

**San Bernardino County Employees'  
Retirement Association**

**Actuarial Valuation and Review  
as of June 30, 2024**



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**Segal**



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

October 22, 2024

Board of Retirement  
San Bernardino County Employees' Retirement Association  
348 West Hospitality Lane, Suite 100  
San Bernardino, CA 92408

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 SBCERA 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 Molly Calcagno, ASA, MAAA and Enrolled Actuary. We are members of the American Academy of Actuaries and we meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion herein. To the best of our knowledge, the information supplied in this actuarial valuation is complete and accurate. The assumptions used in this actuarial valuation were selected by the Board of Retirement based upon our analysis and recommendations. In our opinion, the assumptions are reasonable and take into account the experience of SBCERA and reasonable expectations. In addition, in our opinion, the combined effect of these assumptions is expected to have no significant bias.

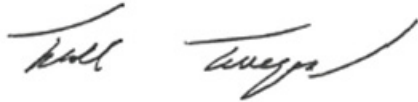
Board of Retirement  
October 22, 2024  
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Segal makes no representation or warranty as to the future status of the Plan and does not guarantee any particular result. This document does not constitute legal, tax, accounting or investment advice or create 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.

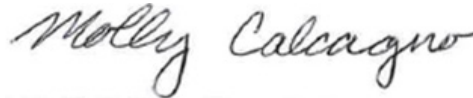
We look forward to reviewing this report at your next meeting and to answering any questions.

Sincerely,

Segal



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



Molly Calcagno, ASA, MAAA, EA  
Senior Actuary

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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 San Bernardino County Employees' Retirement Association ("SBCERA" or "the Plan" or "the Association") 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 staff of SBCERA;
- The characteristics of covered active members, inactive members, and retired members and beneficiaries as of May 31, 2024, provided by the staff of SBCERA;
- The assets of the Plan as of June 30, 2024, provided by the staff of SBCERA;
- Economic assumptions regarding future salary increases and investment earnings and 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 Association'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 Association'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 last reviewed with the Board of Retirement in 2024. Details of the funding policy are provided in *Section 4, Exhibit 1* starting on page 97.

## Section 1: Actuarial Valuation Summary

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 86.1% to 87.3%. 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 85.6% to 87.8%. 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 Association's funded ratios is provided in *Section 2, Subsection G* on pages 41 and 42.
2. The unfunded actuarial accrued liability (the difference between the actuarial accrued liability and the actuarial value of assets) decreased from \$2.29 billion to \$2.21 billion. The decrease in unfunded actuarial accrued liability (UAAL) is primarily due to payments of required and additional UAAL contributions and investment return on the actuarial value of assets (i.e., after asset smoothing) greater than the assumed rate of 7.25% used in the June 30, 2023 actuarial valuation, offset somewhat by individual salary increases greater than expected and other experience losses. A reconciliation of the Association's UAAL from the prior year (on a valuation value of assets basis and excluded the Survivor Benefit Reserve assets and liabilities) 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 82. A graphical projection of the UAAL amortization balances and payments is provided in *Section 3, Exhibit I* starting on page 95.

3. This report reflects a \$12.6 million additional contribution made by San Bernardino County Transportation Authority (SBCTA) to pay off their UAAL as of June 30, 2023. This additional contribution has been excluded from the calculation of the contribution gain for fiscal year 2023-2024 as the additional contribution was to pay off their UAAL as of the prior valuation date. As a result of the UAAL payoff, SBCTA has been de-pooled from the Other General cost group to its own cost group and SBCTA remains overfunded as of June 30, 2024. Based on the Board's funding policy, if the surplus for SBCERA in total does not exceed 20% of the actuarial accrued liability, then the surplus for any UAAL cost sharing group will not be amortized, and the full normal cost will be contributed. Therefore, SBCTA's contribution rates do not reflect any amortization of the surplus of assets over liabilities.

## Section 1: Actuarial Valuation Summary

### Actuarial experience

4. The net actuarial loss of \$107.0 million, or 0.6% of actuarial accrued liability, is due to an investment gain of \$10.6 million, or 0.1% of actuarial accrued liability, a contribution gain of \$50.3 million, or 0.3% of actuarial accrued liability, and a net experience loss from sources other than investments and contributions of \$168.0 million, or 1.0% of actuarial accrued liability, prior to reflection of assumption changes, if applicable. The loss from sources other than investments and contributions was primarily due to individual salary increases greater than expected.
5. The rate of return on the market value of assets was 8.61% for the year ending June 30, 2024. The return on the valuation value of assets was 7.33% 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 7.25% used in the June 30, 2023 valuation. This actuarial investment gain (after asset smoothing) decreased the average employer contribution rate by 0.04% of payroll.

### Contributions

6. The average employer rate calculated in this valuation has decreased from 30.22% to 27.99% of payroll. This decrease is primarily due to the effect of several UAAL amortization layers, including the June 30, 2003 actuarial loss, June 30, 2004 actuarial loss, June 30, 2004 POB credit, and the June 30, 2004 plan change layers, becoming fully amortized, offset to some degree by individual salary increases greater than expected. A complete reconciliation of the Association's aggregate employer rate is provided in *Section 2, Subsection F* on page 34.
7. The average member rate calculated in this valuation has decreased from 10.44% to 10.32% of payroll due to the changes in active member demographics. A complete reconciliation of the Association'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, Exhibit 3* starting on page 123.

8. This report reflects the \$52,500 additional contribution made by Local Agency Formation Commission (LAFCO) towards the reduction of their UAAL as of June 30, 2024. The \$52,500 additional contribution made by LAFCO has been amortized as a level percent of pay over a period of twenty years effective June 30, 2024 and will be credited with earnings based on the Plan's market value investment return every year.

As a result of additional contributions that have been made by LAFCO and Law Library in the current and/or prior fiscal years, these employers have recommended employer UAAL contribution rates that are different from the rest of the Other General cost group as shown in *Section 2, Subsection F*.



## Section 1: Actuarial Valuation Summary

9. 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

10. Based on the Association's UAAL amortization schedule, several amortization layers, including the June 30, 2005 actuarial loss and June 30, 2005 assumption change layers will become fully amortized during fiscal year 2024-2025. As a result, the employer UAAL contributions for the plan as a whole will reflect a decrease of about \$24.1 million or about 1.18% of payroll in the June 30, 2025 valuation before any other experience is accounted for.
11. For the June 30, 2024 actuarial valuation, the Board adopted an adjustment to the asset smoothing method that combines the deferred gains and losses from the June 30, 2023 actuarial valuation into a single net deferred loss of \$86 million. The net deferred loss is then recognized over the next four years from that date in four level amounts of approximately \$21.5 million each year. This reduces the volatility associated with the pattern of deferred loss recognition and results in both more stable funded ratios (on an actuarial value of assets basis) and more level employer contribution rates.
12. The total unrecognized net investment **gain** as of June 30, 2024 is \$89 million as compared to an unrecognized net investment **loss** of \$86 million in the previous valuation. This net deferred gain of \$89 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 22.

The net deferred gain of \$89 million represents about 0.6% of the market value of assets. Unless offset by future investment losses or other unfavorable experience, the recognition of the \$89 million net market gain is expected to have an impact on the Association'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 87.3% to 87.8%.

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 86.1% to 85.6%.

- b. If the net deferred gain was recognized immediately in the actuarial value of assets, the average employer contribution rate would decrease from 27.99% to 27.69% 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 30.22% to 30.57% of payroll.

## Section 1: Actuarial Valuation Summary

### Risk

13. 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.
14. Because the actuarial valuation results are dependent on a given set of assumptions, there is a risk that emerging results may differ significantly as actual experience proves to be different from the assumptions. We have not been engaged to perform a detailed analysis of the potential range of the impact of risk relative to the Plan's future financial condition, but have included a brief discussion of some risks that may affect the Plan in *Section 2, Subsection I*, beginning on page 44. A more detailed assessment would provide the Board of Retirement with a better understanding of the inherent risks.
15. The risk assessment in *Section 2, Subsection I* includes the disclosure of a "Low-Default-Risk Obligation Measure" (LDRM). This disclosure, along with commentary on the significance of the LDRM, is a new requirement under Actuarial Standard of Practice No. 4 (ASOP 4) for all pension funding actuarial valuation reports and can be found on pages 46 and 47.
16. For a plan such as that offered by the Association that may use undesignated excess earnings to provide supplemental benefits, the valuation report must indicate that the impact of any such future use of undesignated excess earnings on the future financial condition of the plan has not been explicitly measured or otherwise reflected in the valuation. However, it should be noted that under the Board's Interest Crediting Policy, the balance of \$4.8 billion (negative) in the Contra Account has to be fully restored out of future excess earnings before any subsequent earnings can be used to provide for any supplemental benefits.

### 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.

Section 1: Actuarial Valuation Summary

Summary of key valuation results

Average Employer Contribution Calculated as of June 30  
 (\$ in '000s)

Cost Sharing Group	2024 Contribution Rate	2024 Annual Amount <sup>1</sup>	2023 Contribution Rate	2023 Annual Amount <sup>1</sup>
<b>County</b>				
• County General Tier 1	23.42%	\$132,985	24.21%	\$142,201
• County General Tier 2	20.84%	170,094	21.57%	144,747
• Safety Tier 1	56.04%	99,566	61.41%	108,871
• Safety Tier 2	47.24%	81,808	52.82%	78,063
– County General and Safety Combined	27.92%	484,453	29.93%	473,882
<b>Non-County</b>				
• Superior Court Tier 1	22.49%	9,452	26.06%	10,906
• Superior Court Tier 2	19.91%	10,598	23.42%	10,252
• South Coast Air Quality Management District Tier 1	39.49%	16,522	42.00%	17,725
• South Coast Air Quality Management District Tier 2	35.17%	19,469	37.45%	16,703
• San Bernardino County Transportation Authority Tier 1	13.93%	683	34.98% <sup>2</sup>	1,477
• San Bernardino County Transportation Authority Tier 2	9.79%	531	29.80% <sup>2</sup>	1,497
• Other General Tier 1 (Non-LAFCO, Non-Law Library)	32.29%	8,100	34.98%	8,723
• Other General Tier 2 (Non-LAFCO, Non-Law Library)	26.73%	5,868	29.80%	6,336
• Other General Tier 1 (LAFCO)	25.30%	109	28.34%	114
• Other General Tier 2 (LAFCO)	19.74%	15	23.16%	16
• Other General Tier 1 (Law Library)	30.65%	55	33.06%	58
• Other General Tier 2 (Law Library)	25.09%	84	27.88%	56
<b>All Categories Combined</b>	<b>27.99%</b>	<b>\$555,939</b>	<b>30.22%</b>	<b>\$547,745</b>

<sup>1</sup> Based on projected annual compensation for each valuation date as shown on page 40.

<sup>2</sup> Before adjustment for additional UAAL contribution made by SBCTA.

Section 1: Actuarial Valuation Summary

Average Member Contribution Calculated as of June 30<sup>1</sup>  
 (\$ in '000s)

Cost Sharing Group	2024 Contribution Rate	2024 Annual Amount <sup>2</sup>	2023 Contribution Rate	2023 Annual Amount <sup>2</sup>
<b>County</b>				
• County General Tier 1	10.61%	\$60,247	10.66%	\$62,613
• County General Tier 2	8.74%	71,335	8.74%	58,650
• Safety Tier 1	13.81%	24,536	13.85%	24,554
• Safety Tier 2	14.86%	25,734	15.06%	22,257
– County General and Safety Combined	10.48%	181,852	10.61%	168,074
<b>Non-County</b>				
• Superior Court Tier 1	10.63%	4,467	10.65%	4,457
• Superior Court Tier 2	8.74%	4,653	8.74%	3,826
• South Coast Air Quality Management District Tier 1	9.75%	4,079	9.57%	4,039
• South Coast Air Quality Management District Tier 2	7.80%	4,318	7.84%	3,497
• San Bernardino County Transportation Authority Tier 1	9.82%	481	9.85%	416
• San Bernardino County Transportation Authority Tier 2	9.37%	507	8.61%	433
• Other General Tier 1	10.28%	2,642	10.31%	2,632
• Other General Tier 2	8.40%	1,878	8.61%	1,853
<b>All Categories Combined</b>	<b>10.32%</b>	<b>\$204,877</b>	<b>10.44%</b>	<b>\$189,227</b>

<sup>1</sup> The refundability factors are 1.03 for General Tier 1 and 1.01 for Safety Tier 1 as of both June 30, 2024 and June 30, 2023. See Section 4, Exhibit 3 for the individual member contribution rates.

<sup>2</sup> Based on projected annual compensation for each valuation date as shown on page 40.

Section 1: Actuarial Valuation Summary

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

Line Description	2024	2023
<b>Actuarial accrued liability</b>		
• Total actuarial accrued liability	\$17,372,252	\$16,446,672
– Retired members and beneficiaries	9,781,523	9,200,759
– Inactive members <sup>1</sup>	757,469	707,293
– Active members	6,805,824	6,510,730
– Survivor Benefit & Burial Allowance	27,436	27,890
• Normal cost for plan year beginning June 30	433,695	402,604
<b>Assets<sup>2</sup></b>		
• Market value of assets (MVA) <sup>3</sup>	\$15,248,225	\$14,071,350
• Actuarial value of assets (AVA) <sup>3,4</sup>	15,159,420	14,157,370
• Actuarial value of assets as a percentage of market value of assets	99.42%	100.61%
<b>Funded status</b>		
• Unfunded actuarial accrued liability on market value of assets	\$2,124,027	\$2,375,322
• Funded percentage on MVA basis	87.77%	85.56%
• Unfunded actuarial accrued liability on actuarial value of assets	2,212,832	2,289,302
• Funded percentage on AVA basis	87.26%	86.08%
<b>Key assumptions</b>		
• Net investment return	7.25%	7.25%
• Inflation rate	2.50%	2.50%
• Payroll growth	3.00%	3.00%
• Cost-of-living adjustments	2.00%	2.00%

<sup>1</sup> Includes inactive members with member contributions on deposit.

<sup>2</sup> See Section 2, Subsection B on page 23 for the development of the valuation value of assets (VVA) by cost group.

<sup>3</sup> The June 30, 2024 and June 30, 2023 values exclude \$5.8 million and \$6.1 million, respectively. These amounts represent the associated present value of additional future contributions payable from the County to SBCERA related to the Crest Forest Fire District transfer and from the City of Big Bear Lake (including the Big Bear Fire Authority) to SBCERA for their transfers.

<sup>4</sup> Includes assets held for Survivor Benefit and Burial Allowance reserves. For June 30, 2024, those amounts are \$98,789 and \$270, respectively. The AVA for retirement plan benefits is \$15,060,361 as of June 30, 2024.

Section 1: Actuarial Valuation Summary

Demographic Data as of June 30

Demographic Data by Status	2024	2023	Change
<b>Active members</b>			
• Number of members	23,131	22,084	4.7%
• Average age	43.4	43.7	(0.3)
• Average service	9.9	10.4	(0.5)
• Total projected compensation	\$1,985,692,240	\$1,812,215,938	9.6%
• Average projected compensation	\$85,845	\$82,060	4.6%
<b>Retired members and beneficiaries</b>			
• Number of members	15,924	15,389	3.5%
– Service retired	11,980	11,526	3.9%
– Disability retired	1,743	1,700	2.5%
– Beneficiaries <sup>1</sup>	2,201	2,163	1.8%
• Average age	70.4	70.2	0.2
• Average monthly benefit	\$4,265	\$4,137	3.1%
<b>Inactive members</b>			
• Number of members <sup>2</sup>	11,005	10,324	6.6%
• Average age	43.8	43.7	0.1
<b>Total members</b>	<b>50,060</b>	<b>47,797</b>	<b>4.7%</b>

<sup>1</sup> Excludes beneficiaries that are only receiving Survivor Benefit amounts.

<sup>2</sup> Includes inactive members with member contributions on deposit.

## Section 1: Actuarial Valuation Summary

### Important information about actuarial valuations

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

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

Input Item	Description
<b>Plan provisions</b>	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.
<b>Member information</b>	An actuarial valuation for a plan is based on data provided to the actuary by the Association. 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.
<b>Financial information</b>	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 Association. 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.
<b>Actuarial assumptions</b>	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 Association. 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 SBCERA 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 Association 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 SBCERA upon delivery and review. SBCERA should notify Segal immediately of any questions or concerns about the final content.



# Section 2: Actuarial Valuation Results

## A. Member information

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

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

### Member Population

As of June 30	Active Members	Inactive Members <sup>1</sup>	Retired Members and Beneficiaries (Pay Status)	Total Non-Actives	Ratio of Non-Actives to Actives	Ratio of Pay Status to Actives
2015	19,938	4,804	11,128	15,932	0.80	0.56
2016	20,538	5,136	11,630	16,766	0.82	0.57
2017	21,110	5,547	12,179	17,726	0.84	0.58
2018	21,465	6,211	12,716	18,927	0.88	0.59
2019	21,823	6,726	13,244	19,970	0.92	0.61
2020	21,814	7,494	13,833	21,327	0.98	0.63
2021	21,500	8,197	14,292	22,489	1.05	0.66
2022	21,276	9,188	14,878	24,066	1.13	0.70
2023	22,084	10,324	15,389	25,713	1.16	0.70
2024	23,131	11,005	15,924	26,929	1.16	0.69

<sup>1</sup> Includes inactive members with member contributions on deposit.

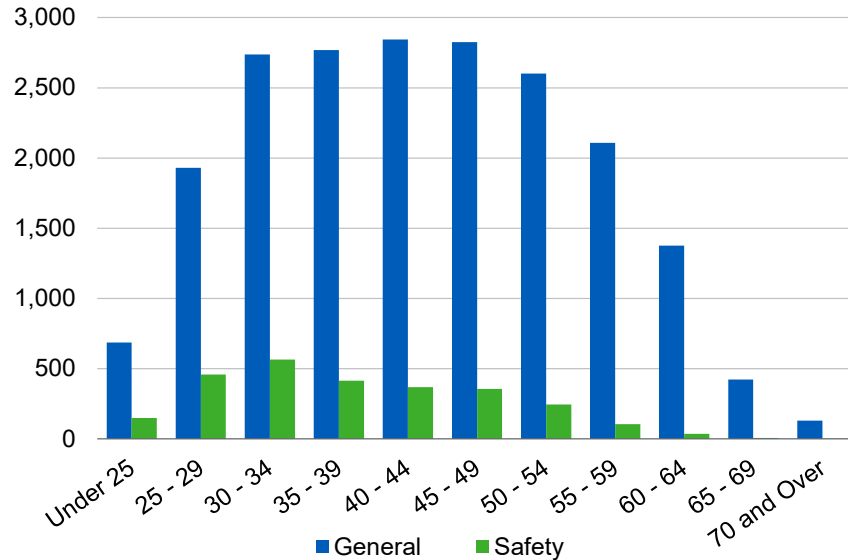
## Section 2: Actuarial Valuation Results

### Active members

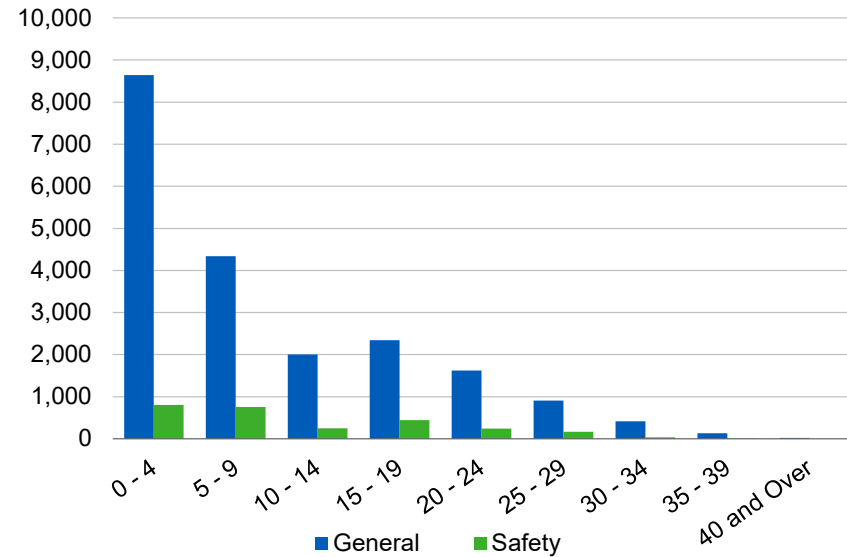
Demographic Data	As of June 30, 2024	As of June 30, 2023	Change
Active members	23,131	22,084	4.7%
Average age <sup>1</sup>	43.4	43.7	(0.3)
Average years of service	9.9	10.4	(0.5)
Average compensation	\$85,845	\$82,060	4.6%

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 <sup>2</sup>	11,005	10,324	6.6%

<sup>1</sup> Among the active members, there were none with unknown age information.

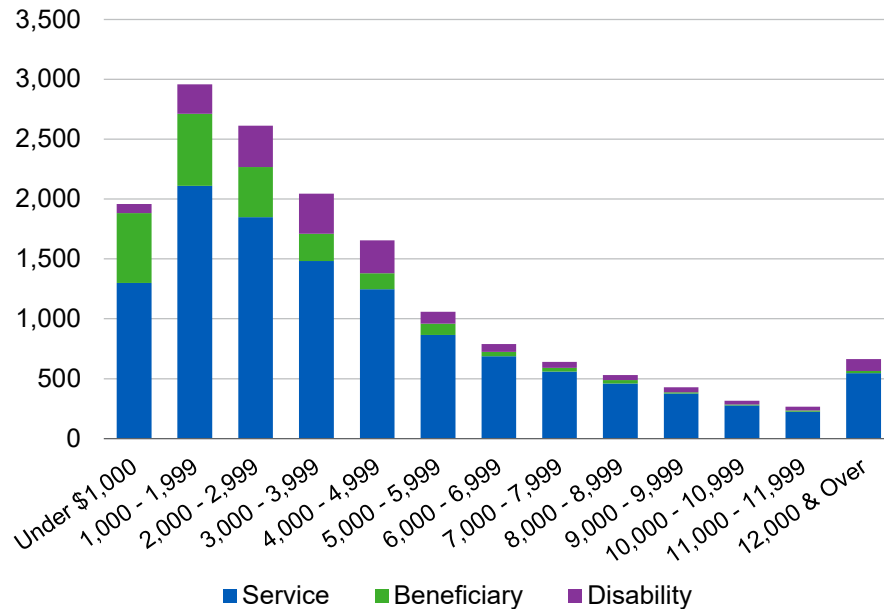
<sup>2</sup> Includes inactive members with member contributions on deposit.

