contracting districts contribute to the retirement plan based upon actuarially determined contribution rates adopted by the Board of Retirement. Employer contribution rates are adopted annually based upon recommendations received from SCERS' actuary after the completion of the annual actuarial valuation. The average employer contribution rate as of June 30, 2024 for 2023-2024 (based on the June 30, 2022 valuation) was 29.74% of compensation.

All members are required to make contributions to SCERS regardless of the retirement plan or tier in which they are included. The average member contribution rate as of June 30, 2024 for 2023-2024 (based on the June 30, 2022 valuation) was 12.00% of compensation.

Exhibit 1 – Net Pension Liability

Line Description	Current Year	Prior Year
Reporting and Measurement Date	June 30, 2024	June 30, 2023
Components of the Net Pension Liability		
Total Pension Liability	$15,002,017,000	$14,358,854,000
Plan Fiduciary Net Position	(13,309,631,000)	(12,363,258,000)
Net Pension Liability	**$1,692,386,000**	**$1,995,596,000**
Plan Fiduciary Net Position as a percentage of the Total Pension Liability[1]	88.72%	86.10%

The NPL for the Plan in this valuation was measured as of June 30, 2024. The Plan FNP was valued as of the measurement date and the TPL was determined based upon the actuarial valuation as of June 30, 2024.

Plan provisions

The plan provisions used in the measurement of the NPL as of June 30, 2024 are the same as those used in SCERS' actuarial funding valuation as of June 30, 2024.

Actuarial assumptions

The TPL as of June 30, 2024 uses the same actuarial assumptions as the actuarial funding valuation as of June 30, 2024. The actuarial assumptions used in that funding valuation were based on the results of an experience study for the period July 1, 2019 through June 30, 2022. In particular, the following actuarial assumptions were applied to all periods included in the measurement:

[1] These funded percentages 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.

Section 2: GASBS 67 Information

Assumption Type	Assumption
Investment rate of return	6.75%, net of pension plan investment expense, including inflation.
Inflation rate	2.50%
“Across-the-board” salary increase	0.25%
Salary increases	4.25% to 9.75% The above salary increases vary by service and include inflation and “across-the-board” salary increase.
Cost-of-living adjustments	Miscellaneous Tier 1: 2.75% Safety Tier 1: 2.75% Miscellaneous Tier 2: 0.00% All other Tiers: 2.00%
Other assumptions	See the analysis of actuarial experience for the period July 1, 2019 through June 30, 2022.

Detailed information regarding all actuarial assumptions can be found in the June 30, 2024 Actuarial Valuation and Review.

Exhibit 2 – Discount rate

Determination of discount rate and investment rates of return

The long-term expected rate of return on pension plan investments[1] was determined using a building-block method in which expected arithmetic real rates of return (expected returns, net of inflation and, beginning with June 30, 2023, any applicable investment management expenses) are developed for each major asset class. These returns are combined to produce the long-term expected arithmetic rate of return for the portfolio by weighting the expected arithmetic real rates of return by the target asset allocation percentage, adding expected inflation and subtracting expected investment expenses (beginning with June 30, 2023 including only investment consulting fees, custodian fees and other miscellaneous investment expenses) and a risk margin. Beginning with June 30, 2023 this portfolio return is also adjusted to an expected geometric real rate of return for the portfolio.

The target allocation (approved by the Board) and projected arithmetic real rates of return for each major asset class (after deducting inflation and applicable investment management expenses), are shown in the following table. This information was used in the derivation of the long-term expected investment rate of return assumption for the actuarial funding valuation as of June 30, 2024. This information will be subject to change every three years based on the results of an actuarial experience study.

[1] Note that the investment return assumption for funding purposes was developed net of both investment and administrative expenses; however, the same investment return assumption was used for financial reporting purposes, where it is considered gross of administrative expenses. This results in an increase in the margin for adverse deviation when using that investment return assumption for financial reporting.