Section 2: Actuarial Valuation Results

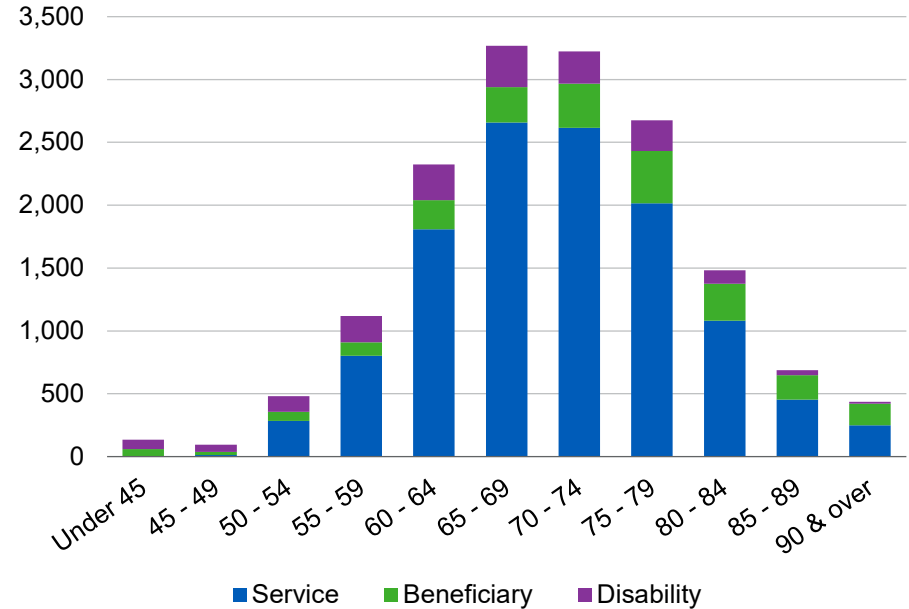
Retired members and beneficiaries

Demographic Data	As of June 30, 2024	As of June 30, 2023	Change
Retired members	13,723	13,226	3.8%
Beneficiaries	2,201	2,163	1.8%
Average age	70.4	70.2	0.2
Average monthly amount	\$4,265	\$4,137	3.1%
Total monthly amount	\$67,909,870	\$63,663,162	6.6%

Distribution of Retired Members and Beneficiaries as of June 30, 2024  
By Type and Monthly Amount



By Type and Age



## Section 2: Actuarial Valuation Results

### Historical plan population

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

#### 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	19,938	44.5	11.1	11,128	68.8	\$3,228
2016	20,538	44.4	10.9	11,630	68.9	3,331
2017	21,110	44.2	10.7	12,179	69.0	3,459
2018	21,465	44.0	10.7	12,716	69.2	3,571
2019	21,823	44.0	10.6	13,244	69.4	3,679
2020	21,814	43.9	10.6	13,833	69.5	3,790
2021	21,500	44.1	10.8	14,292	69.8	3,896
2022	21,276	44.1	10.8	14,878	69.9	4,026
2023	22,084	43.7	10.4	15,389	70.2	4,137
2024	23,131	43.4	9.9	15,924	70.4	4,265

## Section 2: Actuarial Valuation Results

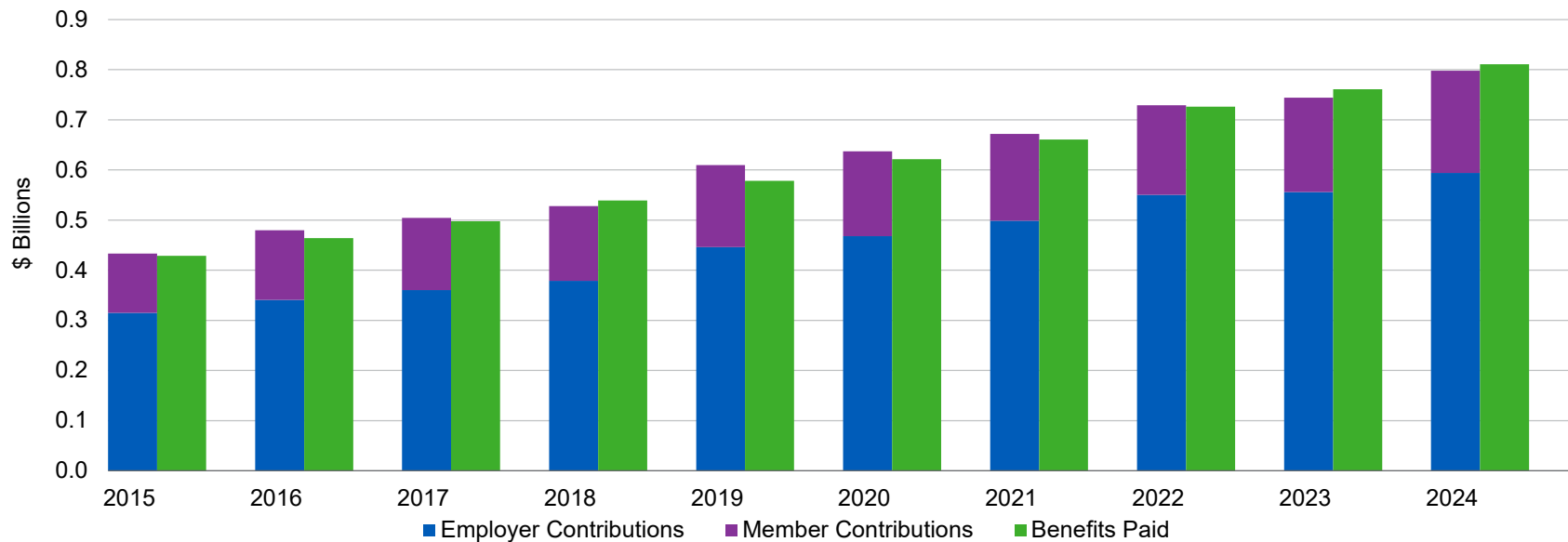
### B. Financial information

Retirement plan funding anticipates that, over the long term, both contributions (less administrative expenses) and investment earnings (less investment fees) 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



Section 2: Actuarial Valuation Results

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	Deferred Amount	Amount
1. Market value of assets						\$15,248,225,226
2. Calculation of unrecognized return <sup>1</sup>						
a. Year ended June 30, 2020	\$(302,050,888)	\$767,727,375	\$(1,069,778,263)	20%*75% <sup>2</sup>	\$(160,466,740)	
b. Year ended June 30, 2021	3,353,791,858	745,550,010	2,608,241,848	40%*75% <sup>2</sup>	782,472,554	
c. Year ended June 30, 2022	(323,043,598)	988,391,295	(1,311,434,893)	60%*75% <sup>2</sup>	(590,145,702)	
d. Year ended June 30, 2023	802,595,553	963,221,416	(160,625,863)	80%*75% <sup>2</sup>	(96,375,518)	
e. Year ended June 30, 2024	1,210,418,942	1,018,768,065	191,650,877	80%	153,320,702	
<b>f. Total deferred return<sup>3</sup></b>						<b>\$88,805,296</b>
<b>3. Actuarial value of assets 1 – 2f</b>						<b>\$15,159,419,930</b>
4. Ratio of actuarial to market value <b>3 ÷ 1</b>						99.4%
5. Non-valuation reserves						
a. Burial allowance reserve						\$269,774
<b>b. Total</b>						<b>\$269,774</b>
<b>6. Preliminary valuation value of assets 3 – 5b</b>						<b>\$15,159,150,156</b>
<b>7. Valuation value of assets<sup>4</sup></b>						<b>\$15,164,948,452</b>

<sup>1</sup> Recognition at 20% per year over five years.

<sup>2</sup> As a result of the Board's action to combine the deferred gains and losses as of June 30, 2023 and recognize the net deferred loss in level amounts over a four-year period, this is equal to the percent deferred as of June 30, 2023 multiplied by the fraction of years remaining in the ad-hoc smoothing period.

<sup>3</sup> Total deferred return is equal to the **sum of 2a through 2e**. The total deferred return as of June 30, 2024 is recognized in each of the next four years as follows:

a. Amount recognized on June 30, 2025	\$16,825,040
b. Amount recognized on June 30, 2026	\$16,825,040
c. Amount recognized on June 30, 2027	\$16,825,040
d. Amount recognized on June 30, 2028	\$38,330,176

<sup>4</sup> Includes \$5.8 million that represents the present value of additional future contributions payable from the County to SBCERA related to the Crest Forest Fire District transfer and from the City of Big Bear Lake (including the Big Bear Fire Authority) to SBCERA for their transfers.

Section 2: Actuarial Valuation Results

Allocation of Valuation Value of Assets as of June 30, 2024

Line Description	County General	Superior Court	SCAQMD	SBCTA	Other General
1. Allocated valuation value of assets at beginning of year	\$8,730,250,470	\$582,443,037	\$877,701,898	\$24,514,390	\$370,153,917
2. Allocated valuation value of assets at beginning of year including future Safety contributions	8,730,250,470	582,443,037	877,701,898	24,514,390	370,153,917
3. Member contributions	130,239,382	8,861,193	8,294,410	962,717	4,783,474
4. Employer contributions	306,108,576	23,130,809	37,929,025	15,893,525	15,825,509
5. Allocated administrative expenses	14,156,130	963,174	976,448	104,021	529,261
6. Benefit payments excluding burial allowance payments (\$250)	483,886,798	28,327,029	65,191,464	771,043	22,165,993
<b>7. Subtotal Sum of 1 + 3 + 4 - 5 - 6</b>	<b>\$8,668,555,500</b>	<b>\$585,144,836</b>	<b>\$857,757,421</b>	<b>\$40,495,568</b>	<b>\$368,067,646</b>
8. Weighted average fund balance	8,699,402,985	583,793,936	867,729,659	29,922,047	369,089,122
9. Earnings allocated in proportion to <b>item 8</b>	637,184,909	42,759,795	63,556,573	2,191,631	27,033,811
<b>10. Allocated valuation value of assets at end of year 7 + 9</b>	<b>\$9,305,740,409</b>	<b>\$627,904,631</b>	<b>\$921,313,994</b>	<b>\$42,687,199</b>	<b>\$395,101,457</b>
<b>11. Allocated valuation value of assets at end of plan year including future Safety contributions</b>	<b>\$9,305,740,409</b>	<b>\$627,904,631</b>	<b>\$921,313,994</b>	<b>\$42,687,199</b>	<b>\$395,101,457</b>

Note: Results may be slightly off due to rounding.

Section 2: Actuarial Valuation Results

Line Description	Safety	Withdrawn Employers <sup>1</sup>	Survivor Benefit Reserve	Total
1. Allocated valuation value of assets at beginning of year	\$3,447,475,663	\$30,868,007	\$93,638,039	\$14,157,045,421
2. Allocated valuation value of assets at beginning of year including future Safety contributions	3,453,573,634 <sup>2</sup>	30,868,007	93,638,039	14,163,143,392
3. Member contributions	50,440,164	0	461,867	204,043,207
4. Employer contributions	194,504,482	0	461,887	593,853,813
5. Allocated administrative expenses	3,656,837	0	0	20,385,871
6. Benefit payments excluding burial allowance payments (\$250)	206,859,645	1,147,513	2,650,035	810,999,520
<b>7. Subtotal Sum of 1 + 3 + 4 - 5 - 6</b>	<b>\$3,481,903,827</b>	<b>\$29,720,494</b>	<b>\$91,911,758</b>	<b>\$14,123,557,050</b>
8. Weighted average fund balance	3,464,689,745	30,294,250	92,774,899	14,137,696,643
9. Earnings allocated in proportion to <b>item 8</b>	253,770,060	2,218,892	6,877,435	1,035,593,106
<b>10. Allocated valuation value of assets at end of year 7 + 9</b>	<b>\$3,735,673,887</b>	<b>\$31,939,386</b>	<b>\$98,789,193</b>	<b>\$15,159,150,156</b>
<b>11. Allocated valuation value of assets at end of plan year including future Safety contributions</b>	<b>\$3,741,472,183<sup>3</sup></b>	<b>\$31,939,386</b>	<b>\$98,789,193</b>	<b>\$15,164,948,452</b>

**Note:** Results may be slightly off due to rounding.

<sup>1</sup> Withdrawn employers include San Bernardino International Airport Authority, Inland Valley Development Agency, Rim of the World Recreation & Park District, Inland Library System and CERTNA.

<sup>2</sup> Includes \$6.1 million that represents the present value of additional future contributions payable from the County to SBCERA related to the Crest Forest Fire District transfer and from the City of Big Bear Lake (including the Big Bear Fire Authority) to SBCERA for their transfers.

<sup>3</sup> Includes \$5.8 million that represents the present value of additional future contributions payable from the County to SBCERA related to the Crest Forest Fire District transfer and from the City of Big Bear Lake (including the Big Bear Fire Authority) to SBCERA for their transfers.



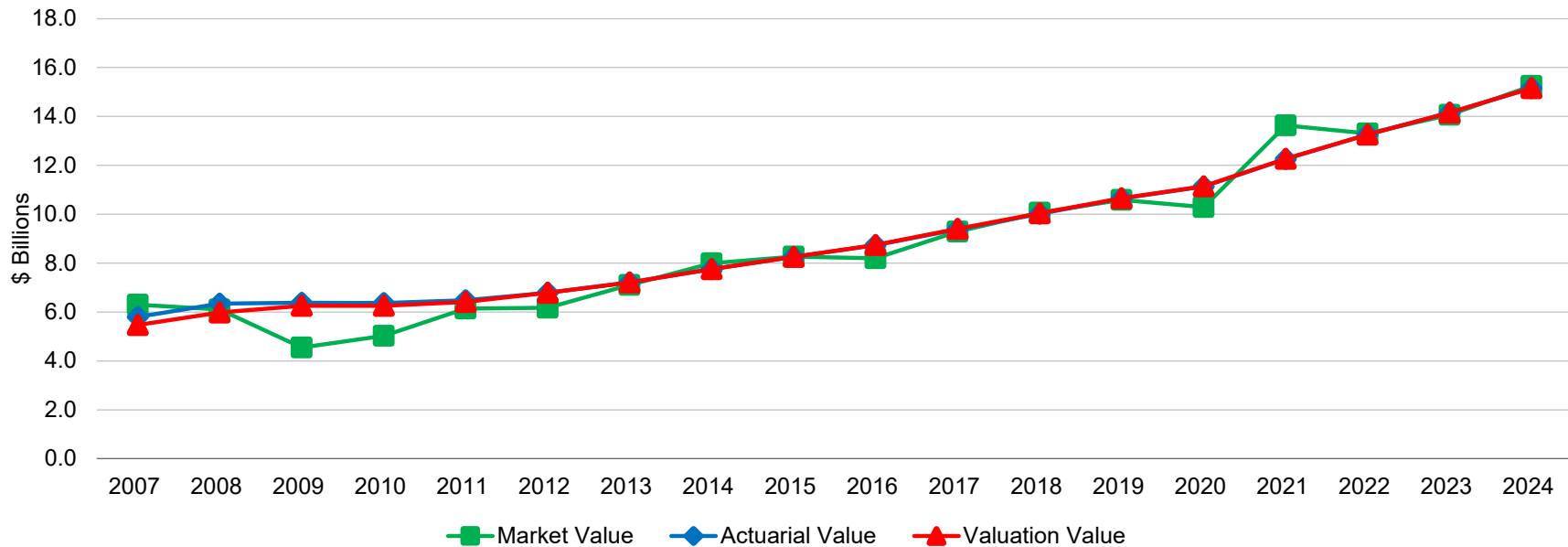
## Section 2: Actuarial Valuation Results

### Asset history

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

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

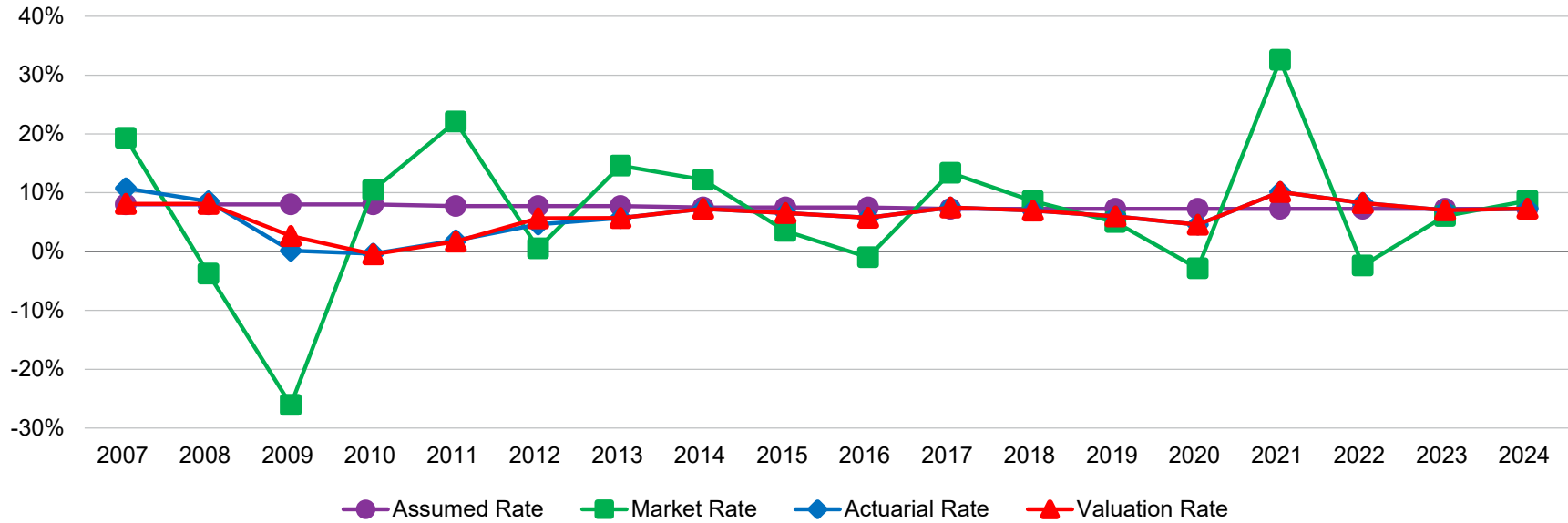
Market Value, Actuarial Value, and Valuation Value of Assets as of June 30



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	19.31%	(3.74%)	(26.04%)	10.49%	22.07%	0.52%	14.62%	12.20%	3.51%	(0.97%)	13.40%	8.60%	4.99%	(2.85%)	32.61%	(2.37%)	6.04%	8.61%
Actuarial rate	10.76%	8.54%	0.14%	(0.38%)	1.89%	4.62%	5.71%	7.26%	6.56%	5.77%	7.51%	6.97%	6.01%	4.60%	10.15%	8.27%	7.03%	7.32%
Valuation rate	8.13%	8.13%	2.64%	(0.45%)	1.72%	5.69%	5.71%	7.26%	6.56%	5.77%	7.51%	6.97%	6.01%	4.60%	10.15%	8.27%	7.03%	7.33%
Assumed rate	8.00%	8.00%	8.00%	8.00%	7.75%	7.75%	7.75%	7.50%	7.50%	7.50%	7.25%	7.25%	7.25%	7.25%	7.25%	7.25%	7.25%	7.25%

Average Rates of Return	Market Value	Actuarial Value	Valuation Value
Most recent five-year geometric average return:	7.69%	7.46%	7.46%
Most recent 10-year geometric average return:	6.74%	7.01%	7.01%
Most recent 15-year geometric average return:	8.39%	5.92%	5.98%

## Section 2: Actuarial Valuation Results

### 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 <sup>1</sup>	\$(10,610,000)
2. Net (gain)/loss from contributions	(50,333,000)
3. Net (gain)/loss from other experience <sup>2</sup>	167,975,000
<b>4. Net experience (gain)/loss</b>	<b>\$107,032,000</b>

<sup>1</sup> Details on next page.

<sup>2</sup> See *Subsection E* for further details. Does not include the effect of plan, method or assumption changes, if any.

## Section 2: Actuarial Valuation Results

### 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 7.25% based on the June 30, 2023 valuation. The actual rate of return on a valuation basis for fiscal year 2023-2024 was 7.33% 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 greater 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	\$1,210,418,942	\$1,035,593,106	\$1,035,593,106
2. Average value of assets	14,051,973,316	14,137,993,856	14,137,696,643
3. Rate of return <b>1 ÷ 2</b>	8.61%	7.32%	7.33%
4. Assumed rate of return	7.25%	7.25%	7.25%
5. Expected investment income <b>2 × 4</b>	\$1,018,768,065	\$1,025,004,555	\$1,024,983,007
<b>6. Investment gain/(loss) 1 – 5</b>	<b>\$191,650,877</b>	<b>\$10,588,551</b>	<b>\$10,610,099</b>

## Section 2: Actuarial Valuation Results

### Contributions

Contributions for the year ended June 30, 2024 totaled \$783.7 million, compared to the projected amount of \$735.1 million. This resulted in a gain of \$50.3 million for the year, when adjusted for timing. The \$50.3 million in contribution gain is net of the additional contribution of \$12.6 million made by SBCTA to pay of their UAAL as of June 30, 2023.

### 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)
- Cost-of-living adjustments (greater or smaller than projected)

The net loss from this other experience for the year ended June 30, 2024 amounted to \$168.0 million, which is 1.0% of the actuarial accrued liability. See *Section 2, Subsection E* for a detailed development of the unfunded actuarial accrued liability.

## Section 2: Actuarial Valuation Results

### D. Other changes impacting the actuarial accrued liability

#### Actuarial assumptions and methods

There were no changes in actuarial assumptions or methods since the prior valuation.

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*.

## Section 2: Actuarial Valuation Results

### E. Unfunded actuarial accrued liability

Development of Unfunded Actuarial Accrued Liability for Year Ended June 30, 2024 (\$ in '000s)

Line Description	Amount
1. Unfunded actuarial accrued liability at beginning of year (before SBCTA payoff) <sup>1</sup>	\$2,349,277
2. Beginning of year unfunded actuarial accrued liability paid off by SBCTA	(11,963)
3. Unfunded actuarial accrued liability at beginning of year (after SBCTA payoff) <sup>1</sup>	\$2,337,314
4. Normal cost at middle of year <sup>2</sup>	394,269
5. Expected administrative expenses	16,309
6. Expected employer and member contributions <sup>3</sup>	(735,053)
7. Interest to end of year	158,786
<b>8. Expected unfunded actuarial accrued liability at end of year</b>	<b>\$2,171,625</b>
9. Changes due to:	
a. Investment return greater than expected, after asset smoothing	(10,610)
b. Actual contributions more than expected under funding policy <sup>4</sup>	(50,280)
c. Additional UAAL contributions from LAFCO	(53)
d. Individual salary increases greater than expected	110,019
e. Other net experience loss <sup>5</sup>	57,956
<b>f. Total changes</b>	<b>\$107,032</b>
<b>10. Unfunded actuarial accrued liability at end of year<sup>1</sup> 8 + 9f</b>	<b>\$2,278,657</b>

**Note:** The sum of items 7b through 7c equals the “Net (gain)/loss from contributions” shown in *Section 2, Subsection C*. The sum of items 7d through 7e equals the “Net (gain)/loss from other experience” shown in *Section 2, Subsection C*. Results include five withdrawn employers.

<sup>1</sup> Beginning of the year and end of the year values are reduced by \$6.1 million and \$5.8 million, respectively. These amounts represent the present value of additional future contributions payable from the County to SBCERA related to the Crest Forest Fire District transfer and from the City of Big Bear Lake (including the Big Bear Fire Authority) to SBCERA for their transfers. These values also exclude the Survivor Benefit Reserve, which had a surplus of assets over liabilities of \$66.1 million at the beginning of the year and \$71.6 million at the end of the year.

<sup>2</sup> Excludes administrative expense load.

<sup>3</sup> Excludes contributions made to Survivor Benefit Reserve during the year ended June 30, 2024. Includes contributions towards administrative expenses.

<sup>4</sup> Mainly from scheduled one-year delay in implementing the lower contribution rates from June 30, 2023 valuation.

<sup>5</sup> Other differences in actual versus expected experience including (but not limited to) mortality, retirement, disability, and termination experience.

## Section 2: Actuarial Valuation Results

### 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 27.99% of payroll.

The Board sets the funding policy used to calculate the recommended contribution based on layered 20-year<sup>1</sup> 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 1*, 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,<sup>2</sup> 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.

<sup>1</sup> Changes in UAAL as a result of gains or losses or as a result of changes in actuarial assumptions or methods for each valuation are amortized over separate 20-year periods. Changes in UAAL as a result of plan amendments are generally amortized over separate 15-year periods.

<sup>2</sup> 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.



Section 2: Actuarial Valuation Results

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 <sup>1</sup>	\$433,695	21.84%	\$402,604	22.21%
2. Expected member normal cost contributions	204,877	10.32%	189,227	10.44%
3. Employer normal cost <b>1 – 2</b>	\$228,818	11.52%	\$213,377	11.77%
4. Actuarial accrued liability <sup>2</sup>	\$17,329,611		\$16,403,551	
5. Valuation value of assets <sup>3</sup>	15,034,220		14,038,637	
6. Unfunded actuarial accrued liability <b>4 – 5</b>	\$2,295,391		\$2,364,914	
7. Payment on UAAL	\$327,121	16.47%	\$334,368	18.45%
<b>8. Average recommended employer contribution 3 + 7</b>	<b>\$555,939</b>	<b>27.99%</b>	<b>\$547,745</b>	<b>30.22%</b>
9. Projected compensation	\$1,985,692		\$1,812,216	

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

<sup>1</sup> Includes administrative expense load.

<sup>2</sup> Excludes liabilities held for Survivor Benefit, Burial Allowance, and Excess Earnings reserves, as well as liabilities for Withdrawn Employers.

<sup>3</sup> Excludes assets held for Survivor Benefit, Burial Allowance, and Excess Earnings reserves, as well as assets for Withdrawn Employers. The June 30, 2024 and June 30, 2023 values include \$5.8 million and \$6.1 million, respectively. These amounts represent the associated present value of additional future contributions payable from the County to SBCERA related to the Crest Forest Fire District transfer and from the City of Big Bear Lake (including the Big Bear Fire Authority) to SBCERA for their transfers.