Asset Class	Target Allocation	Long-Term Expected Arithmetic Real Rate of Return[1]
Global equity	40.00%	7.05%
Private equity	11.00%	10.12%
Public credit – high yield	1.00%	4.63%
Public credit – leveraged loan	1.00%	4.07%
Private credit	5.00%	6.69%
Fixed income – core	12.00%	1.97%
Fixed income – U.S. Treasury	4.00%	1.31%
Core real estate	6.00%	3.86%
Value added real estate	1.50%	6.70%
Opportunistic real estate	1.50%	8.60%
Absolute return	7.00%	3.00%
Real assets	7.00%	7.30%
Liquid real return	2.00%	4.40%
Cash	1.00%	0.63%
Total	**100.00%**	**5.92%**

Discount rate

The discount rate used to measure the TPL was 6.75% as of June 30, 2024.

The projection of cash flows used to determine the discount rate assumes plan member contributions will be made at the current contribution rates and that employer contributions will be made at rates equal to the actuarially determined contribution rates.[2] Projected employer contributions that are intended to fund the service costs for future plan members and their beneficiaries, as well as projected contributions from future plan members, are not included. Based on those assumptions, the Plan FNP was projected to be available to make all projected future benefit payments for current plan members. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the TPL as of June 30, 2024.

[1] Arithmetic real rates of return are net of inflation.
[2] For this purpose, only employer contributions that are intended to fund benefits of current plan members and their beneficiaries are included.

Discount rate sensitivity

The following presents the NPL of SCERS as of June 30, 2024 calculated using the current discount rate of 6.75%, as well as what the SCERS' NPL would be if it were calculated using a discount rate that is 1-percentage-point lower (5.75%) or 1-percentage-point higher (7.75%) than the current rate.

Line Description	1% Decrease in Discount Rate (5.75%)	Current Discount Rate (6.75%)	1% Increase in Discount Rate (7.75%)
Net Pension Liability	$3,701,817,000	$1,692,386,000	$42,325,000

Exhibit 3 – Schedule of changes in Net Pension Liability

Line Description	Current Year	Prior Year
Reporting and Measurement Date	June 30, 2024	June 30, 2023
Total Pension Liability		
Service cost	$287,892,288	$270,739,734
Interest	964,836,649	912,500,116
Change of benefit terms	0	0
Differences between expected and actual experience	96,174,063 [1]	279,701,150 [1]
Changes of assumptions	0	(20,664,000)
Benefit payments, including refunds of member contributions	(705,740,000)	(662,407,000)
Other	0	0
Net change in Total Pension Liability	**$643,163,000**	**$779,870,000**
Total Pension Liability — beginning	14,358,854,000	13,578,984,000
Total Pension Liability — ending	**$15,002,017,000**	**$14,358,854,000**
Plan Fiduciary Net Position		
Contributions — employer	$395,853,000	$360,674,000
Contributions — member	159,654,000	139,521,000
Net investment income	1,104,512,000	710,907,000
Benefit payments, including refunds of member contributions	(705,740,000)	(662,407,000)
Administrative expense	(12,422,000)	(28,178,000) [2]
Other	4,516,000 [3]	12,390,000 [4]
Net change in Plan Fiduciary Net Position	**$946,373,000**	**$532,907,000**
Plan Fiduciary Net Position — beginning	12,363,258,000	11,830,351,000
Plan Fiduciary Net Position — ending	**$13,309,631,000**	**$12,363,258,000**
Net Pension Liability — ending	**$1,692,386,000**	**$1,995,596,000**
Plan Fiduciary Net Position as a percentage of the Total Pension Liability	88.72%	86.10%
Covered payroll [5]	$1,330,913,098	$1,175,393,299
Plan Net Pension Liability as percentage of covered payroll	127.16%	169.78%

See accompanying footnotes to this schedule on next page.

Footnotes to prior page

1. Net of the reductions in the retiree and beneficiary benefits reported for the June 30, 2023 and 2024 valuations under the Alameda Decision as experience gains and losses as discussed on page 6.
2. Includes a one-time impairment amount of $17.1 million associated with termination of pension administration services provided by an outside vendor.
3. We have classified the $2,308,375 interest contribution made by Sacramento Metropolitan Fire, a non-active employer, during 2023-2024 as well as the $2,127,362 receivable contributions due from Sacramento Metropolitan Fire, in the “Other” category. We have also classified net $80,000 of miscellaneous income in the “Other” category. This is done to anticipate that the NPL for the active employers to be disclosed later in our GASBS 68 actuarial valuation as of June 30, 2024 will be allocated using the employer contributions excluding the total $4,436,000 contributions made and miscellaneous income received during 2023-2024. Following last year’s practice, we have continued to treat the net $80,000 in miscellaneous income as an amount to be recognized immediately as of the June 30, 2024 measurement date.
4. We have classified the $1,775,000 interest contribution made by Sacramento Metropolitan Fire, a non-active employer, during 2022-2023 as well as the $10,573,829 receivable contributions due from Sacramento Metropolitan Fire, in the “Other” category. We have also classified $41,000 of miscellaneous income and federal tax credit in the “Other” category. This is done to anticipate that the NPL for the active employers disclosed later in our GASBS 68 actuarial valuation as of June 30, 2023 will be allocated using the employer contributions excluding the total $12,349,000 contributions made and miscellaneous income and federal tax credit received during 2022-2023. Following the prior year’s practice, we have continued to treat the $41,000 in miscellaneous income and federal tax credit as an amount to be recognized immediately as of the June 30, 2023 measurement date.
5. Covered payroll represents payroll on which contributions to the pension plan are based.

Exhibit 4 – Schedule of employer contributions

Year Ended June 30	Actuarially Determined Contributions	Contributions in Relation to the Actuarially Determined Contributions	Contribution Deficiency / (Excess)	Covered Payroll[1]	Contributions as a Percentage of Covered Payroll
2015	$221,823,365	$221,823,365	$0	$873,328,000	25.40%
2016	207,884,162	207,884,162	0	912,421,000	22.78%
2017	201,928,297	201,928,297	0	958,934,000	21.06%
2018	198,331,133	198,331,133	0	985,375,000	20.13%
2019	240,237,090	240,237,090	0	1,017,885,000	23.60%
2020	274,054,940	274,054,940	0	1,059,984,000	25.85%
2021	292,533,591	292,533,591	0	1,034,343,000	28.28%
2022	323,609,923	323,609,923	0	1,078,235,000	30.01%
2023	360,673,968	360,673,968	0	1,175,393,000	30.69%
2024	395,853,306	395,853,306	0	1,330,913,000	29.74%

See accompanying notes to this schedule on next page.

[1] Covered payroll represents payroll on which contributions to the pension plan are based.

Notes

Methods and assumptions used to establish the actuarially determined contribution for the year ended June 30, 2024

Valuation date

Actuarially determined contribution rates are calculated as of June 30, two years prior to the end of the fiscal year in which contributions are reported (the June 30, 2022 valuation sets the rates for the 2023-2024 fiscal year).

Actuarial cost method

Entry Age Actuarial Cost Method

Amortization method

Level percent of payroll

Remaining amortization period

The balance of the UAAL as of June 30, 2012 is amortized separately from any future changes in UAAL over a period of 23 years from June 30, 2012 (13 years remaining as of June 30, 2022).

Effective June 30, 2013, any changes in UAAL due to actuarial gains or losses or due to changes in actuarial assumptions or methods will be amortized over a 20-year closed period effective with each valuation. Any change in UAAL that arises due to plan amendments will be amortized over its own declining 15-year period and any change in UAAL due to retirement incentive programs will be amortized over a declining period of up to 5 years.

Asset valuation method

The actuarial value of assets is equal to the market value (or fair value) of assets less unrecognized returns from each of the last six years. The unrecognized return each year is equal to the difference between the actual and expected returns on the market value of assets, recognized over a seven-year period. The actuarial value of assets is further adjusted, if necessary, to be within 30% of the market value of assets.

Section 2: GASBS 67 Information

Other information

All members with membership dates on or after January 1, 2013 enter the new tiers created by the California Public Employees' Pension Reform Act of 2013 (PEPRA).

Actuarial assumptions

The actuarially determined contribution for the year ended June 30, 2024 is based on the results of the SCERS June 30, 2022 Actuarial Valuation and Review. The actuarial assumptions used in that valuation are as follows:

Assumption Type	Assumptions Used in the June 30, 2022 Valuation
Investment rate of return	6.75%, net of pension plan investment expense, including inflation.
Inflation rate	2.75%
"Across-the-board" salary increase	0.25%
Salary increases	4.25% to 10.50% The above salary increases vary by service and include inflation and "across-the-board" salary increase.
Cost-of-living adjustments	Miscellaneous Tier 1: 2.75% Safety Tier 1: 2.75% Miscellaneous Tier 2: 0.00% All other Tiers: 2.00%
Other assumptions	Same as those used in the funding actuarial valuation as of June 30, 2022.