Section 2: Actuarial Valuation Results

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 <sup>1</sup>
1. Average recommended employer contribution as of June 30, 2023 before adjustment for additional UAAL contributions made by SBCTA	30.22%	\$547,745
2. Adjustment for additional UAAL contributions from SBCTA	(0.10%)	(1,919)
3. Average recommended employer contribution as of June 30, 2023 after adjustment for additional UAAL contributions made by SBCTA	30.12%	545,826
<b>4. Changes due to:</b>		
a. Investment return greater than expected after asset smoothing	(0.04%)	\$(794)
b. Actual contributions more than expected <sup>2</sup>	(0.19%)	(3,773)
c. Individual salary increases greater than expected	0.41%	8,141
d. Amortizing prior year's UAAL over a larger than expected total payroll	(0.95%)	(18,864)
e. Certain UAAL layers being fully amortized	(1.24%)	(24,623)
f. Changes in member demographics amongst tiers on normal cost	(0.26%)	(5,163)
g. Other net experience loss <sup>3</sup>	0.14%	55,189
<b>h. Total change</b>	<b>(2.13%)</b>	<b>\$10,113</b>
<b>5. Average recommended employer contribution as of June 30, 2024 3 + 4h</b>	<b>27.99%</b>	<b>\$555,939</b>

<sup>1</sup> Based on projected annual compensation for each valuation date as shown on page 40.

<sup>2</sup> Mainly from scheduled one-year delay in implementing the lower contribution rates from June 30, 2023 valuation.

<sup>3</sup> Estimated annual dollar cost also reflects change in payroll from prior valuation.

Section 2: Actuarial Valuation Results

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 <sup>1</sup>
1. Average recommended member contribution as of June 30, 2023	10.44%	\$189,227
<b>2. Changes due to:</b>		
a. Changes in member demographics amongst tiers on normal cost <sup>2</sup>	(0.12%)	\$15,650
<b>b. Total change</b>	<b>(0.12%)</b>	<b>\$15,650</b>
<b>3. Average recommended member contribution as of June 30, 2024 1 + 2b</b>	<b>10.32%</b>	<b>\$204,877</b>

<sup>1</sup> Based on projected annual compensation for each valuation date as shown on page 40.

<sup>2</sup> Estimated annual dollar cost also reflects change in payroll from prior valuation.

Section 2: Actuarial Valuation Results

Recommended employer contribution rate

Recommended Employer Contribution Calculated as of June 30 (\$ in '000s)

Component by Cost Sharing Group and Tier	2024 Basic Contribution Rate <sup>1</sup>	2024 COLA Contribution Rate	2024 Total Contribution Rate	2024 Estimated Annual Amount <sup>2</sup>	2023 Basic Contribution Rate <sup>3</sup>	2023 COLA Contribution Rate	2023 Total Contribution Rate	2023 Estimated Annual Amount <sup>2</sup>
<b>County General Tier 1</b>								
Normal cost	9.31%	2.01%	11.32%	\$64,278	9.37%	2.01%	11.38%	\$66,842
UAAL	8.94%	3.16%	12.10%	68,707	8.39%	4.44%	12.83%	75,359
<b>Total contribution</b>	<b>18.25%</b>	<b>5.17%</b>	<b>23.42%</b>	<b>\$132,985</b>	<b>17.76%</b>	<b>6.45%</b>	<b>24.21%</b>	<b>\$142,201</b>
<b>County General Tier 2</b>								
Normal cost	7.21%	1.53%	8.74%	\$71,335	7.21%	1.53%	8.74%	\$58,650
UAAL	8.94%	3.16%	12.10%	98,759	8.39%	4.44%	12.83%	86,097
<b>Total contribution</b>	<b>16.15%</b>	<b>4.69%</b>	<b>20.84%</b>	<b>\$170,094</b>	<b>15.60%</b>	<b>5.97%</b>	<b>21.57%</b>	<b>\$144,747</b>
<b>Safety Tier 1</b>								
Normal cost	19.61%	4.05%	23.66%	\$42,037	19.60%	4.05%	23.65%	\$41,928
UAAL	18.02%	14.36%	32.38%	57,529	20.41%	17.35%	37.76%	66,943
<b>Total contribution</b>	<b>37.63%</b>	<b>18.41%</b>	<b>56.04%</b>	<b>\$99,566</b>	<b>40.01%</b>	<b>21.40%</b>	<b>61.41%</b>	<b>\$108,871</b>
<b>Safety Tier 2</b>								
Normal cost	11.75%	3.11%	14.86%	\$25,734	11.91%	3.15%	15.06%	\$22,257
UAAL	18.02%	14.36%	32.38%	56,074	20.41%	17.35%	37.76%	55,806
<b>Total contribution</b>	<b>29.77%</b>	<b>17.47%</b>	<b>47.24%</b>	<b>\$81,808</b>	<b>32.32%</b>	<b>20.50%</b>	<b>52.82%</b>	<b>\$78,063</b>
<b>All County members</b>								
Normal cost	9.62%	2.10%	11.72%	\$203,384	9.84%	2.14%	11.98%	\$189,677
UAAL	10.78%	5.42%	16.20%	281,069	10.86%	7.09%	17.95%	284,205
<b>Total contribution</b>	<b>20.40%</b>	<b>7.52%</b>	<b>27.92%</b>	<b>\$484,453</b>	<b>20.70%</b>	<b>9.23%</b>	<b>29.93%</b>	<b>\$473,882</b>

<sup>1</sup> The June 30, 2024 basic normal cost and UAAL rates shown for each cost group include an explicit administrative expense of 0.24% and 0.42% of payroll, respectively.

<sup>2</sup> Based on projected annual compensation for each valuation date as shown on page 40.

<sup>3</sup> The June 30, 2023 basic normal cost and UAAL rates shown for each cost group include an explicit administrative expense of 0.23% and 0.44% of payroll, respectively.

Section 2: Actuarial Valuation Results

Recommended Employer Contribution Calculated as of June 30 (\$ in '000s)

Component by Cost Sharing Group and Tier	2024 Basic Contribution Rate <sup>1</sup>	2024 COLA Contribution Rate	2024 Total Contribution Rate	2024 Estimated Annual Amount <sup>2</sup>	2023 Basic Contribution Rate <sup>3</sup>	2023 COLA Contribution Rate	2023 Total Contribution Rate	2023 Estimated Annual Amount <sup>2</sup>
<b>Superior Court Tier 1</b>								
Normal cost	9.31%	2.01%	11.32%	\$4,758	9.37%	2.01%	11.38%	\$4,762
UAAL	10.11%	1.06%	11.17%	4,694	12.53%	2.15%	14.68%	6,144
<b>Total contribution</b>	<b>19.42%</b>	<b>3.07%</b>	<b>22.49%</b>	<b>\$9,452</b>	<b>21.90%</b>	<b>4.16%</b>	<b>26.06%</b>	<b>\$10,906</b>
<b>Superior Court Tier 2</b>								
Normal cost	7.21%	1.53%	8.74%	\$4,652	7.21%	1.53%	8.74%	\$3,826
UAAL	10.11%	1.06%	11.17%	5,946	12.53%	2.15%	14.68%	6,426
<b>Total contribution</b>	<b>17.32%</b>	<b>2.59%</b>	<b>19.91%</b>	<b>\$10,598</b>	<b>19.74%</b>	<b>3.68%</b>	<b>23.42%</b>	<b>\$10,252</b>
<b>SCAQMD Tier 1</b>								
Normal cost	9.95%	2.17%	12.12%	\$5,071	10.17%	2.22%	12.39%	\$5,229
UAAL	19.66%	7.71%	27.37%	11,451	20.03%	9.58%	29.61%	12,496
<b>Total contribution</b>	<b>29.61%</b>	<b>9.88%</b>	<b>39.49%</b>	<b>\$16,522</b>	<b>30.20%</b>	<b>11.80%</b>	<b>42.00%</b>	<b>\$17,725</b>
<b>SCAQMD Tier 2</b>								
Normal cost	6.42%	1.38%	7.80%	\$4,318	6.45%	1.39%	7.84%	\$3,497
UAAL	19.66%	7.71%	27.37%	15,151	20.03%	9.58%	29.61%	13,206
<b>Total contribution</b>	<b>26.08%</b>	<b>9.09%</b>	<b>35.17%</b>	<b>\$19,469</b>	<b>26.48%</b>	<b>10.97%</b>	<b>37.45%</b>	<b>\$16,703</b>
<b>SBCTA Tier 1</b>								
Normal cost	10.98%	2.53%	13.51%	\$662	11.27%	2.52%	13.79%	\$582
UAAL <sup>4</sup>	0.42%	0.00%	0.42%	21	15.48%	5.71%	21.19%	895
<b>Total contribution</b>	<b>11.40%</b>	<b>2.53%</b>	<b>13.93%</b>	<b>\$683</b>	<b>26.75%</b>	<b>8.23%</b>	<b>34.98%</b>	<b>\$1,477</b>
<b>SBCTA Tier 2</b>								
Normal cost	7.75%	1.62%	9.37%	\$508	7.10%	1.51%	8.61%	\$432
UAAL <sup>4</sup>	0.42%	0.00%	0.42%	23	15.48%	5.71%	21.19%	1,065
<b>Total contribution</b>	<b>8.17%</b>	<b>1.62%</b>	<b>9.79%</b>	<b>\$531</b>	<b>22.58%</b>	<b>7.22%</b>	<b>29.80%</b>	<b>\$1,497</b>

<sup>1</sup> The June 30, 2024 basic normal cost and UAAL rates shown for each cost group include an explicit administrative expense of 0.24% and 0.42% of payroll, respectively.

<sup>2</sup> Based on projected annual compensation for each valuation date as shown on page 40.

<sup>3</sup> The June 30, 2023 basic normal cost and UAAL rates shown for each cost group include an explicit administrative expense of 0.23% and 0.44% of payroll, respectively.

<sup>4</sup> The 2023 contribution rates and estimated annual amount are before adjustment for additional UAAL contribution made by SBCTA.

Section 2: Actuarial Valuation Results

Recommended Employer Contribution Calculated as of June 30 (\$ in '000s)

Component by Cost Sharing Group and Tier	2024 Basic Contribution Rate <sup>1</sup>	2024 COLA Contribution Rate	2024 Total Contribution Rate	2024 Estimated Annual Amount <sup>2</sup>	2023 Basic Contribution Rate <sup>3</sup>	2023 COLA Contribution Rate	2023 Total Contribution Rate	2023 Estimated Annual Amount <sup>2</sup>
<b>Other General Tier 1 (Non-LAFCO, Non-Law Library)</b>								
Normal cost	11.40%	2.56%	13.96%	\$3,502	11.27%	2.52%	13.79%	\$3,439
UAAL	13.11%	5.22%	18.33%	4,598	15.48%	5.71%	21.19%	5,284
<b>Total contribution</b>	<b>24.51%</b>	<b>7.78%</b>	<b>32.29%</b>	<b>\$8,100</b>	<b>26.75%</b>	<b>8.23%</b>	<b>34.98%</b>	<b>\$8,723</b>
<b>Other General Tier 2 (Non-LAFCO, Non-Law Library)</b>								
Normal cost	6.92%	1.48%	8.40%	\$1,844	7.10%	1.51%	8.61%	\$1,831
UAAL	13.11%	5.22%	18.33%	4,024	15.48%	5.71%	21.19%	4,505
<b>Total contribution</b>	<b>20.03%</b>	<b>6.70%</b>	<b>26.73%</b>	<b>\$5,868</b>	<b>22.58%</b>	<b>7.22%</b>	<b>29.80%</b>	<b>\$6,336</b>
<b>Other General Tier 1 (LAFCO)</b>								
Normal cost	11.40%	2.56%	13.96%	\$60	11.27%	2.52%	13.79%	\$55
UAAL <sup>4</sup>	7.71%	3.63%	11.34%	49	10.56%	3.99%	14.55%	59
<b>Total contribution</b>	<b>19.11%</b>	<b>6.19%</b>	<b>25.30%</b>	<b>\$109</b>	<b>21.83%</b>	<b>6.51%</b>	<b>28.34%</b>	<b>\$114</b>
<b>Other General Tier 2 (LAFCO)</b>								
Normal cost	6.92%	1.48%	8.40%	\$6	7.10%	1.51%	8.61%	\$6
UAAL <sup>4</sup>	7.71%	3.63%	11.34%	9	10.56%	3.99%	14.55%	10
<b>Total contribution</b>	<b>14.63%</b>	<b>5.11%</b>	<b>19.74%</b>	<b>\$15</b>	<b>17.66%</b>	<b>5.50%</b>	<b>23.16%</b>	<b>\$16</b>

<sup>1</sup> The June 30, 2024 basic normal cost and UAAL rates shown for each cost group include an explicit administrative expense of 0.24% and 0.42% of payroll, respectively.

<sup>2</sup> Based on projected annual compensation for each valuation date as shown on page 40.

<sup>3</sup> The June 30, 2023 basic normal cost and UAAL rates shown for each cost group include an explicit administrative expense of 0.23% and 0.44% of payroll, respectively.

<sup>4</sup> LAFCO made additional contributions towards their UAAL during 2018-2019, 2019-2020, 2020-2021, 2021-2022, 2022-2023, and 2023-2024.

Section 2: Actuarial Valuation Results

Recommended Employer Contribution Calculated as of June 30 (\$ in '000s)

Component by Cost Sharing Group and Tier	2024 Basic Contribution Rate <sup>1</sup>	2024 COLA Contribution Rate	2024 Total Contribution Rate	2024 Estimated Annual Amount <sup>2</sup>	2023 Basic Contribution Rate <sup>3</sup>	2023 COLA Contribution Rate	2023 Total Contribution Rate	2023 Estimated Annual Amount <sup>2</sup>
<b>Other General Tier 1 (Law Library)</b>								
Normal cost	11.40%	2.56%	13.96%	\$25	11.27%	2.52%	13.79%	\$24
UAAL <sup>4</sup>	11.87%	4.82%	16.69%	30	14.11%	5.16%	19.27%	34
<b>Total contribution</b>	<b>23.27%</b>	<b>7.38%</b>	<b>30.65%</b>	<b>\$55</b>	<b>25.38%</b>	<b>7.68%</b>	<b>33.06%</b>	<b>\$58</b>
<b>Other General Tier 2 (Law Library)</b>								
Normal cost	6.92%	1.48%	8.40%	\$28	7.10%	1.51%	8.61%	\$17
UAAL <sup>4</sup>	11.87%	4.82%	16.69%	56	14.11%	5.16%	19.27%	39
<b>Total contribution</b>	<b>18.79%</b>	<b>6.30%</b>	<b>25.09%</b>	<b>\$84</b>	<b>21.21%</b>	<b>6.67%</b>	<b>27.88%</b>	<b>\$56</b>
<b>All employers combined</b>								
Normal cost	9.46%	2.06%	11.52%	\$228,818	9.67%	2.10%	11.77%	\$213,377
UAAL	11.18%	5.29%	16.47%	327,121	11.52%	6.93%	18.45%	334,368
<b>Total contribution</b>	<b>20.64%</b>	<b>7.35%</b>	<b>27.99%</b>	<b>\$555,939</b>	<b>21.19%</b>	<b>9.03%</b>	<b>30.22%</b>	<b>\$547,745</b>

<sup>1</sup> The June 30, 2024 basic normal cost and UAAL rates shown for each cost group include an explicit administrative expense of 0.24% and 0.42% of payroll, respectively.

<sup>2</sup> Based on projected annual compensation for each valuation date as shown on page 40.

<sup>3</sup> The June 30, 2023 basic normal cost and UAAL rates shown for each cost group include an explicit administrative expense of 0.23% and 0.44% of payroll, respectively.

<sup>4</sup> Law Library made additional contributions towards their UAAL during 2022-2023.

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The projected compensation that is used to estimate the annual dollar amount shown on the prior pages as of June 30, 2024 and June 30, 2023 are as follows:

### Projected Compensation as of June 30 (\$ in '000s)

Cost Sharing Group and Tier	2024	2023
County General Tier 1	\$567,831	\$587,362
County General Tier 2	816,188	671,057
Safety Tier 1	177,670	177,287
Safety Tier 2	173,176	147,790
Superior Court Tier 1	42,025	41,851
Superior Court Tier 2	53,235	43,771
SCAQMD Tier 1	41,838	42,203
SCAQMD Tier 2	55,355	44,599
SBCTA Tier 1	4,899	4,222
SBCTA Tier 2	5,415	5,025
Other General Tier 1 (Non-LAFCO, Non-Law Library)	25,085	24,936
Other General Tier 2 (Non-LAFCO, Non-Law Library)	21,953	21,262
Other General Tier 1 (LAFCO)	433	403
Other General Tier 2 (LAFCO)	74	69
Other General Tier 1 (Law Library)	178	176
Other General Tier 2 (Law Library)	337	203
<b>Total</b>	<b>\$1,985,692</b>	<b>\$1,812,216</b>



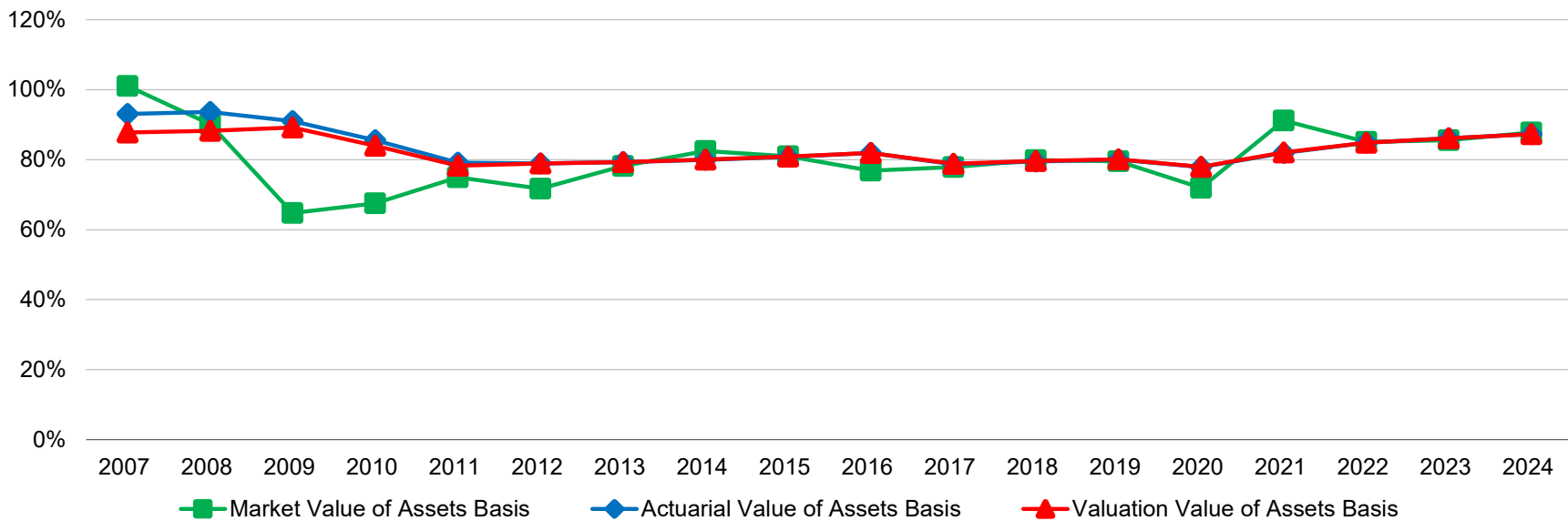
## Section 2: Actuarial Valuation Results

### G. Funded status

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

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

Funded Ratio as of June 30



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Schedule of Funding Progress

Actuarial Valuation as of June 30	Valuation Value of Assets <sup>1,2</sup> (a)	Actuarial Accrued Liability (AAL) <sup>3</sup> (b)	Unfunded AAL (UAAL) (b) – (a)	Funded Ratio (a) / (b)	Projected Compensation (c)	UAAL as a % of Projected Compensation [(b) – (a)] / (c)
2015	\$8,255,352,815	\$10,214,472,907	\$1,959,120,092	80.82%	\$1,309,095,254	149.65%
2016	8,736,959,429	10,669,687,907	1,932,728,478	81.89%	1,346,408,201	143.55%
2017	9,385,976,561	11,928,309,718	2,542,333,157	78.69%	1,406,470,110	180.76%
2018	10,020,862,873	12,604,942,218	2,584,079,345	79.50%	1,477,131,264	174.94%
2019	10,642,400,992	13,304,683,218	2,662,282,226	79.99%	1,542,495,237	172.60%
2020	11,133,172,593	14,298,195,718	3,165,023,125	77.86%	1,587,324,431	199.39%
2021	12,258,924,608	14,957,435,405	2,698,510,797	81.96%	1,626,448,779	165.91%
2022	13,260,595,543	15,630,124,402	2,369,528,859	84.84%	1,663,990,875	142.40%
2023	14,157,370,073	16,446,671,652	2,289,301,579	86.08%	1,812,215,938	126.33%
2024	15,159,419,930	17,372,251,774	2,212,831,844	87.26%	1,985,692,240	111.44%

<sup>1</sup> Includes assets for Survivor Benefit, Burial Allowance, and Excess Earnings reserves.

<sup>2</sup> Excludes present value of additional future contributions payable from the County to SBCERA related to the Crest Forest Fire District transfer and from the Barstow Fire Protection District and the City of Big Bear Lake (including the Big Bear Fire Authority) to SBCERA for their transfers, if any.

<sup>3</sup> Includes liabilities held for Survivor Benefit, Burial Allowance, and Excess Earnings reserves.

## Section 2: Actuarial Valuation Results

### 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  
(\$ in '000s)

Line Description	2024	2023
<b>Liabilities</b>		
Present value of benefits for retired members and beneficiaries	\$9,781,523	\$9,200,759
Present value of benefits for inactive members <sup>1</sup>	757,469	707,293
Present value of benefits for active members	10,166,564	9,612,492
<b>Total liabilities</b>	<b>\$20,705,556</b>	<b>\$19,520,544</b>
<b>Current and Future Assets</b>		
Total valuation value of assets <sup>2</sup>	\$15,066,159	\$14,069,505
Present value of future contributions by members	1,617,819	1,483,985
Present value of future employer contributions for:		
• Entry age normal cost	1,742,921	1,617,777
• Unfunded actuarial accrued liability	2,278,657	2,349,277
<b>Total of current and future assets</b>	<b>\$20,705,556</b>	<b>\$19,520,544</b>

**Note:** Excludes assets and liabilities for Survivor Benefit, Burial Allowance, and Excess Earnings reserves.

<sup>1</sup> Includes inactive members with member contributions on deposit.

<sup>2</sup> Includes \$5.8 million and \$6.1 million for June 30, 2024 and June 30, 2023 valuations, respectively, that represents the present value of additional future contributions payable from the County to SBCERA related to the Crest Forest Fire District transfer and from the City of Big Bear Lake (including the Big Bear Fire Authority) to SBCERA for their transfers.

## Section 2: Actuarial Valuation Results

### 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. We recommend a more detailed assessment of the risks to provide the Board with a better understanding of the risks inherent 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 48, a 1% asset gain or loss (relative to the assumed investment return) translates to about 7.7% of one-

## Section 2: Actuarial Valuation Results

year's payroll. Since actuarial gains and losses are amortized over 20 years, there would be a 0.6% 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 -2.85% to a high of 32.61%.

- **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 ten years:

- The funded percentage on the actuarial value of assets basis has increased from 80.8% to 87.3%. 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) offset to some extent by the adoption of more conservative investment, mortality, and retirement assumptions throughout this time period. For a more detailed history see *Section 2, Subsection G, Funded status* starting on page 41.
- The average geometric investment return on the valuation value of assets over the last 10 years was 7.01%. This includes a high of 10.15% and a low of 4.60%. The average over the last five years is 7.46%. For more details see the *Section 2, Subsection B, Historical investment returns* on page 26.

## Section 2: Actuarial Valuation Results

- Beyond investment experience, the primary source of new UAAL was the strengthening of assumptions through multiple assumption changes. For example, the assumption changes in 2014 that reduced the discount rate from 7.75% to 7.50% and updated mortality tables added \$331 million in unfunded liability. The assumption changes in 2017 reduced the discount rate from 7.50% to 7.25% and again updated mortality tables, adding \$663 million in unfunded liability. The assumption changes in 2020 again updated the mortality tables, updated the retirement rates, and also introduced a terminal pay cashout assumption, adding \$313 million in unfunded liability. The assumption changes in 2023 reduced the unfunded liability by \$123 million. For more details on unfunded liability changes see *Section 3, Exhibit H, Table of Amortization Bases* starting on page 82.
- 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 95.

### Maturity measures

In the last 10 years the ratio of members in pay status to active participants has increased from 0.56 to 0.69. 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 17.

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 about \$33.5 million more than contributions received (net of administrative expenses). 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 a 87.3% funded ratio). For more details on historical cash flows see *Section 2, Subsection B, Financial information* on page 21.