Appendix A: Projection of Plan Fiduciary Net Position

Projection of Plan Fiduciary Net Position for use in the Calculation of Discount Rate as of June 30, 2024 ($ in millions)

Year Beginning July 1	Beginning Plan Fiduciary Net Position (a)	Total Contributions (b)	Benefit Payments (c)	Administrative Expenses (d)	Investment Earnings (e)	Ending Plan Fiduciary Net Position (a) + (b) – (c) – (d) + (e)
2024	$13,310	$519	$786	$13	$886	$13,915
2025	13,915	513	812	14	926	14,529
2026	14,529	508	850	15	966	15,138
2027	15,138	498	890	15	1,005	15,736
2028	15,736	510	929	16	1,044	16,346
2029	16,346	507	970	16	1,084	16,950
2030	16,950	502	1,011	17	1,123	17,547
2031	17,547	500	1,052	18	1,162	18,139
2032	18,139	498	1,094	18	1,200	18,725
2033	18,725	486	1,134	19	1,237	19,296
2049	22,188	110	1,568	22	1,442	22,149
2050	22,149	108	1,584	22	1,439	22,089
2051	22,089	102	1,597	22	1,434	22,006
2052	22,006	96	1,609	22	1,428	21,898
2108	98,145	100 [1]	4	99	6,625	104,767
2109	104,767	106	3	105	7,072	111,836
2110	111,836	113 [1]	2	112	7,549	119,384
2111	119,384	121 [1]	1	120	8,058	127,442
2135	572,495	575 [1]	0 [2]	575	38,643	611,138
2136	611,138	614 [1]	0 [2]	614	41,252	652,390 [3]

1 Mainly attributable to employer contributions to fund each year's annual administrative expenses.
2 Less than $1 million when rounded.
3 The Plan FNP of $652,390 million has a value of $406 million as of June 30, 2024 when discounted with interest at the rate of 6.75% per annum.

Notes

1. Amounts may not total exactly due to rounding.
2. Various years have been omitted from this table.
3. **Column (a):** Except for the “discounted value” for 2136 shown in footnote 3 on the previous page, none of the Plan FNP amounts shown have been adjusted for the time value of money.
4. **Column (b):** Projected total contributions include member and employer normal cost contributions based on closed group projections (based on covered active members as of June 30, 2024); plus employer contributions to the UAAL. Contributions are assumed to occur halfway through the year, on average.
5. **Column (c):** Projected benefit payments have been determined in accordance with paragraph 39 of GASB Statement No. 67, and are based on the closed group of active, inactive and retired members and beneficiaries as of June 30, 2024. The projected benefit payments reflect the cost-of-living increase assumptions used in the June 30, 2024 report. Benefit payments are assumed to occur halfway through the year, on average.
6. **Column (d):** Projected administrative expenses are calculated as approximately 0.10% of the beginning Plan FNP. The 0.10% was based on the actual fiscal year 2023-2024 administrative expenses (unaudited) as a percentage of the beginning Plan FNP as of July 1, 2023. Administrative expenses are assumed to occur halfway through the year, on average.
7. **Column (e):** Projected investment earnings are based on the assumed investment rate of return of 6.75% per annum and reflect the assumed timing of cashflows, as noted above.
8. As illustrated in this appendix, the Plan FNP was projected to be available to make all projected future benefit payments for current Plan members. In other words, there is no projected “cross-over date” when projected benefits are **not** covered by projected assets. Therefore, the long-term expected rate of return on Plan investments of 6.75% per annum was applied to all periods of projected benefit payments to determine the TPL as of June 30, 2024 shown earlier in this report, pursuant to paragraph 44 of GASB Statement No. 67.

Appendix B: Definition of terms

Definitions of certain terms as they are used in GASB Statement No. 67. The terms may have different meanings in other contexts.