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 48.

### Low-Default-Risk Obligation Measure (LDRM)

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 (LDRM) when performing a funding valuation. The LDRM presented in this report is calculated using the same methodology and assumptions used to determine the actuarial accrued liability used for funding, except for the discount rate. The LDRM 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."

## Section 2: Actuarial Valuation Results

The LDRM 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 LDRM is not used to determine a plan's funded status or actuarially determined contribution rates. The plan's expected return on assets, currently 7.25%, is used for these calculations.

As of June 30, 2024, the LDRM for the Plan excluding Survivor Benefit and Burial Allowance is \$27.2 billion.<sup>1</sup> The difference between the Plan's actuarial accrued liability of \$17.3 billion and the LDRM can be thought of as the increase in the actuarial accrued liability 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 LDRM 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.

<sup>1</sup> For comparison purposes, as of June 30, 2023, the LDRM was \$26.93 billion based on a discount rate of 3.65%, while the Plan's actuarial accrued liability was \$16.42 billion.

## Section 2: Actuarial Valuation Results

### 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 7.7. This means that a 1% asset gain or loss (relative to the assumed investment return) translates to about 7.7% of one-year's payroll. Since actuarial gains and losses are amortized over 20 years, there would be a 0.6% 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 8.7 but is 7.8 for General compared to 13.2 for Safety. This means, for example, that assumption changes will have a greater impact on employer contribution rates for Safety than for General. The total Plan LVR is about 13% higher than the AVR. Therefore, we would expect that contribution volatility will increase over the long term.



Section 2: Actuarial Valuation Results

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

As of June 30	AVR General	AVR Safety	AVR Total	LVR General	LVR Safety	LVR Total
2015	5.8	9.0	6.3	6.9	12.3	7.8
2016	5.6	8.4	6.1	7.1	11.9	7.9
2017	6.1	9.2	6.6	7.6	12.8	8.5
2018	6.3	9.1	6.8	7.7	12.4	8.5
2019	6.3	9.5	6.9	7.7	12.9	8.6
2020	6.0	8.9	6.5	8.1	13.4	9.0
2021	7.7	11.5	8.4	8.3	13.6	9.2
2022	7.4	10.9	8.0	8.4	13.9	9.4
2023	7.2	10.6	7.8	8.1	13.4	9.1
2024	7.0	10.7	7.7	7.8	13.2	8.7

# Section 3: Supplemental Information

## Exhibit A: Table of plan demographics

Total Plan – Demographics as of June 30

Demographic Data by Status	2024	2023	Change
<b>Active members</b>			
• Number	23,131	22,084	4.7%
• Average age	43.4	43.7	(0.3)
• Average years of service	9.9	10.4	(0.5)
• Total projected compensation <sup>1</sup>	\$1,985,692,240	\$1,812,215,938	9.6%
• Average projected compensation	\$85,845	\$82,060	4.6%
• Account balances	\$1,475,406,185	\$1,356,942,705	8.7%
• Total active vested members	13,936	13,795	1.0%
<b>Inactive members<sup>2</sup></b>			
• Number	11,005	10,324	6.6%
• Average age	43.8	43.7	0.1
<b>Retired members</b>			
• Number	11,980	11,526	3.9%
• Average age	70.6	70.4	0.2
• Average monthly benefit	\$4,537	\$4,423	2.6%
<b>Disabled members</b>			
• Number	1,743	1,700	2.5%
• Average age	65.9	65.7	0.2
• Average monthly benefit <sup>3</sup>	\$4,677	\$4,462	4.8%
<b>Beneficiaries</b>			
• Number	2,201	2,163	1.8%
• Average age	72.9	72.6	0.3
• Average monthly benefit <sup>4</sup>	\$2,458	\$2,358	4.2%

<sup>1</sup> Calculated by increasing full-time equivalent calendar year pensionable salary by the assumed salary scale.

<sup>2</sup> Includes inactive members with member contributions on deposit.

<sup>3</sup> Excludes Supplemental Disability Benefit amounts.

<sup>4</sup> Excludes Survivor Benefit amounts.

Section 3: Supplemental Information

County General Tier 1 – Demographics as of June 30

Demographic Data by Status	2024	2023	Change
<b>Active members</b>			
• Number	6,115	6,746	(9.4%)
• Average age	52.1	51.8	0.3
• Average years of service	20.3	19.6	0.7
• Total projected compensation <sup>1</sup>	\$567,831,150	\$587,361,918	(3.3%)
• Average projected compensation	\$92,859	\$87,068	6.7%
• Account balances	\$721,736,592	\$715,180,769	0.9%
• Total active vested members	6,099	6,725	(9.3%)
<b>Inactive members<sup>2</sup></b>			
• Number	3,804	3,899	(2.4%)
• Average age	50.9	50.5	0.4
<b>Retired members<sup>3</sup></b>			
• Number	9,001	8,647	4.1%
• Average age	71.4	71.3	0.1
• Average monthly benefit	\$3,920	\$3,789	3.5%
<b>Disabled members<sup>3</sup></b>			
• Number	757	759	(0.3%)
• Average age	68.4	67.9	0.5
• Average monthly benefit <sup>4</sup>	\$2,726	\$2,652	2.8%
<b>Beneficiaries<sup>3</sup></b>			
• Number	1,511	1,478	2.2%
• Average age	74.4	74.2	0.2
• Average monthly benefit <sup>5</sup>	\$2,052	\$1,985	3.4%

<sup>1</sup> Calculated by increasing full-time equivalent calendar year pensionable salary by the assumed salary scale.

<sup>2</sup> Includes inactive members with member contributions on deposit.

<sup>3</sup> Includes all General pre-January 1, 1996 retirees and beneficiaries.

<sup>4</sup> Excludes Supplemental Disability Benefit amounts.

<sup>5</sup> Excludes Survivor Benefit amounts.

Section 3: Supplemental Information

County General Tier 2 – Demographics as of June 30

Demographic Data by Status	2024	2023	Change
<b>Active members</b>			
• Number	11,766	10,280	14.5%
• Average age	39.9	39.7	0.2
• Average years of service	4.0	3.9	0.1
• Total projected compensation <sup>1</sup>	\$816,187,822	\$671,057,407	21.6%
• Average projected compensation	\$69,368	\$65,278	6.3%
• Account balances	\$251,881,247	\$194,792,576	29.3%
• Total active vested members	4,252	3,559	19.5%
<b>Inactive members<sup>2</sup></b>			
• Number	5,608	4,959	13.1%
• Average age	39.5	38.9	0.6
<b>Retired members</b>			
• Number	167	123	35.8%
• Average age	66.2	66.3	(0.1)
• Average monthly benefit	\$865	\$846	2.2%
<b>Disabled members</b>			
• Number	22	22	0.0%
• Average age	54.5	53.1	1.4
• Average monthly benefit <sup>3</sup>	\$2,132	\$2,084	2.3%
<b>Beneficiaries</b>			
• Number	13	11	18.2%
• Average age	46.3	42.1	4.2
• Average monthly benefit <sup>4</sup>	\$1,083	\$1,102	(1.7%)

<sup>1</sup> Calculated by increasing full-time equivalent calendar year pensionable salary by the assumed salary scale.

<sup>2</sup> Includes inactive members with member contributions on deposit.

<sup>3</sup> Excludes Supplemental Disability Benefit amounts.

<sup>4</sup> Excludes Survivor Benefit amounts.

Section 3: Supplemental Information

Safety Tier 1 – Demographics as of June 30

Demographic Data by Status	2024	2023	Change
<b>Active members</b>			
• Number	1,102	1,162	(5.2%)
• Average age	46.6	46.0	0.6
• Average years of service	20.3	19.6	0.7
• Total projected compensation <sup>1</sup>	\$177,670,069	\$177,286,926	0.2%
• Average projected compensation	\$161,225	\$152,571	5.7%
• Account balances	\$213,997,205	\$198,533,891	7.8%
• Total active vested members	1,099	1,160	(5.3%)
<b>Inactive members<sup>2</sup></b>			
• Number	231	234	(1.3%)
• Average age	44.0	43.2	0.8
<b>Retired members</b>			
• Number	1,205	1,205	0.0%
• Average age	65.6	65.1	0.5
• Average monthly benefit	\$8,099	\$7,824	3.5%
<b>Disabled members</b>			
• Number	867	839	3.3%
• Average age	64.6	64.3	0.3
• Average monthly benefit	\$6,528	\$6,235	4.7%
<b>Beneficiaries</b>			
• Number	498	500	(0.4%)
• Average age	69.3	68.7	0.6
• Average monthly benefit	\$3,666	\$3,446	6.4%

<sup>1</sup> Calculated by increasing full-time equivalent calendar year pensionable salary by the assumed salary scale.

<sup>2</sup> Includes inactive members with member contributions on deposit.

Section 3: Supplemental Information

Safety Tier 2 – Demographics as of June 30

Demographic Data by Status	2024	2023	Change
<b>Active members</b>			
• Number	1,600	1,452	10.2%
• Average age	32.9	32.7	0.2
• Average years of service	5.2	4.9	0.3
• Total projected compensation <sup>1</sup>	\$173,176,300	\$147,790,525	17.2%
• Average projected compensation	\$108,235	\$101,784	6.3%
• Account balances	\$109,704,923	\$85,517,959	28.3%
• Total active vested members	813	758	7.3%
<b>Inactive members<sup>2</sup></b>			
• Number	415	355	16.9%
• Average age	33.5	33.2	0.3
<b>Retired members</b>			
• Number	15	14	7.1%
• Average age	61.8	60.2	1.6
• Average monthly benefit	\$1,852	\$1,522	21.7%
<b>Disabled members</b>			
• Number	35	20	75.0%
• Average age	50.7	50.6	0.1
• Average monthly benefit	\$4,595	\$4,328	6.2%
<b>Beneficiaries</b>			
• Number	2	1	100.0%
• Average age	45.6	40.3	5.3
• Average monthly benefit	\$4,069	\$3,113	30.7%

<sup>1</sup> Calculated by increasing full-time equivalent calendar year pensionable salary by the assumed salary scale.

<sup>2</sup> Includes inactive members with member contributions on deposit.

Section 3: Supplemental Information

Superior Court Tier 1 – Demographics as of June 30

Demographic Data by Status	2024	2023	Change
<b>Active members</b>			
• Number	447	477	(6.3%)
• Average age	51.7	51.3	0.4
• Average years of service	20.6	19.9	0.7
• Total projected compensation <sup>1</sup>	\$42,024,725	\$41,850,769	0.4%
• Average projected compensation	\$94,015	\$87,737	7.2%
• Account balances	\$60,520,794	\$58,842,884	2.9%
• Total active vested members	446	477	(6.5%)
<b>Inactive members<sup>2</sup></b>			
• Number	194	191	1.6%
• Average age	50.7	50.1	0.6
<b>Retired members<sup>3</sup></b>			
• Number	471	445	5.8%
• Average age	68.9	68.4	0.5
• Average monthly benefit	\$4,679	\$4,596	1.8%
<b>Disabled members<sup>3</sup></b>			
• Number	30	28	7.1%
• Average age	63.4	62.6	0.8
• Average monthly benefit <sup>4</sup>	\$3,394	\$3,273	3.7%
<b>Beneficiaries<sup>3</sup></b>			
• Number	25	24	4.2%
• Average age	68.0	68.6	(0.6)
• Average monthly benefit <sup>5</sup>	\$2,809	\$2,219	26.6%

<sup>1</sup> Calculated by increasing full-time equivalent calendar year pensionable salary by the assumed salary scale.

<sup>2</sup> Includes inactive members with member contributions on deposit.

<sup>3</sup> Excludes pre-January 1, 1996 retirees and beneficiaries.

<sup>4</sup> Excludes Supplemental Disability Benefit amounts.

<sup>5</sup> Excludes Survivor Benefit amounts.

Section 3: Supplemental Information

Superior Court Tier 2 – Demographics as of June 30

Demographic Data by Status	2024	2023	Change
<b>Active members</b>			
• Number	701	624	12.3%
• Average age	39.0	38.6	0.4
• Average years of service	4.7	4.4	0.3
• Total projected compensation <sup>1</sup>	\$53,234,845	\$43,770,758	21.6%
• Average projected compensation	\$75,941	\$70,145	8.3%
• Account balances	\$18,694,229	\$14,733,630	26.9%
• Total active vested members	334	282	18.4%
<b>Inactive members<sup>2</sup></b>			
• Number	160	139	15.1%
• Average age	39.7	38.8	0.9
<b>Retired members</b>			
• Number	2	1	100.0%
• Average age	67.7	57.5	10.2
• Average monthly benefit	\$1,778	\$500	255.6%
<b>Disabled members</b>			
• Number	0	0	N/A
• Average age	N/A	N/A	N/A
• Average monthly benefit <sup>3</sup>	N/A	N/A	N/A
<b>Beneficiaries</b>			
• Number	0	0	N/A
• Average age	N/A	N/A	N/A
• Average monthly benefit <sup>4</sup>	N/A	N/A	N/A

<sup>1</sup> Calculated by increasing full-time equivalent calendar year pensionable salary by the assumed salary scale.

<sup>2</sup> Includes inactive members with member contributions on deposit.

<sup>3</sup> Excludes Supplemental Disability Benefit amounts.

<sup>4</sup> Excludes Survivor Benefit amounts.



Section 3: Supplemental Information

SCAQMD Tier 1 – Demographics as of June 30

Demographic Data by Status	2024	2023	Change
<b>Active members</b>			
• Number	290	311	(6.8%)
• Average age	52.9	52.6	0.3
• Average years of service	21.8	21.3	0.5
• Total projected compensation <sup>1</sup>	\$41,837,963	\$42,203,059	(0.9%)
• Average projected compensation	\$144,269	\$135,701	6.3%
• Account balances	\$46,665,433	\$43,968,886	6.1%
• Total active vested members	290	311	(6.8%)
<b>Inactive members<sup>2</sup></b>			
• Number	93	94	(1.1%)
• Average age	52.3	51.9	0.4
<b>Retired members<sup>3</sup></b>			
• Number	683	672	1.6%
• Average age	71.6	70.9	0.7
• Average monthly benefit	\$7,353	\$7,204	2.1%
<b>Disabled members<sup>3</sup></b>			
• Number	16	16	0.0%
• Average age	72.5	71.5	1.0
• Average monthly benefit <sup>4</sup>	\$4,438	\$4,350	2.0%
<b>Beneficiaries<sup>3</sup></b>			
• Number	105	104	1.0%
• Average age	72.5	73.0	(0.5)
• Average monthly benefit <sup>5</sup>	\$2,842	\$2,745	3.5%

<sup>1</sup> Calculated by increasing full-time equivalent calendar year pensionable salary by the assumed salary scale.

<sup>2</sup> Includes inactive members with member contributions on deposit.

<sup>3</sup> Excludes pre-January 1, 1996 retirees and beneficiaries.

<sup>4</sup> Excludes Supplemental Disability Benefit amounts.

<sup>5</sup> Excludes Survivor Benefit amounts.

Section 3: Supplemental Information

SCAQMD Tier 2 – Demographics as of June 30

Demographic Data by Status	2024	2023	Change
<b>Active members</b>			
• Number	565	487	16.0%
• Average age	37.6	37.4	0.2
• Average years of service	4.5	4.2	0.3
• Total projected compensation <sup>1</sup>	\$55,355,181	\$44,598,669	24.1%
• Average projected compensation	\$97,974	\$91,578	7.0%
• Account balances	\$16,685,756	\$12,442,573	34.1%
• Total active vested members	255	188	35.6%
<b>Inactive members<sup>2</sup></b>			
• Number	110	88	25.0%
• Average age	36.5	36.0	0.5
<b>Retired members</b>			
• Number	5	3	66.7%
• Average age	65.2	63.0	2.2
• Average monthly benefit	\$1,113	\$882	26.2%
<b>Disabled members</b>			
• Number	0	0	N/A
• Average age	N/A	N/A	N/A
• Average monthly benefit <sup>3</sup>	N/A	N/A	N/A
<b>Beneficiaries</b>			
• Number	0	0	N/A
• Average age	N/A	N/A	N/A
• Average monthly benefit <sup>4</sup>	N/A	N/A	N/A

<sup>1</sup> Calculated by increasing full-time equivalent calendar year pensionable salary by the assumed salary scale.

<sup>2</sup> Includes inactive members with member contributions on deposit.

<sup>3</sup> Excludes Supplemental Disability Benefit amounts.

<sup>4</sup> Excludes Survivor Benefit amounts.

Section 3: Supplemental Information

SBCTA Tier 1 – Demographics as of June 30

Demographic Data by Status	2024	2023 <sup>1</sup>	Change
<b>Active members</b>			
• Number	30	0	N/A
• Average age	49.2	N/A	N/A
• Average years of service	19.9	N/A	N/A
• Total projected compensation <sup>2</sup>	\$4,899,384	N/A	N/A
• Average projected compensation	\$163,313	N/A	N/A
• Account balances	\$4,571,330	N/A	N/A
• Total active vested members	30	0	N/A
<b>Inactive members<sup>3</sup></b>			
• Number	7	0	N/A
• Average age	47.3	N/A	N/A
<b>Retired members<sup>4</sup></b>			
• Number	10	0	N/A
• Average age	65.3	N/A	N/A
• Average monthly benefit	\$6,482	N/A	N/A
<b>Disabled members<sup>4</sup></b>			
• Number	0	0	N/A
• Average age	N/A	N/A	N/A
• Average monthly benefit <sup>5</sup>	N/A	N/A	N/A
<b>Beneficiaries<sup>4</sup></b>			
• Number	0	0	N/A
• Average age	N/A	N/A	N/A
• Average monthly benefit <sup>6</sup>	N/A	N/A	N/A

<sup>1</sup> Prior to June 30, 2024, SBCTA members were included with Other General.

<sup>2</sup> Calculated by increasing full-time equivalent calendar year pensionable salary by the assumed salary scale.

<sup>3</sup> Includes inactive members with member contributions on deposit.

<sup>4</sup> Excludes pre-January 1, 1996 retirees and beneficiaries.

<sup>5</sup> Excludes Supplemental Disability Benefit amounts.

<sup>6</sup> Excludes Survivor Benefit amounts.

Section 3: Supplemental Information

SBCTA Tier 2 – Demographics as of June 30

Demographic Data by Status	2024	2023 <sup>1</sup>	Change
<b>Active members</b>			
• Number	48	0	N/A
• Average age	43.2	N/A	N/A
• Average years of service	4.3	N/A	N/A
• Total projected compensation <sup>2</sup>	\$5,415,103	N/A	N/A
• Average projected compensation	\$112,815	N/A	N/A
• Account balances	\$1,561,485	N/A	N/A
• Total active vested members	20	0	N/A
<b>Inactive members<sup>3</sup></b>			
• Number	14	0	N/A
• Average age	43.8	N/A	N/A
<b>Retired members</b>			
• Number	0	0	N/A
• Average age	N/A	N/A	N/A
• Average monthly benefit	N/A	N/A	N/A
<b>Disabled members</b>			
• Number	0	0	N/A
• Average age	N/A	N/A	N/A
• Average monthly benefit <sup>4</sup>	N/A	N/A	N/A
<b>Beneficiaries</b>			
• Number	0	0	N/A
• Average age	N/A	N/A	N/A
• Average monthly benefit <sup>5</sup>	N/A	N/A	N/A

<sup>1</sup> Prior to June 30, 2024, SBCTA members were included with Other General.

<sup>2</sup> Calculated by increasing full-time equivalent calendar year pensionable salary by the assumed salary scale.

<sup>3</sup> Includes inactive members with member contributions on deposit.

<sup>4</sup> Excludes Supplemental Disability Benefit amounts.

<sup>5</sup> Excludes Survivor Benefit amounts.

Section 3: Supplemental Information

Other General Tier 1 – Demographics as of June 30

Demographic Data by Status	2024	2023 <sup>1</sup>	Change
<b>Active members</b>			
• Number	191	226	(15.5%)
• Average age	51.5	51.0	0.5
• Average years of service	19.8	19.5	0.3
• Total projected compensation <sup>2</sup>	\$25,696,064	\$29,737,063	(13.6%)
• Average projected compensation	\$134,534	\$131,580	2.2%
• Account balances	\$22,578,783	\$26,017,631	(13.2%)
• Total active vested members	189	226	(16.4%)
<b>Inactive members<sup>3</sup></b>			
• Number	198	211	(6.2%)
• Average age	50.5	49.9	0.6
<b>Retired members<sup>4</sup></b>			
• Number	387	384	0.8%
• Average age	70.5	69.9	0.6
• Average monthly benefit	\$4,488	\$4,373	2.6%
<b>Disabled members<sup>4</sup></b>			
• Number	15	15	0.0%
• Average age	66.2	65.2	1.0
• Average monthly benefit <sup>5</sup>	\$3,113	\$3,052	2.0%
<b>Beneficiaries<sup>4</sup></b>			
• Number	44	42	4.8%
• Average age	71.8	71.8	0.0
• Average monthly benefit <sup>6</sup>	\$2,037	\$2,029	0.4%

<sup>1</sup> Prior to June 30, 2024, SBCTA members were included with Other General.

<sup>2</sup> Calculated by increasing full-time equivalent calendar year pensionable salary by the assumed salary scale.

<sup>3</sup> Includes inactive members with member contributions on deposit.

<sup>4</sup> Excludes pre-January 1, 1996 retirees and beneficiaries.

<sup>5</sup> Excludes Supplemental Disability Benefit amounts.

<sup>6</sup> Excludes Survivor Benefit amounts.

Section 3: Supplemental Information

Other General Tier 2 – Demographics as of June 30

Demographic Data by Status	2024	2023 <sup>1</sup>	Change
<b>Active members</b>			
• Number	276	319	(13.5%)
• Average age	37.7	38.3	(0.6)
• Average years of service	4.3	3.8	0.5
• Total projected compensation <sup>2</sup>	\$22,363,634	\$26,558,843	(15.8%)
• Average projected compensation	\$81,028	\$83,257	(2.7%)
• Account balances	\$6,808,408	\$6,911,906	(1.5%)
• Total active vested members	109	109	0.0%
<b>Inactive members<sup>3</sup></b>			
• Number	161	143	12.6%
• Average age	39.1	39.6	(0.5)
<b>Retired members</b>			
• Number	3	2	50.0%
• Average age	66.8	62.5	4.3
• Average monthly benefit	\$1,190	\$1,229	(3.2%)
<b>Disabled members</b>			
• Number	1	1	0.0%
• Average age	49.9	48.9	1.0
• Average monthly benefit <sup>4</sup>	\$2,243	\$2,199	2.0%
<b>Beneficiaries</b>			
• Number	0	0	N/A
• Average age	N/A	N/A	N/A
• Average monthly benefit <sup>5</sup>	N/A	N/A	N/A

<sup>1</sup> Prior to June 30, 2024, SBCTA members were included with Other General.

<sup>2</sup> Calculated by increasing full-time equivalent calendar year pensionable salary by the assumed salary scale.

<sup>3</sup> Includes inactive members with member contributions on deposit.

<sup>4</sup> Excludes Supplemental Disability Benefit amounts.

<sup>5</sup> Excludes Survivor Benefit amounts.

Section 3: Supplemental Information

Withdrawn Employers – Demographics as of June 30

Demographic Data by Status	2024	2023	Change
<b>Active members</b>			
• Number	0	0	N/A
• Average age	N/A	N/A	N/A
• Average years of service	N/A	N/A	N/A
• Total projected compensation <sup>1</sup>	N/A	N/A	N/A
• Average projected compensation	N/A	N/A	N/A
• Account balances	N/A	N/A	N/A
• Total active vested members	0	0	N/A
<b>Inactive members<sup>2</sup></b>			
• Number	10	11	(9.1%)
• Average age	53.0	53.4	(0.4)
<b>Retired members</b>			
• Number	31	30	3.3%
• Average age	70.8	69.9	0.9
• Average monthly benefit	\$3,085	\$3,066	0.6%
<b>Disabled members</b>			
• Number	0	0	N/A
• Average age	N/A	N/A	N/A
• Average monthly benefit <sup>3</sup>	N/A	N/A	N/A
<b>Beneficiaries</b>			
• Number	3	3	0.0%
• Average age	73.5	72.5	1.0
• Average monthly benefit <sup>4</sup>	\$1,013	\$994	1.9%

<sup>1</sup> Calculated by increasing full-time equivalent calendar year pensionable salary by the assumed salary scale.

<sup>2</sup> Includes inactive members with member contributions on deposit.

<sup>3</sup> Excludes Supplemental Disability Benefit amounts.