Term	Definition
Active employees	Individuals employed at the end of the reporting or measurement period, as applicable.
Actual contributions	Cash contributions recognized as additions to the Plan Fiduciary Net Position.
Actuarial present value of projected benefit payments	Projected benefit payments discounted to reflect the expected effects of the time value (present value) of money and the probabilities of payment.
Actuarial valuation	The determination, as of a point in time (the actuarial valuation date), of the service cost, Total Pension Liability, and related actuarial present value of projected benefit payments for pensions performed in conformity with Actuarial Standards of Practice unless otherwise specified by the GASB.
Actuarial valuation date	The date as of which an actuarial valuation is performed.
Actuarially determined contribution	A target or recommended contribution to a defined benefit pension plan for the reporting period, determined in conformity with Actuarial Standards of Practice based on the most recent measurement available when the contribution for the reporting period was adopted.
Ad hoc cost-of-living adjustments (Ad Hoc COLAs)	Cost-of-living adjustments that require a decision to grant by the authority responsible for making such decisions.
Ad hoc postemployment benefit changes	Postemployment benefit changes that require a decision to grant by the authority responsible for making such decisions.
Agent employer	An employer whose employees are provided with pensions through an agent multiple-employer defined benefit pension plan.
Agent multiple-employer defined benefit pension plan (agent pension plan)	A multiple-employer defined benefit pension plan in which pension plan assets are pooled for investment purposes but separate accounts are maintained for each individual employer so that each employer's share of the pooled assets is legally available to pay the benefits of only its employees.
Automatic cost-of-living adjustments (Automatic COLAs)	Cost-of-living adjustments that occur without a requirement for a decision to grant by a responsible authority, including those for which the amounts are determined by reference to a specified experience factor (such as the earnings experience of the pension plan) or to another variable (such as an increase in the consumer price index).
Automatic postemployment benefit changes	Postemployment benefit changes that occur without a requirement for a decision to grant by a responsible authority, including those for which the amounts are determined by reference to a specified experience factor (such as the earnings experience of the pension plan) or to another variable (such as an increase in the consumer price index).

Appendix B: Definition of terms

Term	Definition
Closed period	A specific number of years that is counted from one date and declines to zero with the passage of time. For example, if the recognition period initially is five years on a closed basis, four years remain after the first year, three years after the second year, and so forth.
Contributions	Additions to the Plan Fiduciary Net Position for amounts from employers, non-employer contributing entities (for example, state government contributions to a local government pension plan), or employees. Contributions can result from cash receipts by the pension plan or from recognition by the pension plan of a receivable from one of these sources.
Cost-of-living adjustments	Postemployment benefit changes intended to adjust benefit payments for the effects of inflation.
Cost-sharing employer	An employer whose employees are provided with pensions through a cost-sharing multiple-employer defined benefit pension plan.
Cost-sharing multiple employer defined benefit pension plan (Cost-sharing pension plan)	A multiple-employer defined benefit pension plan in which the pension obligations to the employees of more than one employer are pooled and pension plan assets can be used to pay the benefits of the employees of any employer that provides pensions through the pension plan.
Covered payroll	Payroll on which contributions to a pension plan are based.
Deferred retirement option program (DROP)	A program that permits an employee to elect a calculation of benefit payments based on service credits and salary, as applicable, as of the DROP entry date. The employee continues to provide service to the employer and is paid for that service by the employer after the DROP entry date; however, the pensions that would have been paid to the employee (if the employee had retired and not entered the DROP) are credited to an individual employee account within the defined benefit pension plan until the end of the DROP period.
Defined benefit pension plans	Pension plans that are used to provide defined benefit pensions.
Defined benefit pensions	Pensions for which the income or other benefits that the employee will receive at or after separation from employment are defined by the benefit terms. The pensions may be stated as a specified dollar amount or as an amount that is calculated based on one or more factors such as age, years of service, and compensation. (A pension that does not meet the criteria of a defined contribution pension is classified as a defined benefit pension for purposes of GASB Statement No. 67.)
Defined contribution pension plans	Pension plans that are used to provide defined contribution pensions.