<sup>4</sup> Excludes Survivor Benefit amounts.

Section 3: Supplemental Information

**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	834	830	4	—	—	—	—	—	—	—
	\$61,172	\$61,121	\$71,773	—	—	—	—	—	—	—
25 - 29	2,390	2,128	262	—	—	—	—	—	—	—
	\$69,369	\$67,021	\$88,442	—	—	—	—	—	—	—
30 - 34	3,301	2,018	1,163	120	—	—	—	—	—	—
	\$77,382	\$68,161	\$90,239	\$107,840	—	—	—	—	—	—
35 - 39	3,182	1,412	1,090	482	196	2	—	—	—	—
	\$83,672	\$71,576	\$87,443	\$97,751	\$115,144	\$91,526	—	—	—	—
40 - 44	3,212	1,006	812	505	729	157	3	—	—	—
	\$90,351	\$72,367	\$86,197	\$93,270	\$111,694	\$117,505	\$146,094	—	—	—
45 - 49	3,181	790	623	387	691	522	166	2	—	—
	\$94,272	\$70,608	\$88,071	\$92,287	\$105,833	\$112,053	\$130,673	\$100,608	—	—
50 - 54	2,846	579	430	324	519	486	392	107	9	—
	\$96,368	\$74,464	\$85,937	\$83,546	\$103,799	\$110,068	\$118,485	\$116,740	\$91,510	—
55 - 59	2,213	381	367	224	338	369	292	189	53	—
	\$94,337	\$77,012	\$86,855	\$85,863	\$96,409	\$99,873	\$110,693	\$107,250	\$118,567	—
60 - 64	1,413	234	240	138	212	238	159	126	57	9
	\$88,614	\$71,954	\$81,298	\$80,508	\$93,404	\$95,653	\$93,959	\$103,708	\$114,270	\$74,013
65 - 69	428	60	80	52	69	72	53	22	11	9
	\$86,893	\$70,034	\$81,074	\$84,523	\$101,685	\$83,014	\$87,080	\$98,260	\$131,278	\$99,202
70 & over	131	15	22	19	29	23	11	5	6	1
	\$89,185	\$97,099	\$104,706	\$89,226	\$83,144	\$87,359	\$77,344	\$101,509	\$63,693	\$67,051
<b>Total</b>	<b>23,131</b>	<b>9,453</b>	<b>5,093</b>	<b>2,251</b>	<b>2,783</b>	<b>1,869</b>	<b>1,076</b>	<b>451</b>	<b>136</b>	<b>19</b>
	<b>\$85,845</b>	<b>\$69,343</b>	<b>\$87,514</b>	<b>\$91,682</b>	<b>\$105,214</b>	<b>\$106,057</b>	<b>\$112,736</b>	<b>\$107,980</b>	<b>\$113,583</b>	<b>\$85,578</b>

**Note:** Age and years of service were projected from May 31, 2024 to June 30, 2024.



Section 3: Supplemental Information

County General 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	24	2	2	20	—	—	—	—	—	—
	\$72,781	\$142,323	\$75,073	\$65,598	—	—	—	—	—	—
35-39	335	4	19	217	94	1	—	—	—	—
	\$86,388	\$81,204	\$79,204	\$86,646	\$87,578	\$75,767	—	—	—	—
40-44	913	17	34	293	475	93	1	—	—	—
	\$92,504	\$91,575	\$112,156	\$84,977	\$96,253	\$89,766	\$119,799	—	—	—
45-49	1,226	21	29	221	489	369	96	1	—	—
	\$94,404	\$97,304	\$117,208	\$88,336	\$92,808	\$96,012	\$103,159	\$59,849	—	—
50-54	1,400	16	20	207	392	376	297	86	6	—
	\$95,032	\$96,383	\$92,729	\$78,028	\$93,928	\$99,098	\$99,442	\$108,406	\$93,101	—
55-59	1,167	6	25	123	273	305	244	156	35	—
	\$95,901	\$178,289	\$121,244	\$80,570	\$91,874	\$94,179	\$104,605	\$96,272	\$101,631	—
60-64	738	1	7	75	176	198	142	96	34	9
	\$88,395	\$81,320	\$67,283	\$73,286	\$88,580	\$89,809	\$90,223	\$91,984	\$103,129	\$74,013
65-69	240	1	4	28	61	66	47	20	5	8
	\$87,705	\$81,320	\$77,695	\$80,799	\$99,659	\$80,938	\$82,734	\$94,482	\$84,538	\$96,596
70 and over	72	—	2	9	24	19	8	4	5	1
	\$79,207	—	\$212,590	\$87,435	\$80,289	\$73,044	\$68,843	\$64,177	\$60,312	\$67,051
<b>Total</b>	<b>6,115</b>	<b>68</b>	<b>142</b>	<b>1,193</b>	<b>1,984</b>	<b>1,427</b>	<b>835</b>	<b>363</b>	<b>85</b>	<b>18</b>
	<b>\$92,859</b>	<b>\$102,708</b>	<b>\$105,352</b>	<b>\$83,103</b>	<b>\$93,162</b>	<b>\$94,148</b>	<b>\$98,601</b>	<b>\$97,460</b>	<b>\$98,192</b>	<b>\$83,663</b>

Note: Age and years of service were projected from May 31, 2024 to June 30, 2024.

Section 3: Supplemental Information

County General 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	616	614	2	—	—	—	—	—	—	—
	\$55,715	\$55,685	\$65,215	—	—	—	—	—	—	—
25-29	1,660	1,536	124	—	—	—	—	—	—	—
	\$60,714	\$60,438	\$64,136	—	—	—	—	—	—	—
30-34	2,331	1,631	669	31	—	—	—	—	—	—
	\$68,165	\$64,729	\$75,931	\$81,352	—	—	—	—	—	—
35-39	2,069	1,188	752	129	—	—	—	—	—	—
	\$73,272	\$68,497	\$79,204	\$82,666	—	—	—	—	—	—
40-44	1,587	866	608	112	1	—	—	—	—	—
	\$72,613	\$68,353	\$76,757	\$82,284	\$159,568	—	—	—	—	—
45-49	1,255	681	476	97	—	1	—	—	—	—
	\$72,322	\$66,341	\$78,618	\$82,450	—	\$166,170	—	—	—	—
50-54	928	495	349	80	4	—	—	—	—	—
	\$72,523	\$68,224	\$76,962	\$78,197	\$103,796	—	—	—	—	—
55-59	681	332	277	70	2	—	—	—	—	—
	\$72,742	\$70,397	\$74,681	\$76,029	\$78,346	—	—	—	—	—
60-64	461	210	203	47	1	—	—	—	—	—
	\$72,625	\$69,094	\$74,738	\$78,685	\$100,454	—	—	—	—	—
65-69	136	51	68	17	—	—	—	—	—	—
	\$76,092	\$68,294	\$79,334	\$86,519	—	—	—	—	—	—
70 and over	42	14	18	8	2	—	—	—	—	—
	\$93,308	\$97,175	\$90,504	\$84,440	\$126,936	—	—	—	—	—
<b>Total</b>	<b>11,766</b>	<b>7,618</b>	<b>3,546</b>	<b>591</b>	<b>10</b>	<b>1</b>	—	—	—	—
	<b>\$69,368</b>	<b>\$64,957</b>	<b>\$76,784</b>	<b>\$80,916</b>	<b>\$108,577</b>	<b>\$166,170</b>	—	—	—	—

Note: Age and years of service were projected from May 31, 2024 to June 30, 2024.

Section 3: Supplemental Information

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	22	2	1	19	—	—	—	—	—	—
	\$146,343	\$124,805	\$124,970	\$149,735	—	—	—	—	—	—
35-39	143	1	11	55	75	1	—	—	—	—
	\$150,161	\$155,268	\$134,283	\$144,725	\$156,980	\$107,284	—	—	—	—
40-44	291	3	19	45	170	52	2	—	—	—
	\$156,149	\$145,435	\$154,002	\$144,448	\$154,864	\$171,761	\$159,242	—	—	—
45-49	330	2	22	17	127	106	55	1	—	—
	\$159,858	\$139,257	\$163,549	\$138,917	\$149,029	\$166,412	\$178,316	\$141,366	—	—
50-54	212	—	6	4	50	63	77	12	—	—
	\$173,393	—	\$139,975	\$149,027	\$152,241	\$167,629	\$192,328	\$195,127	—	—
55-59	75	1	2	1	13	19	25	11	3	—
	\$172,499	\$132,533	\$164,333	\$137,080	\$137,649	\$171,723	\$162,075	\$211,357	\$303,393	—
60-64	24	—	—	2	5	4	6	7	—	—
	\$176,630	—	—	\$180,971	\$175,956	\$156,008	\$174,130	\$189,799	—	—
65-69	5	—	—	—	1	—	—	2	2	—
	\$169,752	—	—	—	\$143,633	—	—	\$136,042	\$216,522	—
70 and over	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—
<b>Total</b>	<b>1,102</b>	<b>9</b>	<b>61</b>	<b>143</b>	<b>441</b>	<b>245</b>	<b>165</b>	<b>33</b>	<b>5</b>	<b>—</b>
	<b>\$161,225</b>	<b>\$139,137</b>	<b>\$152,373</b>	<b>\$145,187</b>	<b>\$152,953</b>	<b>\$167,861</b>	<b>\$182,010</b>	<b>\$194,197</b>	<b>\$268,644</b>	<b>—</b>

Note: Age and years of service were projected from May 31, 2024 to June 30, 2024.

Section 3: Supplemental Information

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	148	147	1	—	—	—	—	—	—	—
	\$85,560	\$85,475	\$98,043	—	—	—	—	—	—	—
25-29	459	348	111	—	—	—	—	—	—	—
	\$98,280	\$92,772	\$115,548	—	—	—	—	—	—	—
30-34	542	181	319	42	—	—	—	—	—	—
	\$111,926	\$91,617	\$120,864	\$131,566	—	—	—	—	—	—
35-39	271	73	158	40	—	—	—	—	—	—
	\$114,290	\$93,150	\$120,019	\$130,244	—	—	—	—	—	—
40-44	77	15	48	14	—	—	—	—	—	—
	\$120,211	\$99,994	\$124,320	\$127,786	—	—	—	—	—	—
45-49	26	7	17	2	—	—	—	—	—	—
	\$121,462	\$115,478	\$122,363	\$134,740	—	—	—	—	—	—
50-54	33	19	11	3	—	—	—	—	—	—
	\$147,229	\$142,365	\$162,144	\$123,342	—	—	—	—	—	—
55-59	29	5	20	4	—	—	—	—	—	—
	\$150,324	\$141,865	\$156,053	\$132,250	—	—	—	—	—	—
60-64	13	3	9	1	—	—	—	—	—	—
	\$137,528	\$103,619	\$145,858	\$164,286	—	—	—	—	—	—
65-69	1	—	—	1	—	—	—	—	—	—
	\$181,734	—	—	\$181,734	—	—	—	—	—	—
70 and over	1	—	—	1	—	—	—	—	—	—
	\$164,286	—	—	\$164,286	—	—	—	—	—	—
<b>Total</b>	<b>1,600</b>	<b>798</b>	<b>694</b>	<b>108</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>
	<b>\$108,235</b>	<b>\$93,065</b>	<b>\$122,057</b>	<b>\$131,512</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>

Note: Age and years of service were projected from May 31, 2024 to June 30, 2024.

Section 3: Supplemental Information

Superior Court 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	2	1	—	1	—	—	—	—	—	—
	\$70,138	\$57,901	—	\$82,375	—	—	—	—	—	—
35-39	28	—	—	12	16	—	—	—	—	—
	\$77,564	—	—	\$74,647	\$79,752	—	—	—	—	—
40-44	70	4	1	14	41	10	—	—	—	—
	\$87,945	\$138,278	\$38,911	\$91,720	\$82,369	\$90,295	—	—	—	—
45-49	93	4	3	21	30	26	9	—	—	—
	\$98,101	\$157,562	\$183,423	\$93,566	\$96,718	\$84,261	\$98,410	—	—	—
50-54	95	2	4	9	37	25	10	5	3	—
	\$100,461	\$161,732	\$213,404	\$79,315	\$102,681	\$83,138	\$108,470	\$85,102	\$88,326	—
55-59	90	—	2	8	29	22	14	9	6	—
	\$93,008	—	\$86,850	\$89,889	\$98,266	\$86,801	\$96,150	\$88,789	\$95,562	—
60-64	54	—	—	4	16	14	8	8	4	—
	\$89,766	—	—	\$92,037	\$87,048	\$101,214	\$96,116	\$75,685	\$73,758	—
65-69	11	—	—	1	3	3	3	—	1	—
	\$113,910	—	—	\$105,662	\$111,171	\$79,157	\$119,988	—	\$216,402	—
70 and over	4	—	—	—	—	1	3	—	—	—
	\$104,553	—	—	—	—	\$118,172	\$100,013	—	—	—
<b>Total</b>	<b>447</b>	<b>11</b>	<b>10</b>	<b>70</b>	<b>172</b>	<b>101</b>	<b>47</b>	<b>22</b>	<b>14</b>	<b>—</b>
	<b>\$94,015</b>	<b>\$142,248</b>	<b>\$161,650</b>	<b>\$87,627</b>	<b>\$92,616</b>	<b>\$87,668</b>	<b>\$100,966</b>	<b>\$83,186</b>	<b>\$96,413</b>	<b>—</b>

Note: Age and years of service were projected from May 31, 2024 to June 30, 2024.

Section 3: Supplemental Information

Superior Court 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	35	34	1	—	—	—	—	—	—	—
	\$51,220	\$51,002	\$58,620	—	—	—	—	—	—	—
25-29	107	95	12	—	—	—	—	—	—	—
	\$57,368	\$56,508	\$64,172	—	—	—	—	—	—	—
30-34	163	76	83	4	—	—	—	—	—	—
	\$66,688	\$58,637	\$72,425	\$100,605	—	—	—	—	—	—
35-39	129	56	66	7	—	—	—	—	—	—
	\$78,214	\$78,196	\$77,689	\$83,308	—	—	—	—	—	—
40-44	81	39	33	8	1	—	—	—	—	—
	\$83,338	\$79,702	\$82,246	\$107,417	\$68,548	—	—	—	—	—
45-49	77	34	38	4	1	—	—	—	—	—
	\$83,116	\$78,511	\$85,616	\$89,740	\$118,172	—	—	—	—	—
50-54	41	15	20	6	—	—	—	—	—	—
	\$100,680	\$83,477	\$118,021	\$85,884	—	—	—	—	—	—
55-59	33	15	13	5	—	—	—	—	—	—
	\$109,499	\$121,493	\$96,125	\$108,288	—	—	—	—	—	—
60-64	22	10	10	2	—	—	—	—	—	—
	\$100,107	\$82,511	\$116,455	\$106,350	—	—	—	—	—	—
65-69	10	5	4	1	—	—	—	—	—	—
	\$93,226	\$69,541	\$118,513	\$110,503	—	—	—	—	—	—
70 and over	3	—	2	1	—	—	—	—	—	—
	\$105,949	—	\$124,642	\$68,566	—	—	—	—	—	—
<b>Total</b>	<b>701</b>	<b>379</b>	<b>282</b>	<b>38</b>	<b>2</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>
	<b>\$75,941</b>	<b>\$68,504</b>	<b>\$83,095</b>	<b>\$96,115</b>	<b>\$93,360</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>

Note: Age and years of service were projected from May 31, 2024 to June 30, 2024.

Section 3: Supplemental Information

SCAQMD 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	1	—	1	—	—	—	—	—	—	—
	\$65,035	—	\$65,035	—	—	—	—	—	—	—
35-39	15	1	—	9	5	—	—	—	—	—
	\$146,187	\$110,632	—	\$159,706	\$128,964	—	—	—	—	—
40-44	40	2	4	5	28	1	—	—	—	—
	\$144,256	\$118,359	\$112,863	\$146,943	\$151,164	\$114,774	—	—	—	—
45-49	61	2	2	7	33	14	3	—	—	—
	\$148,929	\$120,009	\$126,627	\$157,554	\$140,316	\$153,477	\$236,485	—	—	—
50-54	48	2	1	5	20	13	5	2	—	—
	\$144,574	\$152,084	\$85,036	\$141,128	\$151,248	\$152,068	\$134,867	\$84,279	—	—
55-59	58	—	1	3	14	15	8	8	9	—
	\$142,033	—	\$240,730	\$170,607	\$122,445	\$127,039	\$166,870	\$160,897	\$138,160	—
60-64	51	—	1	1	8	11	1	11	18	—
	\$146,492	—	\$197,802	\$84,071	\$146,855	\$134,967	\$154,907	\$158,789	\$146,008	—
65-69	12	—	—	1	4	2	1	—	3	1
	\$130,352	—	—	\$100,033	\$114,983	\$162,987	\$186,309	—	\$123,975	\$120,054
70 and over	4	—	—	—	2	1	—	1	—	—
	\$128,089	—	—	—	\$94,409	\$72,701	—	\$250,838	—	—
<b>Total</b>	<b>290</b>	<b>7</b>	<b>10</b>	<b>31</b>	<b>114</b>	<b>57</b>	<b>18</b>	<b>22</b>	<b>30</b>	<b>1</b>
	<b>\$144,269</b>	<b>\$127,362</b>	<b>\$129,331</b>	<b>\$150,855</b>	<b>\$140,970</b>	<b>\$140,864</b>	<b>\$169,998</b>	<b>\$156,966</b>	<b>\$141,451</b>	<b>\$120,054</b>

Note: Age and years of service were projected from May 31, 2024 to June 30, 2024.

Section 3: Supplemental Information

SCAQMD 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	20	20	—	—	—	—	—	—	—	—
	\$77,995	\$77,995	—	—	—	—	—	—	—	—
25-29	101	92	9	—	—	—	—	—	—	—
	\$92,766	\$90,408	\$116,868	—	—	—	—	—	—	—
30-34	145	79	66	—	—	—	—	—	—	—
	\$98,247	\$89,195	\$109,083	—	—	—	—	—	—	—
35-39	119	56	61	2	—	—	—	—	—	—
	\$99,439	\$87,262	\$109,079	\$146,384	—	—	—	—	—	—
40-44	70	25	39	6	—	—	—	—	—	—
	\$108,185	\$95,393	\$114,412	\$121,016	—	—	—	—	—	—
45-49	40	17	20	3	—	—	—	—	—	—
	\$102,398	\$83,509	\$114,276	\$130,245	—	—	—	—	—	—
50-54	26	16	9	1	—	—	—	—	—	—
	\$99,355	\$79,017	\$126,359	\$181,734	—	—	—	—	—	—
55-59	27	13	14	—	—	—	—	—	—	—
	\$91,549	\$90,089	\$92,905	—	—	—	—	—	—	—
60-64	14	6	7	1	—	—	—	—	—	—
	\$98,822	\$88,212	\$106,413	\$109,342	—	—	—	—	—	—
65-69	3	—	3	—	—	—	—	—	—	—
	\$79,780	—	\$79,780	—	—	—	—	—	—	—
70 and over	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—
<b>Total</b>	<b>565</b>	<b>324</b>	<b>228</b>	<b>13</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>
	<b>\$97,974</b>	<b>\$88,209</b>	<b>\$109,977</b>	<b>\$130,821</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>

Note: Age and years of service were projected from May 31, 2024 to June 30, 2024.



Section 3: Supplemental Information

SBCTA 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	5	—	—	3	2	—	—	—	—	—
	\$98,752	—	—	\$87,779	\$115,212	—	—	—	—	—
40-44	7	—	2	2	3	—	—	—	—	—
	\$129,315	—	\$131,097	\$136,742	\$123,177	—	—	—	—	—
45-49	4	1	—	1	2	—	—	—	—	—
	\$166,880	\$82,505	—	\$197,094	\$193,960	—	—	—	—	—
50-54	7	—	—	3	1	3	—	—	—	—
	\$215,821	—	—	\$229,019	\$138,547	\$228,381	—	—	—	—
55-59	4	—	1	3	—	—	—	—	—	—
	\$183,772	—	\$132,659	\$200,809	—	—	—	—	—	—
60-64	2	—	—	—	—	1	—	1	—	—
	\$143,516	—	—	—	—	\$187,835	—	\$99,197	—	—
65-69	—	—	—	—	—	—	—	—	—	—
70 and over	1	—	—	—	—	1	—	—	—	—
	\$300,029	—	—	—	—	\$300,029	—	—	—	—
<b>Total</b>	<b>30</b>	<b>1</b>	<b>3</b>	<b>12</b>	<b>8</b>	<b>5</b>	<b>—</b>	<b>1</b>	<b>—</b>	<b>—</b>
	<b>\$163,313</b>	<b>\$82,505</b>	<b>\$131,617</b>	<b>\$168,617</b>	<b>\$140,803</b>	<b>\$234,602</b>	<b>—</b>	<b>\$99,197</b>	<b>—</b>	<b>—</b>

Note: Age and years of service were projected from May 31, 2024 to June 30, 2024.

Section 3: Supplemental Information

SBCTA 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	4	4	—	—	—	—	—	—	—	—
	\$84,001	\$84,001	—	—	—	—	—	—	—	—
30-34	10	6	4	—	—	—	—	—	—	—
	\$88,951	\$76,423	\$107,743	—	—	—	—	—	—	—
35-39	7	6	1	—	—	—	—	—	—	—
	\$101,260	\$105,686	\$74,706	—	—	—	—	—	—	—
40-44	9	6	3	—	—	—	—	—	—	—
	\$121,871	\$107,203	\$151,206	—	—	—	—	—	—	—
45-49	4	3	1	—	—	—	—	—	—	—
	\$124,524	\$144,896	\$63,409	—	—	—	—	—	—	—
50-54	6	3	2	1	—	—	—	—	—	—
	\$102,483	\$84,348	\$147,310	\$67,232	—	—	—	—	—	—
55-59	5	3	1	1	—	—	—	—	—	—
	\$160,149	\$145,759	\$181,734	\$181,734	—	—	—	—	—	—
60-64	2	2	—	—	—	—	—	—	—	—
	\$181,734	\$181,734	—	—	—	—	—	—	—	—
65-69	1	1	—	—	—	—	—	—	—	—
	\$106,727	\$106,727	—	—	—	—	—	—	—	—
70 and over	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—
<b>Total</b>	<b>48</b>	<b>34</b>	<b>12</b>	<b>2</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>
	<b>\$112,815</b>	<b>\$107,855</b>	<b>\$124,922</b>	<b>\$124,483</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>

Note: Age and years of service were projected from May 31, 2024 to June 30, 2024.

Section 3: Supplemental Information

Other General 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	18	5	3	6	4	—	—	—	—	—
	\$123,904	\$139,675	\$108,688	\$132,445	\$102,791	—	—	—	—	—
40-44	27	4	6	6	10	1	—	—	—	—
	\$133,474	\$169,359	\$130,642	\$136,801	\$117,089	\$150,805	—	—	—	—
45-49	41	6	6	11	9	6	3	—	—	—
	\$133,750	\$162,434	\$190,518	\$116,323	\$86,990	\$152,928	\$128,665	—	—	—
50-54	39	5	4	4	15	6	3	2	—	—
	\$151,034	\$220,788	\$118,889	\$185,282	\$137,466	\$155,234	\$114,528	\$116,364	—	—
55-59	29	—	3	5	7	8	1	5	—	—
	\$144,149	—	\$204,979	\$122,747	\$142,093	\$131,333	\$65,659	\$168,136	—	—
60-64	29	1	2	4	6	10	2	3	1	—
	\$125,954	\$174,092	\$159,671	\$131,542	\$110,624	\$126,962	\$79,557	\$152,249	\$83,831	—
65-69	5	—	—	2	—	1	2	—	—	—
	\$80,455	—	—	\$75,068	—	\$71,647	\$90,246	—	—	—
70 and over	3	—	—	—	1	1	—	—	1	—
	\$84,226	—	—	—	\$41,565	\$130,521	—	—	\$80,593	—
<b>Total</b>	<b>191</b>	<b>21</b>	<b>24</b>	<b>38</b>	<b>52</b>	<b>33</b>	<b>11</b>	<b>10</b>	<b>2</b>	<b>—</b>
	<b>\$134,534</b>	<b>\$172,783</b>	<b>\$152,619</b>	<b>\$129,637</b>	<b>\$117,825</b>	<b>\$137,037</b>	<b>\$103,168</b>	<b>\$153,015</b>	<b>\$82,212</b>	<b>—</b>

Note: Age and years of service were projected from May 31, 2024 to June 30, 2024.