Appendix B: Definition of terms

Term	Definition
Defined contribution pensions	Pensions having terms that: 1. Provide an individual account for each employee; 2. Define the contributions that an employer is required to make (or the credits that it is required to provide) to an active employee's account for periods in which that employee renders service; and 3. Provide that the pensions an employee will receive will depend only on the contributions (or credits) to the employee's account, actual earnings on investments of those contributions (or credits), and the effects of forfeitures of contributions (or credits) made for other employees, as well as pension plan administrative costs, that are allocated to the employee's account.
Discount rate	The single rate of return that, when applied to all projected benefit payments, results in an actuarial present value of projected benefit payments equal to the total of the following: 1. The actuarial present value of benefit payments projected to be made in future periods in which: a. The amount of the Plan Fiduciary Net Position is projected (under the requirements of GASB Statement No. 67) to be greater than the benefit payments that are projected to be made in that period, and b. Pension plan assets up to that point are expected to be invested using a strategy to achieve the long-term expected rate of return, calculated using the long-term expected rate of return on pension plan investments. 2. The actuarial present value of projected benefit payments not included in 1., calculated using the municipal bond rate.
Entry age actuarial cost method	A method under which the actuarial present value of the projected benefits of each individual included in an actuarial valuation is allocated on a level basis over the earnings or service of the individual between entry age and assumed exit age(s). The portion of this actuarial present value allocated to a valuation year is called the normal cost. The portion of this actuarial present value not provided for at a valuation date by the actuarial present value of future normal costs is called the actuarial accrued liability.
Inactive employees	Terminated individuals that have accumulated benefits but are not yet receiving them, and retirees or their beneficiaries currently receiving benefits.
Measurement period	The period between the prior and the current measurement dates.
Multiple-employer defined benefit pension plan	A defined benefit pension plan that is used to provide pensions to the employees of more than one employer.
Net Pension Liability (NPL)	The liability of employers and non-employer contributing entities to employees for benefits provided through a defined benefit pension plan.
Non-employer contributing entities	Entities that make contributions to a pension plan that is used to provide pensions to the employees of other entities.

Appendix B: Definition of terms

Term	Definition
Other postemployment benefits	All postemployment benefits other than retirement income (such as death benefits, life insurance, disability, and long-term care) that are provided separately from a pension plan, as well as postemployment healthcare benefits, regardless of the manner in which they are provided. Other postemployment benefits do not include termination benefits.
Pension plans	Arrangements through which pensions are determined, assets dedicated for pensions are accumulated and managed and benefits are paid as they come due.
Pensions	Retirement income and, if provided through a pension plan, postemployment benefits other than retirement income (such as death benefits, life insurance, and disability benefits). Pensions do not include postemployment healthcare benefits and termination benefits.
Plan members	Individuals that are covered under the terms of a pension plan. Plan members generally include: 1. Employees in active service (active plan members), and 2. Terminated employees who have accumulated benefits but are not yet receiving them and retirees or their beneficiaries currently receiving benefits (inactive plan members).
Postemployment	The period after employment.
Postemployment benefit changes	Adjustments to the pension of an inactive employee.
Postemployment healthcare benefits	Medical, dental, vision, and other health-related benefits paid subsequent to the termination of employment.
Projected benefit payments	All benefits estimated to be payable through the pension plan to current active and inactive employees as a result of their past service and their expected future service.
Public employee retirement system	A special-purpose government that administers one or more pension plans; also may administer other types of employee benefit plans, including postemployment healthcare plans and deferred compensation plans.
Real rate of return	The rate of return on an investment after adjustment to eliminate inflation.
Service costs	The portions of the actuarial present value of projected benefit payments that are attributed to valuation years.
Single employer	An employer whose employees are provided with pensions through a single-employer defined benefit pension plan.
Single-employer defined benefit pension plan (Single-employer pension plan)	A defined benefit pension plan that is used to provide pensions to employees of only one employer.

Appendix B: Definition of terms

Term	Definition
Special funding situations	Circumstances in which a non-employer entity is legally responsible for making contributions directly to a pension plan that is used to provide pensions to the employees of another entity or entities and either of the following conditions exists: 1. The amount of contributions for which the non-employer entity legally is responsible is not dependent upon one or more events or circumstances unrelated to the pensions. 2. The non-employer entity is the only entity with a legal obligation to make contributions directly to a pension plan.
Termination benefits	Inducements offered by employers to active employees to hasten the termination of services, or payments made in consequence of the early termination of services. Termination benefits include early-retirement incentives, severance benefits, and other termination-related benefits.
Total Pension Liability (TPL)	The portion of the actuarial present value of projected benefit payments that is attributed to past periods of employee service in conformity with the requirements of GASB Statement No. 67.

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