Section 3: Supplemental Information

Other General 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	15	15	—	—	—	—	—	—	—	—
	\$45,417	\$45,417	—	—	—	—	—	—	—	—
25-29	59	53	6	—	—	—	—	—	—	—
	\$68,669	\$65,664	\$95,217	—	—	—	—	—	—	—
30-34	61	40	18	3	—	—	—	—	—	—
	\$77,095	\$70,962	\$89,609	\$83,791	—	—	—	—	—	—
35-39	43	22	19	2	—	—	—	—	—	—
	\$82,315	\$77,366	\$85,476	\$106,723	—	—	—	—	—	—
40-44	40	25	15	—	—	—	—	—	—	—
	\$99,055	\$100,449	\$96,731	—	—	—	—	—	—	—
45-49	24	12	9	3	—	—	—	—	—	—
	\$87,932	\$85,051	\$91,092	\$89,976	—	—	—	—	—	—
50-54	11	6	4	1	—	—	—	—	—	—
	\$98,904	\$99,332	\$102,139	\$83,405	—	—	—	—	—	—
55-59	15	6	8	1	—	—	—	—	—	—
	\$107,092	\$104,548	\$101,778	\$164,870	—	—	—	—	—	—
60-64	3	1	1	1	—	—	—	—	—	—
	\$87,113	\$43,268	\$129,282	\$88,789	—	—	—	—	—	—
65-69	4	2	1	1	—	—	—	—	—	—
	\$66,066	\$91,662	\$67,010	\$13,929	—	—	—	—	—	—
70 and over	1	1	—	—	—	—	—	—	—	—
	\$96,034	\$96,034	—	—	—	—	—	—	—	—
<b>Total</b>	<b>276</b>	<b>183</b>	<b>81</b>	<b>12</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>
	<b>\$81,028</b>	<b>\$75,299</b>	<b>\$92,570</b>	<b>\$90,478</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>

Note: Age and years of service were projected from May 31, 2024 to June 30, 2024.

## Section 3: Supplemental Information

## Exhibit C: Reconciliation of member data

Line Description	Active Members	Inactive Members <sup>1</sup>	Retired Members	Disabled Members <sup>2</sup>	Beneficiaries	Total
Number as of June 30, 2023	22,084	10,324	11,526	1,700	2,163	47,797
New members	3,115	297	0	0	147	3,559
Terminations with vested rights	(1,109)	1,109	0	0	0	0
Contribution refunds	(385)	(449)	0	0	0	(834)
Retirements	(620)	(145)	765	0	0	0
New disabilities	(40)	(1)	(44)	85	0	0
Return to work	117	(114)	(3)	0	0	0
Died with or without beneficiary	(29)	(16)	(264)	(42)	(97)	(448)
Data adjustments	(2)	0	0	0	(12)	(14)
<b>Number as of June 30, 2024</b>	<b>23,131</b>	<b>11,005</b>	<b>11,980</b>	<b>1,743</b>	<b>2,201</b>	<b>50,060</b>

<sup>1</sup> Includes inactive members with member contributions on deposit.

<sup>2</sup> As of June 30, 2024 includes 318 members receiving a non-service connected disability and 1,425 members receiving a service connected disability.

## Section 3: Supplemental Information

## 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
<b>Contribution income</b>		
• Employer contributions	\$593,853,813	\$555,891,684
• Member contributions	204,043,207	188,090,607
• Less administrative expenses	(20,385,871)	(17,359,515)
– <b>Net contribution income</b>	<b>\$777,511,149</b>	<b>\$726,622,776</b>
<b>Investment income</b>		
• Interest, dividends, asset appreciation, and other income	\$1,437,587,945	\$963,166,233
• Less investment expenses	(227,169,003)	(160,570,680)
– <b>Net investment income</b>	<b>\$1,210,418,942</b>	<b>\$802,595,553</b>
<b>Total income available for benefits</b>	<b>\$1,987,930,091</b>	<b>\$1,529,218,329</b>
<b>Less benefit payments</b>		
• Benefits paid	\$(811,054,398)	\$(760,785,095)
– <b>Net benefit payments</b>	<b>\$(811,054,398)</b>	<b>\$(760,785,095)</b>
<b>Change in market value of assets</b>	<b>1,176,875,693</b>	<b>768,433,234</b>
<b>Net assets at market value at the beginning of the year</b>	<b>\$14,071,349,533</b>	<b>\$13,302,916,299</b>
<b>Net assets at market value at the end of the year</b>	<b>\$15,248,225,226</b>	<b>\$14,071,349,533</b>

**Note:** Results may be slightly off due to rounding.

## Section 3: Supplemental Information

## Exhibit E: Summary statement of plan assets

## Statement of Plan Assets as of June 30

Line Description	2024	2023
<b>Cash equivalents</b>	<b>\$2,328,138,676</b>	<b>\$1,588,755,744</b>
<b>Accounts receivable</b>		
• Securities sold	\$320,075,816	\$211,472,491
• Accrued interest and dividends	25,928,972	28,067,913
• Employer contributions	34,897,976	33,098,927
• All other	1,265,142	1,630,661
– <b>Total accounts receivable</b>	<b>\$382,167,906</b>	<b>\$274,269,992</b>
<b>Investments</b>		
• Equities	\$3,069,897,875	\$2,920,297,165
• Fixed income	1,901,931,841	1,671,463,785
• Real estate	10,822,377	8,522,383
• Domestic alternatives	6,364,796,281	6,071,584,871
• Foreign alternatives	1,719,200,144	1,820,482,391
• All other	9,074,811	9,852,587
• Investments received on securities lending	25,825,936	48,514,972
– <b>Total investments at market value</b>	<b>\$13,101,549,266</b>	<b>\$12,550,718,154</b>
<b>Total assets</b>	<b>\$15,811,855,848</b>	<b>\$14,413,743,890</b>
<b>Accounts payable</b>		
• Securities settlements	\$(25,153,406)	\$(48,514,972)
• Securities lending liability	(482,718,263)	(257,268,298)
• All other	(55,758,953)	(36,611,087)
– <b>Total accounts payable</b>	<b>\$(563,630,622)</b>	<b>\$(342,394,357)</b>
<b>Net assets at market value</b>	<b>\$15,248,225,226</b>	<b>\$14,071,349,533</b>
<b>Net assets at actuarial value</b>	<b>\$15,159,419,930</b>	<b>\$14,157,370,073</b>
<b>Net assets at valuation value<sup>1</sup></b>	<b>\$15,164,948,452</b>	<b>\$14,163,143,392</b>

**Note:** Results may be slightly off due to rounding.

<sup>1</sup> The June 30, 2024 and June 30, 2023 values include \$5.8 million and \$6.1 million, respectively. These amounts represent the associated present value of additional future contributions payable from the County to SBCERA related to the Crest Forest Fire District transfer and from the City of Big Bear Lake (including the Big Bear Fire Authority) to SBCERA for their transfers.

Section 3: Supplemental Information

**Exhibit F: Summary of reported reserve information**

Total Allocated Reserves as of June 30

Line Description	2024	2023
<b>Used in development of valuation value of assets</b>		
• Member Deposit Reserve	\$2,046,278,733	\$1,904,197,302
• Current Service Reserve	3,992,716,475	3,700,223,290
• Contra Account	(4,753,278,486)	(4,400,275,545)
• Pension Reserve	6,553,819,193	6,193,284,397
• Cost-of-Living Reserve	3,456,225,832	3,196,433,373
• Annuity Reserve	3,761,958,732	3,465,736,466
• Supplemental Disability Reserve	2,640,484	3,808,099
• Survivor Benefit Reserve	98,789,193	93,638,039
<b>Valuation value of assets<sup>1</sup></b>	<b>\$15,159,150,156</b>	<b>\$14,157,045,421</b>
<b>Not used in development of valuation value of assets</b>		
• Burial Allowance Reserve	\$269,774	\$324,652
• Restricted Balance Reserved for Deficiencies	0	0
• Additional Contingency Reserve	0	0
• Undesignated Excess Earnings	0	0
<b>Actuarial value of assets</b>	<b>\$15,159,419,930</b>	<b>\$14,157,370,073</b>
• Unrecognized Investment Income	88,805,296	(86,020,540)
<b>Gross market value of assets</b>	<b>\$15,248,225,226</b>	<b>\$14,071,349,533</b>

**Note:** Results may be slightly off due to rounding.

<sup>1</sup> The June 30, 2024 and June 30, 2023 values exclude \$5.8 million and \$6.1 million, respectively. These amounts represent the associated present value of additional future contributions payable from the County to SBCERA related to the Crest Forest Fire District transfer and from the City of Big Bear Lake (including the Big Bear Fire Authority) to SBCERA for their transfers.



Section 3: Supplemental Information

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

Year Ended June 30	Employer Contributions	Member Contributions	Other <sup>1</sup>	Administrative and Other Expenses	Net Investment Return <sup>2</sup>	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	\$315,239,709	\$117,899,734	\$0	\$8,917,907	\$280,841,907	\$428,474,844	\$8,271,659,138	\$8,255,352,815	99.8%
2016	340,511,616	139,132,004	0	10,233,264	(80,027,512)	464,068,036	8,196,973,946	8,736,959,429	106.6%
2017	360,477,890	143,858,526	0	13,163,171	1,098,198,034	497,903,864	9,288,441,361	9,385,976,561	101.1%
2018	378,667,309	149,478,284	4,311,546	12,092,067	797,480,630	539,296,847	10,066,990,216	10,020,862,873	99.5%
2019	446,294,977	163,551,784	0	12,675,054	502,752,677	578,507,943	10,588,406,657	10,642,400,992	100.5%
2020	467,985,568	169,182,925	0	14,626,796	(302,050,888)	621,563,606	10,287,333,860	11,133,172,593	108.2%
2021	498,747,129	172,953,457	0	14,511,411	3,353,791,858	660,822,131	13,637,492,762	12,258,924,608	89.9%
2022	550,345,800	178,892,641	0	14,323,302	(323,043,598)	726,448,004 <sup>3</sup>	13,302,916,299	13,260,595,543	99.7%
2023	555,891,684	188,090,607	0	17,359,515	802,595,553	760,785,095	14,071,349,533	14,157,370,073	100.6%
2024	593,853,813	204,043,207	0	20,385,871	1,210,418,942	811,054,398	15,248,225,226	15,159,419,930	99.4%

**Note:** Results may be slightly off due to rounding.

<sup>1</sup> Represents asset transfer from CalPERS related to the transfer of Big Bear Fire Authority employees.

<sup>2</sup> On a market basis, net of investment fees.

<sup>3</sup> Includes \$12,293,237 in refunds of member contributions previously paid in conjunction with the reclassification of pay items for inclusion in compensation earnable.

## Section 3: Supplemental Information

## Exhibit H: Table of amortization bases

Combined  
(\$ in '000s)

Base Type	Date Established	Initial Amount	Initial Period	Outstanding Balance	Years Remaining	Annual Payment <sup>1</sup>
Actuarial (gain) or loss	June 30, 2005	\$119,698	20	\$16,746	1	\$17,393
Assumption changes	June 30, 2005	41,548	20	5,810	1	6,034
Actuarial (gain) or loss	June 30, 2006	(17,318)	20	(4,569)	2	(2,420)
UAAL prepayment	December 31, 2006	(10,000)	20	(3,198)	2.5	(1,369)
Actuarial (gain) or loss	June 30, 2007	(6,979)	20	(2,588)	3	(932)
Plan change	June 30, 2007	586	20	214	3	77
Actuarial (gain) or loss	June 30, 2008	18,782	20	8,790	4	2,422
Assumption change	June 30, 2008	(10,643)	20	(4,990)	4	(1,376)
Actuarial (gain) or loss	June 30, 2009	205,189	20	113,297	5	25,474
Actuarial (gain) or loss	June 30, 2010	452,342	20	282,608	6	53,993
Actuarial (gain) or loss	June 30, 2011	319,321	20	219,474	7	36,641
Assumption change	June 30, 2011	310,810	20	213,619	7	35,666
Actuarial (gain) or loss	June 30, 2012	121,531	20	90,248	8	13,439
Burial Allowance method change	June 30, 2012	2,997	20	2,159	8	321
Actuarial (gain) or loss	June 30, 2013	78,752	20	62,235	9	8,396
Actuarial (gain) or loss	June 30, 2014	(231,612)	20	(192,199)	10	(23,783)
Assumption change	June 30, 2014	330,103	20	273,877	10	33,891
Actuarial (gain) or loss	June 30, 2015	58,602	20	50,677	11	5,809
Actuarial (gain) or loss	June 30, 2016	23,062	20	20,636	12	2,209
Actuarial (gain) or loss	June 30, 2017	(3,188)	20	(2,917)	13	(293)

<sup>1</sup> Calculated as a level percentage of payroll, payable at the beginning of the month.

## Section 3: Supplemental Information

Base Type	Date Established	Initial Amount	Initial Period	Outstanding Balance	Years Remaining	Annual Payment <sup>1</sup>
Assumption change	June 30, 2017	\$658,860	20	\$605,394	13	\$60,944
Actuarial (gain) or loss	June 30, 2018	125,526	20	118,023	14	11,237
Actuarial (gain) or loss	June 30, 2019	170,854	20	163,681	15	14,814
Actuarial (gain) or loss	June 30, 2020	332,002	20	322,423	16	27,856
Entry age method change	June 30, 2020	(28,740)	20	(27,885)	16	(2,409)
Assumption change	June 30, 2020	311,665	20	302,681	16	26,151
Actuarial (gain) or loss	June 30, 2021	(211,512)	20	(207,790)	17	(17,203)
Implementation of Alameda Decision	June 30, 2021	(128,617)	15	(119,149)	12	(12,756)
Actuarial (gain) or loss	June 30, 2022	(197,706)	20	(195,857)	18	(15,590)
Implementation of Alameda Decision <sup>2</sup>	June 30, 2022	11,732	14	11,073	12	1,185
Actuarial (gain) or loss	June 30, 2023	188,148	20	187,366	19	14,383
Assumption change	June 30, 2023	(121,998)	20	(121,493)	19	(9,326)
Actuarial (gain) or loss	June 30, 2024	107,197	20	107,197	20	7,955
<b>Subtotal</b>				<b>\$2,295,593</b>		<b>\$318,833</b>
SBCTA				\$(202)		
Withdrawn Employers				(16,734)		
<b>Subtotal</b>				<b>\$(16,936)</b>		
<b>Grand Total<sup>3</sup></b>				<b>\$2,278,657</b>		

**Note:** The equivalent single amortization period is about 9 years.

<sup>2</sup> Reflects refunds of member contributions due to implementation of the Alameda Decision. The amortization period has been set equal to the remaining period for the related 2021 amortization layer.

<sup>3</sup> The present value of additional future contributions payable from the County to SBCERA related to the Crest Forest Fire District transfer and from the City of Big Bear Lake (including the Big Bear Fire Authority) to SBCERA for their transfers has been reflected in the UAAL.

## Section 3: Supplemental Information

County General  
(\$ in '000s)

Base Type	Date Established	Initial Amount	Initial Period	Outstanding Balance	Years Remaining	Annual Payment <sup>1</sup>
Actuarial (gain) or loss	June 30, 2005	\$58,722	20	\$8,213	1	\$8,530
Assumption changes	June 30, 2005	55,608	20	7,779	1	8,079
Actuarial (gain) or loss	June 30, 2006	(12,582)	20	(3,317)	2	(1,757)
Actuarial (gain) or loss	June 30, 2007	(32,313)	20	(12,042)	3	(4,338)
Actuarial (gain) or loss	June 30, 2008	(10,019)	20	(4,694)	4	(1,294)
Assumption change	June 30, 2008	(9,274)	20	(4,347)	4	(1,198)
Actuarial (gain) or loss	June 30, 2009	116,654	20	64,404	5	14,481
Actuarial (gain) or loss	June 30, 2010	283,312	20	176,978	6	33,812
Actuarial (gain) or loss	June 30, 2011	169,657	20	116,613	7	19,469
Assumption change	June 30, 2011	199,268	20	136,959	7	22,866
Actuarial (gain) or loss	June 30, 2012	70,289	20	52,186	8	7,771
Burial Allowance method change	June 30, 2012	2,391	20	1,771	8	264
Actuarial (gain) or loss	June 30, 2013	36,154	20	28,560	9	3,853
Actuarial (gain) or loss	June 30, 2014	(143,394)	20	(118,976)	10	(14,723)
Assumption change	June 30, 2014	186,100	20	154,401	10	19,107
Actuarial (gain) or loss	June 30, 2015	(34,419)	20	(29,787)	11	(3,414)
Actuarial (gain) or loss	June 30, 2016	(19,721)	20	(17,645)	12	(1,889)
Actuarial (gain) or loss	June 30, 2017	(23,495)	20	(21,589)	13	(2,173)
Assumption change	June 30, 2017	391,172	20	359,436	13	36,184
Actuarial (gain) or loss	June 30, 2018	36,456	20	34,282	14	3,264
Actuarial (gain) or loss	June 30, 2019	94,317	20	90,331	15	8,175
Actuarial (gain) or loss	June 30, 2020	171,584	20	166,630	16	14,396

<sup>1</sup> Calculated as a level percentage of payroll, payable at the beginning of the month.

Section 3: Supplemental Information

Base Type	Date Established	Initial Amount	Initial Period	Outstanding Balance	Years Remaining	Annual Payment <sup>1</sup>
Entry age method change	June 30, 2020	\$(12,138)	20	\$(11,779)	16	\$(1,018)
Assumption change	June 30, 2020	200,613	20	194,825	16	16,832
Actuarial (gain) or loss	June 30, 2021	(162,927)	20	(160,066)	17	(13,252)
Implementation of Alameda Decision	June 30, 2021	(25,254)	15	(23,389)	12	(2,504)
Actuarial (gain) or loss	June 30, 2022	(141,889)	20	(140,565)	18	(11,189)
Implementation of Alameda Decision <sup>2</sup>	June 30, 2022	2,415	14	2,280	12	244
Actuarial (gain) or loss	June 30, 2023	92,809	20	92,428	19	7,095
Assumption change	June 30, 2023	(109,455)	20	(109,001)	19	(8,367)
Actuarial (gain) or loss	June 30, 2024	59,235	20	59,235	20	4,396
<b>County General Total</b>				<b>\$1,090,114</b>		<b>\$161,702</b>

<sup>2</sup> Reflects refunds of member contributions due to implementation of the Alameda Decision. The amortization period has been set equal to the remaining period for the related 2021 amortization layer.

## Section 3: Supplemental Information

Superior Court  
(\$ in '000s)

Base Type	Date Established	Initial Amount	Initial Period	Outstanding Balance	Years Remaining	Annual Payment <sup>1</sup>
Actuarial (gain) or loss	June 30, 2005	\$3,451	20	\$482	1	\$501
Assumption changes	June 30, 2005	3,269	20	457	1	475
Actuarial (gain) or loss	June 30, 2006	4,889	20	1,289	2	683
Actuarial (gain) or loss	June 30, 2007	4,076	20	1,521	3	548
Actuarial (gain) or loss	June 30, 2008	729	20	344	4	95
Assumption change	June 30, 2008	(1,520)	20	(718)	4	(198)
Actuarial (gain) or loss	June 30, 2009	6,270	20	3,463	5	779
Actuarial (gain) or loss	June 30, 2010	10,935	20	6,836	6	1,306
Actuarial (gain) or loss	June 30, 2011	8,620	20	5,929	7	990
Assumption change	June 30, 2011	10,323	20	7,089	7	1,184
Actuarial (gain) or loss	June 30, 2012	3	20	0	8	0
Burial Allowance method change	June 30, 2012	68	20	35	8	5
Actuarial (gain) or loss	June 30, 2013	(2,565)	20	(2,023)	9	(273)
Actuarial (gain) or loss	June 30, 2014	(5,786)	20	(4,803)	10	(594)
Assumption change	June 30, 2014	10,501	20	8,715	10	1,078
Actuarial (gain) or loss	June 30, 2015	(307)	20	(270)	11	(31)
Actuarial (gain) or loss	June 30, 2016	11,583	20	10,352	12	1,108
Actuarial (gain) or loss	June 30, 2017	(1,529)	20	(1,402)	13	(141)
Assumption change	June 30, 2017	37,250	20	34,225	13	3,445
Actuarial (gain) or loss	June 30, 2018	3,765	20	3,527	14	336
Actuarial (gain) or loss	June 30, 2019	2,285	20	2,197	15	199
Actuarial (gain) or loss	June 30, 2020	14,836	20	14,401	16	1,244

<sup>1</sup> Calculated as a level percentage of payroll, payable at the beginning of the month.

## Section 3: Supplemental Information

Base Type	Date Established	Initial Amount	Initial Period	Outstanding Balance	Years Remaining	Annual Payment <sup>1</sup>
Entry age method change	June 30, 2020	\$(1,751)	20	\$(1,693)	16	\$(146)
Assumption change	June 30, 2020	14,594	20	14,187	16	1,226
Actuarial (gain) or loss	June 30, 2021	(4,639)	20	(4,553)	17	(377)
Implementation of Alameda Decision	June 30, 2021	(19,413)	15	(17,982)	12	(1,925)
Actuarial (gain) or loss	June 30, 2022	(17,892)	20	(17,728)	18	(1,411)
Implementation of Alameda Decision <sup>2</sup>	June 30, 2022	404	14	385	12	41
Actuarial (gain) or loss	June 30, 2023	2,576	20	2,563	19	197
Assumption change	June 30, 2023	(7,319)	20	(7,286)	19	(559)
Actuarial (gain) or loss	June 30, 2024	6,204	20	6,204	20	460
<b>Superior Court Total</b>				<b>\$65,743</b>		<b>\$10,245</b>

<sup>2</sup> Reflects refunds of member contributions due to implementation of the Alameda Decision. The amortization period has been set equal to the remaining period for the related 2021 amortization layer.

## Section 3: Supplemental Information

SCAQMD  
(\$ in '000s)

Base Type	Date Established	Initial Amount	Initial Period	Outstanding Balance	Years Remaining	Annual Payment <sup>1</sup>
Actuarial (gain) or loss	June 30, 2005	\$11,432	20	\$1,603	1	\$1,665
Assumption changes	June 30, 2005	(3,613)	20	(509)	1	(529)
Actuarial (gain) or loss	June 30, 2006	(1,328)	20	(350)	2	(185)
UAAL prepayment	December 31, 2006	(10,000)	20	(3,198)	2.5	(1,369)
Actuarial (gain) or loss	June 30, 2007	12,093	20	4,508	3	1,624
Actuarial (gain) or loss	June 30, 2008	16,095	20	7,538	4	2,077
Assumption change	June 30, 2008	1,425	20	669	4	184
Actuarial (gain) or loss	June 30, 2009	8,947	20	4,938	5	1,110
Actuarial (gain) or loss	June 30, 2010	34,808	20	21,748	6	4,155
Actuarial (gain) or loss	June 30, 2011	26,766	20	18,391	7	3,070
Assumption change	June 30, 2011	21,411	20	14,708	7	2,456
Actuarial (gain) or loss	June 30, 2012	6,060	20	4,510	8	672
Burial Allowance method change	June 30, 2012	131	20	62	8	9
Actuarial (gain) or loss	June 30, 2013	4,599	20	3,626	9	489
Actuarial (gain) or loss	June 30, 2014	(39,137)	20	(32,487)	10	(4,020)
Assumption change	June 30, 2014	19,750	20	16,389	10	2,028
Actuarial (gain) or loss	June 30, 2015	29,235	20	25,294	11	2,899
Actuarial (gain) or loss	June 30, 2016	13,576	20	12,151	12	1,301
Actuarial (gain) or loss	June 30, 2017	11,818	20	10,866	13	1,094
Assumption change	June 30, 2017	38,515	20	35,381	13	3,562
Actuarial (gain) or loss	June 30, 2018	20,453	20	19,223	14	1,830
Actuarial (gain) or loss	June 30, 2019	16,556	20	15,876	15	1,437

<sup>1</sup> Calculated as a level percentage of payroll, payable at the beginning of the month.



Section 3: Supplemental Information

Base Type	Date Established	Initial Amount	Initial Period	Outstanding Balance	Years Remaining	Annual Payment <sup>1</sup>
Actuarial (gain) or loss	June 30, 2020	\$27,368	20	\$26,585	16	\$2,297
Entry age method change	June 30, 2020	(1,218)	20	(1,192)	16	(103)
Assumption change	June 30, 2020	31,848	20	30,925	16	2,672
Actuarial (gain) or loss	June 30, 2021	(9,845)	20	(9,667)	17	(800)
Implementation of Alameda Decision	June 30, 2021	(29,772)	15	(27,584)	12	(2,953)
Actuarial (gain) or loss	June 30, 2022	(9,092)	20	(9,006)	18	(717)
Implementation of Alameda Decision <sup>2</sup>	June 30, 2022	4,000	14	3,771	12	404
Actuarial (gain) or loss	June 30, 2023	2,536	20	2,523	19	194
Assumption change	June 30, 2023	(7,438)	20	(7,407)	19	(569)
Actuarial (gain) or loss	June 30, 2024	2,884	20	2,884	20	214
<b>SCAQMD Total</b>				<b>\$192,769</b>		<b>\$26,198</b>

<sup>2</sup> Reflects refunds of member contributions due to implementation of the Alameda Decision. The amortization period has been set equal to the remaining period for the related 2021 amortization layer.

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SBCTA  
 (\$ in '000s)

Base Type	Date Established	Initial Amount	Initial Period	Outstanding Balance	Years Remaining	Annual Payment
SBCTA Total				\$(202)		\$0

## Section 3: Supplemental Information

Other General  
(\$ in '000s)

Base Type	Date Established	Initial Amount	Initial Period	Outstanding Balance	Years Remaining	Annual Payment <sup>1</sup>
Actuarial (gain) or loss	June 30, 2005	\$5,541	20	\$779	1	\$809
Assumption changes	June 30, 2005	(410)	20	(58)	1	(60)
Actuarial (gain) or loss	June 30, 2006	1,997	20	519	2	275
Actuarial (gain) or loss	June 30, 2007	1,667	20	620	3	223
Actuarial (gain) or loss	June 30, 2008	3,432	20	1,603	4	442
Assumption change	June 30, 2008	(232)	20	(108)	4	(30)
Actuarial (gain) or loss	June 30, 2009	4,653	20	2,570	5	578
Actuarial (gain) or loss	June 30, 2010	9,482	20	5,930	6	1,133
Actuarial (gain) or loss	June 30, 2011	7,604	20	5,225	7	872
Assumption change	June 30, 2011	6,906	20	4,750	7	793
Actuarial (gain) or loss	June 30, 2012	2,312	20	1,708	8	254
Burial Allowance method change	June 30, 2012	59	20	28	8	4
Actuarial (gain) or loss	June 30, 2013	3,473	20	2,756	9	372
Actuarial (gain) or loss	June 30, 2014	(5,086)	20	(4,220)	10	(522)
Assumption change	June 30, 2014	6,447	20	5,344	10	661
Actuarial (gain) or loss	June 30, 2015	2,302	20	1,977	11	227
Actuarial (gain) or loss	June 30, 2016	5,553	20	4,974	12	532
Actuarial (gain) or loss	June 30, 2017	1,401	20	1,289	13	130
Assumption change	June 30, 2017	18,937	20	17,404	13	1,752
Actuarial (gain) or loss	June 30, 2018	7,614	20	7,161	14	682
Actuarial (gain) or loss	June 30, 2019	6,746	20	6,464	15	585
Actuarial (gain) or loss	June 30, 2020	5,564	20	5,401	16	467

<sup>1</sup> Calculated as a level percentage of payroll, payable at the beginning of the month.

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Base Type	Date Established	Initial Amount	Initial Period	Outstanding Balance	Years Remaining	Annual Payment <sup>1</sup>
Entry age method change	June 30, 2020	\$(4,556)	20	\$(4,423)	16	\$(382)
Assumption change	June 30, 2020	8,189	20	7,952	16	687
Actuarial (gain) or loss	June 30, 2021	2,902	20	2,849	17	236
Implementation of Alameda Decision	June 30, 2021	(21,333)	15	(19,762)	12	(2,116)
Actuarial (gain) or loss	June 30, 2022	(6,230)	20	(6,172)	18	(491)
Implementation of Alameda Decision <sup>2</sup>	June 30, 2022	2,853	14	2,694	12	288
Actuarial (gain) or loss	June 30, 2023	3,213	20	3,194	19	245
Assumption change	June 30, 2023	(3,753)	20	(3,744)	19	(287)
Actuarial (gain) or loss	June 30, 2024	2,740	20	2,740	20	203
<b>Other General Total</b>				<b>\$57,444</b>		<b>\$8,562</b>

<sup>2</sup> Reflects refunds of member contributions due to implementation of the Alameda Decision. The amortization period has been set equal to the remaining period for the related 2021 amortization layer.

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Safety  
(\$ in '000s)

Base Type	Date Established	Initial Amount	Initial Period	Outstanding Balance	Years Remaining	Annual Payment <sup>1</sup>
Actuarial (gain) or loss	June 30, 2005	\$40,552	20	\$5,669	1	\$5,888
Assumption changes	June 30, 2005	(13,306)	20	(1,859)	1	(1,931)
Actuarial (gain) or loss	June 30, 2006	(10,294)	20	(2,710)	2	(1,436)
Actuarial (gain) or loss	June 30, 2007	7,498	20	2,805	3	1,011
Plan change	June 30, 2007	586	20	214	3	77
Actuarial (gain) or loss	June 30, 2008	8,545	20	3,999	4	1,102
Assumption change	June 30, 2008	(1,042)	20	(486)	4	(134)
Actuarial (gain) or loss	June 30, 2009	68,665	20	37,922	5	8,526
Actuarial (gain) or loss	June 30, 2010	113,805	20	71,116	6	13,587
Actuarial (gain) or loss	June 30, 2011	106,674	20	73,316	7	12,240
Assumption change	June 30, 2011	72,902	20	50,113	7	8,367
Actuarial (gain) or loss	June 30, 2012	42,867	20	31,844	8	4,742
Burial Allowance method change	June 30, 2012	348	20	263	8	39
Actuarial (gain) or loss	June 30, 2013	37,091	20	29,316	9	3,955
Actuarial (gain) or loss	June 30, 2014	(38,209)	20	(31,713)	10	(3,924)
Assumption change	June 30, 2014	107,305	20	89,028	10	11,017
Actuarial (gain) or loss	June 30, 2015	61,791	20	53,463	11	6,128
Actuarial (gain) or loss	June 30, 2016	12,071	20	10,804	12	1,157
Actuarial (gain) or loss	June 30, 2017	8,617	20	7,919	13	797
Assumption change	June 30, 2017	172,986	20	158,948	13	16,001
Actuarial (gain) or loss	June 30, 2018	57,238	20	53,830	14	5,125
Actuarial (gain) or loss	June 30, 2019	50,950	20	48,813	15	4,418

<sup>1</sup> Calculated as a level percentage of payroll, payable at the beginning of the month.

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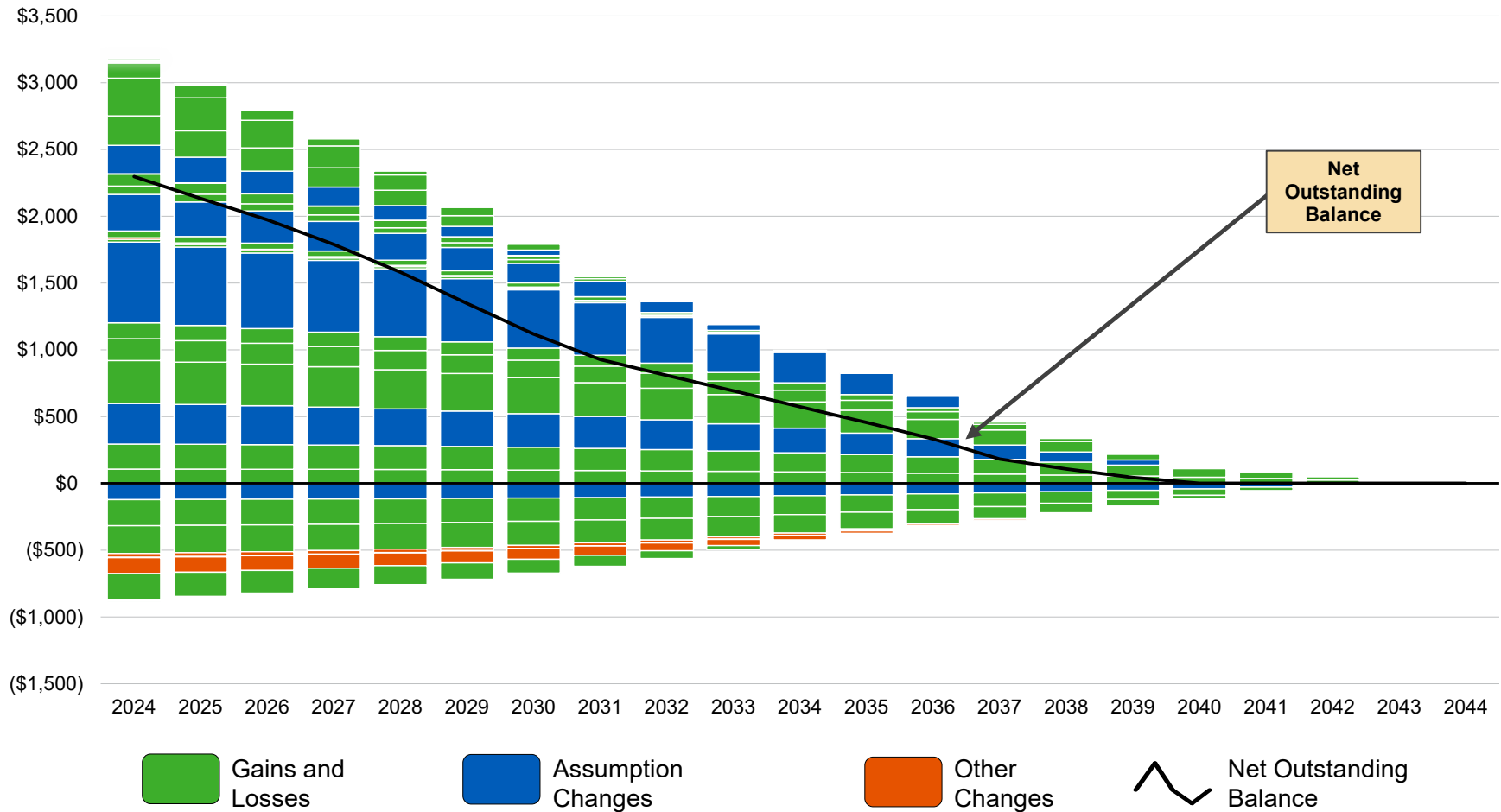
Base Type	Date Established	Initial Amount	Initial Period	Outstanding Balance	Years Remaining	Annual Payment <sup>1</sup>
Actuarial (gain) or loss	June 30, 2020	\$112,650	20	\$109,406	16	\$9,452
Entry age method change	June 30, 2020	(9,077)	20	(8,798)	16	(760)
Assumption change	June 30, 2020	56,421	20	54,792	16	4,734
Actuarial (gain) or loss	June 30, 2021	(37,003)	20	(36,353)	17	(3,010)
Implementation of Alameda Decision	June 30, 2021	(32,845)	15	(30,432)	12	(3,258)
Actuarial (gain) or loss	June 30, 2022	(22,603)	20	(22,386)	18	(1,782)
Implementation of Alameda Decision <sup>2</sup>	June 30, 2022	2,060	14	1,943	12	208
Actuarial (gain) or loss	June 30, 2023	87,014	20	86,658	19	6,652
Assumption change	June 30, 2023	5,967	20	5,945	19	456
Actuarial (gain) or loss	June 30, 2024	36,134	20	36,134	20	2,682
<b>Safety Total</b>				<b>\$889,523</b>		<b>\$112,126</b>

<sup>2</sup> Reflects refunds of member contributions due to implementation of the Alameda Decision. The amortization period has been set equal to the remaining period for the related 2021 amortization layer.

Section 3: Supplemental Information

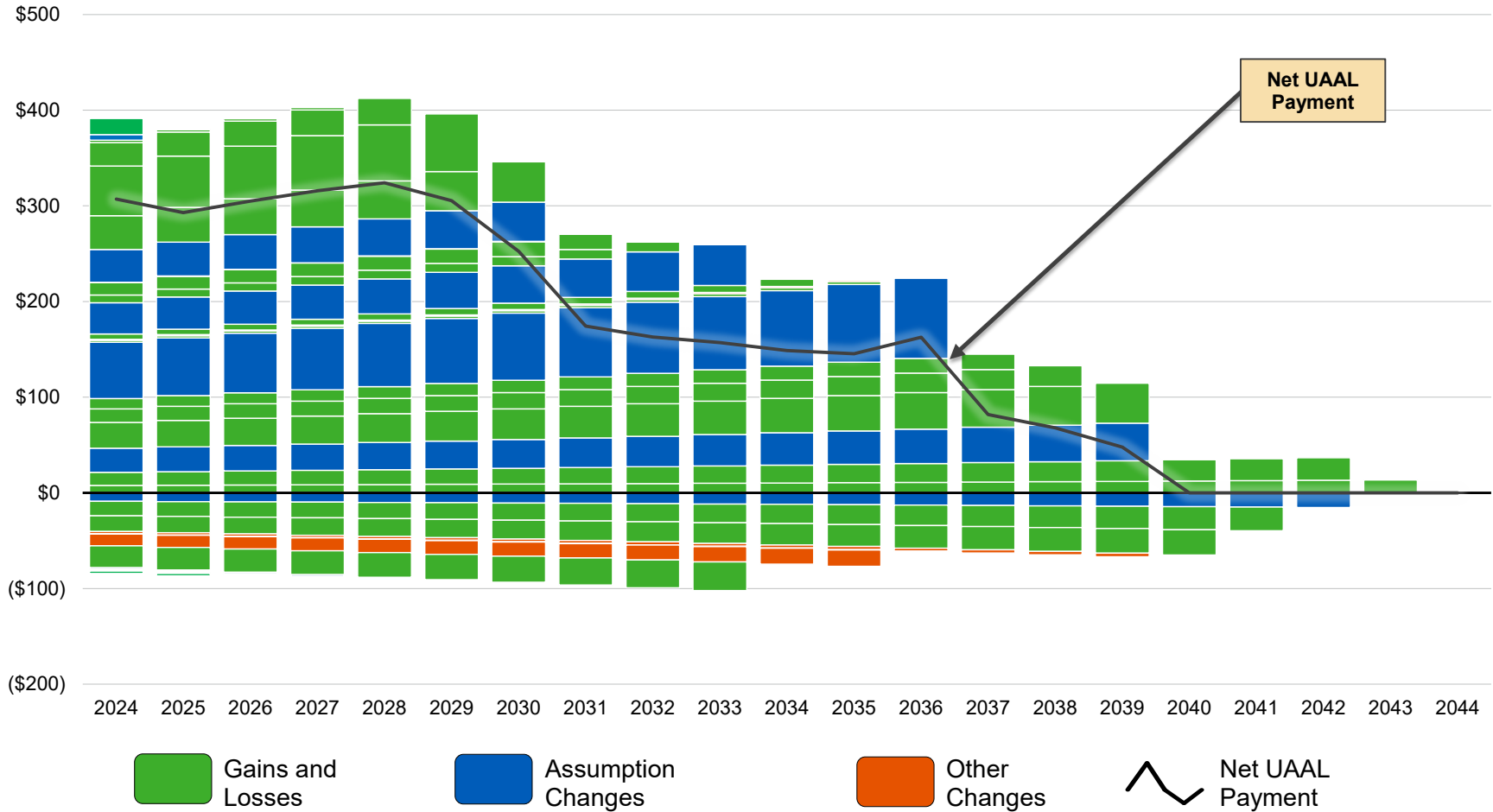
Exhibit I: Projection of UAAL balances and payments

Outstanding Balance of \$2,296 Million in Net UAAL as of June 30, 2024  
 (\$ in Millions)



Section 3: Supplemental Information

Annual Payments Required to Amortize \$2,296 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 dated May 24, 2023. Unless otherwise noted, all actuarial assumptions and methods shown below apply to all members for all tiers. These assumptions were adopted by the Board.

### Net investment return

7.25%; net of investment expenses.

Based on the Actuarial Experience Study referenced above, expected investment expenses represent about 0.50% of the actuarial value of assets.

### Member contribution crediting rate

2.50% (actual rate is based on six-month Treasury rate).

### Inflation rate

Increase of 2.50% per year.

### Cost-of-Living Adjustment (COLA)

Increases of 2.00% per year.

## Section 4: Actuarial Valuation Basis

### Administrative expenses

0.90% of payroll allocated to both the employer and member based on the components of the total average contribution rate (before expenses) for the employer and member. This results in an administrative expense load as shown below:

Component	Average Contribution Rate Before Administrative Expense	Weighting	Total
Employer	27.33%	73.06%	0.66%
Member	10.08%	26.94%	0.24%
<b>Total</b>	<b>37.41%</b>	<b>100.00%</b>	<b>0.90%</b>

Under this approach, the employer normal cost rate is then increased by the same percent of payroll as the basic member rate with the remaining employer loading allocated to the employer UAAL rate. This is done to maintain a 50/50 sharing of normal cost for those in Tier 2. The table below shows this allocation.

Allocation of Administrative Expense Load	% of Payroll
Addition to employer basic normal cost rate	0.24%
Addition to employer basic UAAL rate	0.42%
Addition to member basic rate	0.24%
<b>Total addition to contribution rates</b>	<b>0.90%</b>

### Payroll

Inflation of 2.50% per year plus “across-the-board” salary increase of 0.50% per year, used to amortize the UAAL 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.

## Section 4: Actuarial Valuation Basis

### Salary increase

The annual rate of compensation increase includes:

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

#### Merit and Promotion Increases (%)

Years of Service	General	Safety
Less than 1	5.00%	7.00%
1–2	6.50%	4.75%
2–3	4.75%	3.75%
3–4	4.25%	3.75%
4–5	4.00%	3.75%
5–6	3.50%	3.75%
6–7	3.25%	3.75%
7–8	3.25%	3.75%
8–9	3.00%	3.50%
9–10	2.50%	3.25%
10–11	2.00%	2.50%
11–12	1.75%	2.00%
12–13	1.50%	1.90%
13–14	1.40%	1.85%
14–15	1.35%	1.80%
15–16	1.30%	1.75%
16–17	1.30%	1.75%
17–18	1.30%	1.75%
18–19	1.30%	1.75%
19–20	1.30%	1.75%
20 and over	1.30%	1.75%

## Section 4: Actuarial Valuation Basis

### Post-retirement mortality rates

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

#### Healthy

- **General 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 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) with rates decreased by 5% for females, projected generationally with the two-dimensional mortality improvement scale MP-2021.

#### Disabled

- **General members:** Pub-2010 Non-Safety Disabled Retiree Amount-Weighted Mortality Table (separate tables for males and females) with rates decreased 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), 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 females, projected generationally with the two-dimensional mortality improvement scale MP-2021.
- **Beneficiaries in pay status:** Pub-2010 Contingent Survivor Amount-Weighted Above-Median Mortality Table (separate tables for males and females) with rates increased by 5% for males and 15% for females, projected generationally with the two-dimensional mortality improvement scale MP-2021.

## Section 4: Actuarial Valuation Basis

### Pre-retirement mortality rates

- **General 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	General Male	General Female	Safety Male	Safety Female
20	0.04%	0.01%	0.04%	0.02%
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%
70	0.61%	0.44%	0.66%	0.39%

All pre-retirement deaths are assumed to be non-service connected.

## Section 4: Actuarial Valuation Basis

### Mortality rates for member contributions

- **General 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 females, projected 30 years (from 2010) with the two-dimensional mortality improvement scale MP-2021, weighted 30% male and 70% female.
- **Safety members:** Pub-2010 Safety Healthy Retiree Amount-Weighted Above-Median Mortality Table (separate tables for males and females) with rates decreased by 5% for females, projected 30 years (from 2010) with the two-dimensional mortality improvement scale MP-2021, weighted 90% male and 10% female.

Section 4: Actuarial Valuation Basis

**Disability incidence**

Disability Incidence Rates (%)

Age	General	Safety
20	0.03%	0.15%
25	0.03%	0.21%
30	0.04%	0.31%
35	0.06%	0.56%
40	0.09%	0.76%
45	0.16%	1.04%
50	0.23%	2.58%
55	0.31%	5.60%
60	0.50%	7.00%
65	0.84%	10.30%
70	1.00%	0.00%

60% of General disabilities are assumed to be service connected (duty) disabilities and the other 40% are assumed to be non-service connected (ordinary) disabilities.

100% of Safety disabilities are assumed to be service connected (duty) disabilities.

Section 4: Actuarial Valuation Basis

Termination

Termination Rates (%)

Years of Service	General	Safety
Less than 1	15.00%	8.00%
1–2	12.00%	7.50%
2–3	11.00%	6.50%
3–4	9.00%	6.00%
4–5	7.50%	5.00%
5–6	7.00%	4.00%
6–7	6.50%	3.00%
7–8	5.50%	2.00%
8–9	5.00%	1.90%
9–10	5.00%	1.80%
10–11	5.00%	1.60%
11–12	5.00%	1.40%
12–13	4.50%	1.20%
13–14	4.50%	1.20%
14–15	4.25%	1.20%
15–16	4.00%	1.10%
16–17	3.75%	1.10%
17–18	3.50%	1.10%
18–19	3.25%	1.10%
19–20	3.25%	1.10%
20 and over	3.25%	1.10%

Refer to the next table that contains rates for electing a refund of contributions upon termination.

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



Section 4: Actuarial Valuation Basis

**Election for refund of contributions upon termination**

Rate of Electing a Refund of Contributions (%)

Years of Service	General Member Currently Electing Refundable Contributions	General Member Currently Electing Non-Refundable Contributions	Safety Member Currently Electing Refundable Contributions	Safety Member Currently Electing Non-Refundable Contributions
Less than 5	100.00%	100.00%	100.00%	100.00%
5–6	35.00%	17.50%	15.00%	7.50%
6–7	35.00%	17.50%	15.00%	7.50%
7–8	35.00%	17.50%	15.00%	7.50%
8–9	35.00%	17.50%	15.00%	7.50%
9–10	35.00%	17.50%	15.00%	7.50%
10–11	30.00%	15.00%	15.00%	7.50%
11–12	30.00%	15.00%	10.00%	5.00%
12–13	30.00%	15.00%	10.00%	5.00%
13–14	30.00%	15.00%	10.00%	5.00%
14–15	30.00%	15.00%	10.00%	5.00%
15–16	15.00%	7.50%	10.00%	5.00%
16–17	15.00%	7.50%	5.00%	2.50%
17–18	15.00%	7.50%	5.00%	2.50%
18–19	15.00%	7.50%	5.00%	2.50%
19–20	15.00%	7.50%	5.00%	2.50%
20 and over	15.00%	7.50%	0.00%	0.00%

Section 4: Actuarial Valuation Basis

Retirement rates

Retirement Rates (%) – General

Age	Tier 1 (\$31676.15) <30 Years of Service	Tier 1 (\$31676.15) 30+ Years of Service	Tier 2 (\$7522.20(a))
49	0.00%	50.00%	0.00%
50	2.50%	2.50%	0.00%
51	2.00%	2.00%	0.00%
52	2.50%	2.50%	1.50%
53	2.50%	2.50%	1.50%
54	2.50%	2.50%	1.50%
55	4.50%	10.00%	3.50%
56	5.00%	10.00%	3.50%
57	5.50%	10.00%	5.50%
58	6.00%	17.00%	6.50%
59	8.50%	21.50%	7.00%
60	11.00%	27.50%	8.00%
61	11.00%	27.50%	10.50%
62	15.00%	35.00%	16.00%
63	15.00%	35.00%	16.00%
64	24.00%	42.00%	18.00%
65	36.00%	50.00%	22.00%
66	30.00%	40.00%	22.00%
67	30.00%	40.00%	25.00%
68	26.00%	35.00%	20.00%
69	26.00%	35.00%	20.00%
70	26.00%	35.00%	35.00%
71	24.00%	30.00%	25.00%
72	22.00%	30.00%	25.00%
73	22.00%	30.00%	25.00%
74	22.00%	30.00%	25.00%
75	100.00%	100.00%	100.00%

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

Section 4: Actuarial Valuation Basis

Retirement Rates (%) — Safety

Age	Tier 1 (\$31664.1) <30 Years of Service	Tier 1 (\$31664.1) 30+ Years of Service	Tier 2 (\$7522.25(d))
45	2.00%	2.00%	0.00%
46	2.50%	2.50%	0.00%
47	2.50%	2.50%	0.00%
48	2.50%	2.50%	0.00%
49	9.00%	9.00%	0.00%
50	13.00%	35.00%	5.00%
51	10.50%	30.00%	4.00%
52	12.00%	30.00%	5.00%
53	12.50%	30.00%	6.00%
54	14.00%	30.00%	12.00%
55	14.00%	37.50%	18.00%
56	15.00%	37.50%	20.00%
57	15.00%	37.50%	22.00%
58	17.00%	37.50%	25.00%
59	17.00%	37.50%	25.00%
60	25.00%	45.00%	25.00%
61	25.00%	45.00%	25.00%
62	25.00%	45.00%	25.00%
63	25.00%	45.00%	25.00%
64	25.00%	45.00%	25.00%
65	100.00%	100.00%	100.00%

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

## Section 4: Actuarial Valuation Basis

### Inactive members

#### Current and Future Inactive Member Assumptions

Membership and Reciprocity	% of Future <sup>1</sup> Deferred Vested Members	Annual Salary Increases from Separation Date	Retirement Age (Vested)	Retirement Age (Non-Vested)
General with reciprocity	40%	4.30%	59	59
General without reciprocity	60%	N/A	59	70
Safety with reciprocity	65%	4.75%	52	52
Safety without reciprocity	35%	N/A	53	70

### Future benefit accruals

1.0 year of service per year of employment.

### Unknown data for members

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

### Inclusion of deferred vested members

All deferred vested members are included in the valuation.

### Definition of active members

First day of employment.

### Data adjustment

Data as of May 31 has been adjusted to June 30 by adding one month of age and, for active members, one month or two biweekly periods of service.

<sup>1</sup> SBCERA provides the reciprocity status for current deferred vested members in the valuation census data.

## Section 4: Actuarial Valuation Basis

### Form of payment

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

### 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	65%	3 years younger than member	Female
Female member	50%	2 years older than member	Male

### Supplemental disability benefit

40% of future General service connected (duty) disabled retirees are assumed to be eligible for this benefit; 75% of future General non-service connected (ordinary) disabled retirees are assumed to be eligible for this benefit.

### Leave cashouts

Additional compensation amounts are expected to be received during a member’s final average earnings period. The percentages are as follows:

Membership	Leave Cashout
General Tier 1	0.75%
Safety Tier 1	1.75%
Tier 2	0.00%

## Section 4: Actuarial Valuation Basis

### Actuarial cost method

Entry age actuarial cost method.

Entry age is the age on the valuation date minus the lesser of years of employment or years of benefit service. Normal cost and actuarial accrued liability are calculated on an individual basis and are based on costs allocated as a level percentage of compensation, as if the current benefit formula for each individual has always been in effect.

### Actuarial value of assets

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

### Valuation value of assets

The actuarial value of assets reduced by the value of the non-valuation reserves and designations: (1) Burial Allowance Reserve; (2) Restricted Balance Reserved for Deficiencies; (3) Additional Contingency Reserve; and (4) Undesignated Excess Earnings Reserve. It includes the present value of additional future contributions payable from the County to SBCERA related to the Crest Forest Fire District transfer and from the City of Big Bear Lake (including the Big Bear Fire Authority) to SBCERA for their transfers.

### Amortization policy

The UAAL (i.e., the difference between the actuarial accrued liability and the valuation value of assets), as of June 30, 2011 shall continue to be amortized over separate 20-year period amortization layers based on the valuations during which each separate layer was previously established.

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.

Unless an alternative amortization period is recommended by the Actuary and accepted by the Board based on the results of an actuarial analysis:

## Section 4: Actuarial Valuation Basis

- With the exception noted in the bullet below, the increase in UAAL as a result of any plan amendments will be amortized over a period of 15 years;
- The increase in UAAL resulting from a temporary retirement incentive, including the impact of benefits resulting from additional service permitted in Section 31641.04 of the 1937 CERL (Golden Handshake), will be funded over a period of up to 5 years.

UAAL shall be amortized over “closed” amortization periods so that the amortization period for each layer decreases by one year with each actuarial valuation.

UAAL shall be amortized as a level percentage of payroll so that the amortization amount in each year during the amortization period shall be expected to be a level percentage of covered payroll, taking into consideration the current assumption for general payroll increase (i.e., wage inflation).

If an overfunding exists for a UAAL cost sharing group (i.e., the total UAAL for that cost sharing group becomes negative so that there is a surplus), any prior UAAL amortization layers will be considered fully amortized, and any subsequent UAAL will be amortized as the first of a new series of amortization layers, using the above amortization periods.

Per Section 7522.52 of the Government Code, if the surplus for SBCERA in total does not exceed 20% of the actuarial accrued liability, then the surplus for any UAAL cost sharing group will not be amortized, and the full normal cost will be contributed. If the surplus for SBCERA in total exceeds 20% of the actuarial accrued liability, then for each UAAL cost sharing group, the amount of any such surplus in excess of 20% of the actuarial accrued liability (and any subsequent surpluses in excess of 20% of the then current actuarial accrued liability) will be amortized over an “open” amortization period of 30 years, but only if the other conditions of Section 7522.52 have also been met for SBCERA in total. If those other conditions are not met, then the surplus will not be amortized, and the full normal cost will be contributed.

These amortization policy components will apply separately to each of SBCERA's UAAL cost sharing groups with the exception that the conditions of Section 7522.52 apply to the total plan.

### Employer contributions

The recommended employer contributions are provided in *Section 2, Subsection F* and consist of two components:

## Section 4: Actuarial Valuation Basis

### 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 determined as a level percentage of the member's compensation.

Note that the normal cost rate for County General and Superior Court members is a combined rate based on the members at both employers.

### 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 Association) 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 payroll growth rate assumption.

Note that all pre-January 1, 1996 retirees and beneficiaries are included as County members for purposes of this calculation and all information shown throughout this report.

Note that the employer rates provided in this report exclude any debt payments associated with any pension obligation bonds.

## Member contributions

The member contribution rates for all members are provided in *Section 4, Exhibit 3*.

### Tier 1 Members

Articles 6 and 6.8 of the CERL define the methodology to be used in the calculation of member basic contribution rates for General members and Safety members, respectively. The basic contribution rate is determined so that the accumulation of a member's basic contributions made each year until a certain age (age is 55 for General members and 50 for Safety members) will be sufficient to fund an annuity at that age that is equal to 1/100 of Final Average Salary. It is assumed that contributions are made annually at the same rate, starting at entry age.



## Section 4: Actuarial Valuation Basis

In addition to the basic contributions, members also pay one-half of the total normal cost necessary to fund cost-of-living benefits. Accumulation includes crediting of interest at the lesser of the assumed investment-earning rate or the six-month T-bill rate. Any difference between the assumed investment-earning rate and the actual interest-crediting rate will be credited to the annuity reserve.

### Tier 2 Members

Pursuant to Section 7522.30(a) of the Government Code, Tier 2 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 the requirements of Section 7522.30(e).

### Additional contribution rate adjustments

Adjustments are made to the UAAL amounts for LAFCO and Law Library to account for special contributions that have previously been made. These adjustments serve to reduce the UAAL contribution rate for these employers in the Other General cost group.

The outstanding balances of these adjustments as of June 30, 2024 are as follows:

Contribution Component	LAFCO <sup>1</sup>	Law Library
Basic UAAL adjustment	\$314,000	\$74,000
COLA UAAL adjustment	104,000	27,000

### 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.

<sup>1</sup> LAFCO made several UAAL prepayments in past valuations. Those prepayments have been amortized over 20 years from the date they were made and allocated to provide Basic and COLA rate credits based on the then current Basic and COLA UAAL rates before the prepayments.

## Section 4: Actuarial Valuation Basis

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

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.

Tier 1 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 Tier 2 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 actuarial 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

There have been no changes in actuarial assumptions, methods or models since the prior valuation.

## Section 4: Actuarial Valuation Basis

### Exhibit 2: Summary of plan provisions

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

#### Plan year

July 1 through June 30

#### Membership eligibility

All permanent employees of the County of San Bernardino or contracting district, scheduled to work 20 or more hours weekly, are eligible, subject to classification below:

Membership Tier	Membership Eligibility
General	All employees not eligible for Safety.
Safety	Employees in law enforcement and fire suppression.
Tier 1	All members with membership dates before January 1, 2013.
Tier 2	All members with membership dates on or after January 1, 2013.

#### Final compensation and service for benefit determination

Final Compensation and Service	Plan Provision
<b>Final average compensation</b>	
Tier 1	Highest consecutive 12 months of compensation earnable (§31462.1) (FAS1).
Tier 2	Highest 36 months of pensionable compensation (§7522.10(c), §7522.32 and §7522.34) (FAS3).

## Section 4: Actuarial Valuation Basis

Final Compensation and Service	Plan Provision
<b>Compensation limit</b>	
Tier 1	For members with membership dates on or after July 1, 1996, Compensation Earnable is limited to Internal Revenue Code Section 401(a)(17). The limit as of July 1, 2024 is \$345,000. The limit is indexed for inflation on an annual basis.
Tier 2	Pensionable compensation is limited to \$181,734 for 2024. The limit is indexed for inflation on an annual basis.
<b>Service</b>	
All members	Years of service (Yrs) are generally based on a member's employment during a period of time for which deductions are made from their compensation.

## Service retirement benefits

Provision by Tier	Service Retirement Plan Provision
<b>Eligibility</b>	
General Tier 1	Age 50 with 10 years of service, or age 70 regardless of service, or after 30 years of service regardless of age (§31672).
General Tier 2	Age 52 with 5 years of service (§7522.20(a)) or age 70 regardless of service (§31672.3).
Safety Tier 1	Age 50 with 10 years of service, or age 70 regardless of service, or after 20 years regardless of age (§31663.25).
Safety Tier 2	Age 50 with 5 years of service (§7522.25(d)) or age 70 regardless of service (§31672.3).
<b>Benefit amount</b>	
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.
<b>Maximum benefit</b>	
Tier 1	100% of Highest Average Compensation (§31676.15, §31664.1).
Tier 2	There is no final compensation limit on the maximum retirement benefit.

Section 4: Actuarial Valuation Basis

Service retirement benefit formula

Tier and Retirement Age	Service Retirement Benefit Formula by Tier
<b>General Tier 1 – 2.0% @ 55 (\$31676.15)</b>	
Age 50	1.49% × FAS1 × Yrs
Age 55	2.00% × FAS1 × Yrs
Age 60	2.62% × FAS1 × Yrs
Age 62	2.82% × FAS1 × Yrs
Age 65 and over	3.13% × FAS1 × Yrs
<b>General Tier 2 – 2.5% @ 67 (\$7522.20(a))</b>	
Age 52	1.00% x FAS3 x Yrs
Age 55	1.30% x FAS3 x Yrs
Age 60	1.80% x FAS3 x Yrs
Age 62	2.00% x FAS3 x Yrs
Age 65	2.30% x FAS3 x Yrs
Age 67 and over	2.50% x FAS3 x Yrs
<b>Safety Tier 1 – 3.0% @ 50 (\$31664.1)</b>	
Age 50 and over	3.00% × FAS1 × Yrs
<b>Safety Tier 2 – 2.7% @ 57 (\$7522.25(d))</b>	
Age 50	2.00% × FAS3 × Yrs
Age 55	2.50% × FAS3 × Yrs
Age 57 and over	2.70% × FAS3 × Yrs

## Section 4: Actuarial Valuation Basis

### Disability benefits

#### Non-service connected (ordinary) disability

Provision by Tier	Non-Service Connected (Ordinary) Disability Plan Provision
<b>Eligibility</b>	
All members	Five years of service (§31720).
<b>Benefit amount</b>	
General members entering before January 1, 1981	1.8% of final average compensation per year of service. <ul style="list-style-type: none"> <li>• If the benefit does not exceed one-third of final average compensation, the service is projected to 65, but the total projected benefit cannot be more than one-third of final average compensation (§31727.3).</li> <li>• The service retirement benefit is payable, if greater.</li> </ul>
Safety members entering before January 1, 1981	1.8% of final average compensation per year of service. <ul style="list-style-type: none"> <li>• If the benefit does not exceed one-third of final average compensation, the service is projected to 55, but the total projected benefit cannot be more than one-third of final average compensation (§31727.2).</li> <li>• The service retirement benefit is payable, if greater.</li> </ul>
All members entering on or after January 1, 1981	20% of final average compensation, plus 2% of final average compensation for each year of service in excess of five years, up to a maximum of 40% of final average compensation (§31727.7). <ul style="list-style-type: none"> <li>• The service retirement benefit is payable, if greater.</li> </ul>

#### Line-of-duty disability

Provision by Tier	Line-of-Duty Disability Plan Provision
<b>Eligibility</b>	
All members	No age or service requirements (§31720).
<b>Benefit amount</b>	
All members	50% of the final average compensation or 100% of service retirement benefit, if larger (§31727.4).

## Section 4: Actuarial Valuation Basis

### Supplemental disability

Provision by Tier	Supplemental Disability Plan Provision
<b>Eligibility</b>	
General members	Incapable of gainful employment.
Safety members	N/A
<b>Benefit amount</b>	
General members	\$300 per month payable as long as the member is incapable of gainful employment. This benefit is not considered when calculating cost-of-living increases.
Safety members	None.

### Pre-retirement death benefits

#### Basic death benefit

Provision by Tier	Pre-Retirement Basic Death Benefit Plan Provision
<b>Eligibility</b>	
All members	None.
Vested members	Five years of service.
<b>Benefit amount</b>	
All members	Refund of employee contributions with interest, plus one month's compensation for each year of service, to a maximum of six months' compensation (§37181).
Vested members	60% of the greater of service retirement or non-service connected (ordinary) disability benefit payable to surviving eligible spouse (§31765.1, §31781.1), in lieu of the basic lump sum benefit above.

## Section 4: Actuarial Valuation Basis

### Line-of-duty death benefit

Provision by Tier	Pre-Retirement Line-of-Duty Death Benefit Plan Provision
<b>Eligibility</b>	
All members	None.
Vested members	Five years of service.
<b>Benefit amount</b>	
All members	50% of final compensation or 100% of service retirement benefit, if greater, payable to spouse or minor children (§31787).
Vested members	50% of final compensation or 100% of service retirement benefit, if greater, payable to spouse or minor children (§31787). An additional lump sum payment of one-year of compensation is paid if line-of-duty death for Safety member (§31787.6).

### Post-retirement death

#### Service retirement

Unless another option was selected at retirement, 60% of member’s unmodified allowance continued to eligible spouse (§31760.1).

#### Non-service connected (ordinary) disability

Unless another option was selected at retirement, 60% of member’s unmodified allowance continued to eligible spouse (§31760.1).

#### Line-of-duty disability

Unless another option was selected at retirement, 100% of member’s unmodified allowance continued to eligible spouse (§31786).



## Section 4: Actuarial Valuation Basis

### **Additional death benefit**

A lump sum benefit of \$750 is payable to the member's beneficiary for all post-retirement deaths (§31789.1).

In addition, the Board of Retirement approved a discretionary \$250 post-retirement lump sum death benefit (i.e., burial allowance) (§31789.13). This benefit is funded from undesignated excess earnings and is subject at all times to the availability of funds in the Burial Allowance reserve. This benefit is not valued in the actuarial valuation.

### **Withdrawal benefits**

#### **Refund**

Refund of accumulated employee contributions with interest.

#### **Less than five years of service**

In lieu of a refund of employee contributions, a member may 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). Service for eligibility includes service credited as an employee of a reciprocal system.

### **Post-retirement cost-of-living benefits**

Annual adjustment based on Consumer Price Index to a maximum of 2% per year; excess "banked" (§31870). There is a one-time 7% increase at retirement for members hired before August 19, 1975.

## Section 4: Actuarial Valuation Basis

### Member normal cost contributions

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

Tier by Contribution Type	Member Contribution Plan Provision
<b>General Tier 1</b>	
Basic contributions	Entry-age based rates that provide for an annuity at age 55 equal to 1/100 of FAS1 (§31621.6).
Cost-of-living contributions	Entry-age based rates that provide for one-half of future cost-of-living costs.
<b>Safety Tier 1</b>	
Basic contributions	Entry-age based rates that provide for an annuity at age 50 equal to 1/100 of FAS1 (§31639.25).
Cost-of-living contributions	Entry-age based rates that provide for one-half of future cost-of-living costs.
<b>General and Safety Tier 2</b>	
Contributions	A flat rate that provides for one-half of the total normal cost rate.

### Other information

Tier 1 members with 30 or more years of benefit service are exempt from paying member contributions (§31625.2, §31625.3).

### Changes in Plan Provisions

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

Section 4: Actuarial Valuation Basis

**Exhibit 3: Member contribution rates**

General Tier 1 Members' Contribution Rates (**Refundable** Basis)  
(as a % of Monthly Payroll)

Entry Age	Basic	Total	Entry Age	Basic	Total
16	7.26%	8.77%	36	10.16%	12.29%
17	7.38%	8.91%	37	10.35%	12.52%
18	7.51%	9.07%	38	10.54%	12.75%
19	7.63%	9.22%	39	10.74%	12.99%
20	7.76%	9.37%	40	10.95%	13.25%
21	7.89%	9.53%	41	11.16%	13.50%
22	8.02%	9.69%	42	11.37%	13.76%
23	8.15%	9.85%	43	11.57%	14.00%
24	8.29%	10.02%	44	11.76%	14.23%
25	8.43%	10.19%	45	11.91%	14.42%
26	8.57%	10.36%	46	12.01%	14.54%
27	8.71%	10.53%	47	12.10%	14.65%
28	8.86%	10.71%	48	12.20%	14.77%
29	9.01%	10.89%	49	12.28%	14.86%
30	9.16%	11.08%	50	12.33%	14.93%
31	9.32%	11.27%	51	12.36%	14.96%
32	9.48%	11.46%	52	12.36%	14.96%
33	9.64%	11.66%	53	12.19%	14.76%
34	9.81%	11.86%	54 and over	12.11%	14.66%
35	9.99%	12.08%			

Interest: 7.25% per annum  
 COLA: 2.00%  
 Administrative Expense: 0.24% of payroll added to basic rates  
 Mortality: See Section 4, Exhibit 1  
 Salary Increase: Inflation (2.50%) + "across-the-board" (0.50%) + merit and promotion (See Section 4, Exhibit 1)  
 COLA Loading Factor: 21.47% applied to basic rates prior to adjustment for administrative expenses

**Note:** These rates are determined before any pickups by the employer, if any.

Section 4: Actuarial Valuation Basis

General Tier 1 Members' Contribution Rates (Nonrefundable Basis)  
(as a % of Monthly Payroll)

Entry Age	Basic	Total	Entry Age	Basic	Total
16	7.05%	8.51%	36	9.86%	11.93%
17	7.17%	8.65%	37	10.05%	12.16%
18	7.29%	8.81%	38	10.23%	12.38%
19	7.41%	8.95%	39	10.43%	12.61%
20	7.53%	9.10%	40	10.63%	12.86%
21	7.66%	9.25%	41	10.83%	13.11%
22	7.79%	9.41%	42	11.04%	13.36%
23	7.91%	9.56%	43	11.23%	13.59%
24	8.05%	9.73%	44	11.42%	13.82%
25	8.18%	9.89%	45	11.56%	14.00%
26	8.32%	10.06%	46	11.66%	14.12%
27	8.46%	10.22%	47	11.75%	14.22%
28	8.60%	10.40%	48	11.84%	14.34%
29	8.75%	10.57%	49	11.92%	14.43%
30	8.89%	10.76%	50	11.97%	14.50%
31	9.05%	10.94%	51	12.00%	14.52%
32	9.20%	11.13%	52	12.00%	14.52%
33	9.36%	11.32%	53	11.83%	14.33%
34	9.52%	11.51%	54 and over	11.76%	14.23%
35	9.70%	11.73%			

Interest: 7.25% per annum  
 COLA: 2.00%  
 Administrative Expense: 0.24% of payroll added to basic rates  
 Mortality: See Section 4, Exhibit 1  
 Salary Increase: Inflation (2.50%) + "across-the-board" (0.50%) + merit and promotion (See Section 4, Exhibit 1)  
 COLA Loading Factor: 21.47% applied to basic rates prior to adjustment for administrative expenses  
 Refundability Factor: 1.03

**Note:** These rates are determined before any pickups by the employer, if any.

Section 4: Actuarial Valuation Basis

Safety Tier 1 Members' Contribution Rates (Refundable Basis)  
(as a % of Monthly Payroll)

Entry Age	Basic	Total	Entry Age	Basic	Total
16	8.90%	12.33%	36	11.93%	16.56%
17	9.03%	12.51%	37	12.13%	16.84%
18	9.15%	12.68%	38	12.33%	17.12%
19	9.28%	12.86%	39	12.48%	17.33%
20	9.41%	13.04%	40	12.57%	17.46%
21	9.54%	13.22%	41	12.62%	17.52%
22	9.68%	13.42%	42	12.66%	17.58%
23	9.81%	13.60%	43	12.70%	17.64%
24	9.95%	13.80%	44	12.73%	17.68%
25	10.10%	14.01%	45	12.78%	17.75%
26	10.24%	14.20%	46	12.82%	17.80%
27	10.39%	14.41%	47	12.89%	17.90%
28	10.54%	14.62%	48	12.86%	17.86%
29	10.70%	14.84%	49 and over	12.60%	17.50%
30	10.86%	15.07%			
31	11.02%	15.29%			
32	11.19%	15.53%			
33	11.37%	15.78%			
34	11.55%	16.03%			
35	11.74%	16.30%			

Interest: 7.25% per annum  
 COLA: 2.00%  
 Administrative Expense: 0.24% of payroll added to basic rates  
 Mortality: See Section 4, Exhibit 1  
 Salary Increase: Inflation (2.50%) + "across-the-board" (0.50%) + merit and promotion (See Section 4, Exhibit 1)  
 COLA Loading Factor: 39.62% applied to basic rates prior to adjustment for administrative expenses

**Note:** These rates are determined before any pickups by the employer, if any.

Section 4: Actuarial Valuation Basis

Safety Tier 1 Members' Contribution Rates (Nonrefundable Basis)  
(as a % of Monthly Payroll)

Entry Age	Basic	Total	Entry Age	Basic	Total
16	8.81%	12.21%	36	11.81%	16.40%
17	8.94%	12.39%	37	12.01%	16.67%
18	9.06%	12.55%	38	12.21%	16.95%
19	9.19%	12.73%	39	12.36%	17.16%
20	9.32%	12.91%	40	12.45%	17.29%
21	9.45%	13.09%	41	12.50%	17.35%
22	9.58%	13.29%	42	12.53%	17.41%
23	9.71%	13.47%	43	12.57%	17.47%
24	9.85%	13.66%	44	12.60%	17.50%
25	10.00%	13.87%	45	12.65%	17.57%
26	10.14%	14.06%	46	12.69%	17.62%
27	10.29%	14.27%	47	12.76%	17.72%
28	10.44%	14.48%	48	12.73%	17.68%
29	10.59%	14.69%	49 and over	12.48%	17.33%
30	10.75%	14.92%			
31	10.91%	15.14%			
32	11.08%	15.38%			
33	11.26%	15.62%			
34	11.44%	15.87%			
35	11.62%	16.14%			

Interest: 7.25% per annum  
 COLA: 2.00%  
 Administrative Expense: 0.24% of payroll added to basic rates  
 Mortality: See Section 4, Exhibit 1  
 Salary Increase: Inflation (2.50%) + "across-the-board" (0.50%) + merit and promotion (See Section 4, Exhibit 1)  
 COLA Loading Factor: 39.62% applied to basic rates prior to adjustment for administrative expenses  
 Refundability Factor: 1.01

**Note:** These rates are determined before any pickups by the employer, if any.

Section 4: Actuarial Valuation Basis

Tier 2 Members' Contribution Rates (**Refundable** Basis)  
*(as a % of Monthly Payroll)*

All Entry Ages	Basic	COLA	Total
County General and Superior Court	7.21%	1.53%	8.74%
Safety	11.75%	3.11%	14.86%
SCAQMD	6.42%	1.38%	7.80%
SBCTA	7.75%	1.62%	9.37%
Other General	6.92%	1.48%	8.40%

**Note:** The Tier 2 member contribution rate is 50% of the normal cost rate. The basic rates shown above also include an administrative expense load of 0.24% of payroll.

# 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: <b>Investment return</b> — the rate of investment yield that the Plan will earn over the long-term future; <b>Mortality rates</b> — the rate or probability of death at a given age for employees and retirees; <b>Retirement rates</b> — the rate or probability of retirement at a given age or service; <b>Disability rates</b> — the rate or probability of disability retirement at a given age; <b>Withdrawal rates</b> — the rate or probability at which employees of various ages are expected to leave employment for reasons other than death, disability, or retirement; <b>Salary increase rates</b> — 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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