



# San Mateo County Employees' Retirement Association

June 30, 2023 Actuarial Valuation

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September 19, 2023

Board of Retirement  
San Mateo County Employees' Retirement Association  
100 Marine Parkway, Suite 125  
Redwood City, CA 4065-5208

Dear Members of the Board:

As requested, we have completed an actuarial valuation for the San Mateo County Employees' Retirement Association (SamCERA). The purpose of the valuation is to recommend the employer and member contribution rates for the fiscal year beginning July 1, 2024.

#### **Actuarial Certification – Per SamCERA Consulting Contract**

This actuarial valuation has been completed in accordance with generally accepted actuarial principles and practices, including Actuarial Standards of Practice (ASOPs) Nos. 4, 27, and 35. In particular, it reflects the actuary's responsibility under Section 5.8 ("Actuary's Responsibility") of ASOP No. 4 (1993 Reformatted Edition) for assessing the implications of overall results, in terms of short-range and long-range benefit security and expected cost progression. Note that this section no longer exists in the current ASOP No. 4; however, Milliman will continue to assess the results pursuant to the prior section.

To the best of our knowledge, the information supplied in this actuarial valuation is complete and accurate. Further, in our best professional judgment, the assumptions and methodologies as adopted by the Board of Retirement, individually and in combination, are reasonably related to the experience of and the expectations for SamCERA, and will not, in and of themselves, expose SamCERA to "unsound financial risk." In this regard, we consider "unsound financial risk" to mean the following:

- A substantial likelihood that future required contribution rates as a percentage of payroll will be dramatically higher than the rates shown in this report, given the uncertainties of actuarial projections and assuming the full payment of all recommended contributions; or
- A substantial likelihood that SamCERA's assets will be insufficient to pay benefit payments when due, given the uncertainties of actuarial projections and assuming the full payment of all recommended contributions.

In preparing this report, we have complied with all quality assurance procedures detailed on page 26 of our October 22, 2018 proposal titled "Actuarial Consulting Services Proposal."

#### **Actuarial Certification – Milliman**

The major findings of the valuation are contained in this report. This report reflects the benefit provisions as of June 30, 2023 and member contribution rates effective July 1, 2024. In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by SamCERA staff. This information includes, but is not limited to, statutory provisions, employee data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete, our results may be different, and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for SamCERA have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of SamCERA and reasonable expectations) and which, in combination, offer a reasonable estimate of anticipated experience affecting SamCERA and are expected to have no significant bias. Further, in our opinion, each actuarial assumption used is reasonably related to the experience of the Plan and to reasonable expectations, which, in combination, represent a reasonable estimate of anticipated experience for SamCERA.

The valuation results were developed using models employing standard actuarial techniques. We have reviewed the models, including their inputs, calculations, and outputs for consistency, reasonableness, and appropriateness to the intended purpose and in compliance with generally accepted actuarial practice and relevant actuarial standards of practice. Reliance on other experts is reflected in Milliman's capital market assumptions, and in Milliman's expected return model maintained by Milliman investment consultants.

This valuation report is only an estimate of SamCERA's financial condition as of a single date. It can neither predict SamCERA's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of benefits, only the timing of contributions. While the valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct. Determining results using alternative assumptions is outside the scope of our engagement.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the Plan's funded status); and changes in plan provisions or applicable law. Due to the limited scope of our assignment, we did not perform an analysis of the potential range of future measurements. The Board of Retirement has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in Appendix A.

Actuarial computations presented in this report are for purposes of determining the recommended funding amounts for SamCERA. The calculations in this report have been made on a basis consistent with our understanding of SamCERA's current funding requirements. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

Milliman's work is prepared solely for the internal business use of SamCERA. SamCERA may place the final version of this report on its website. Milliman's "work" to create this report, to the extent that Milliman's work is not subject to disclosure under applicable public records laws, may not be provided to third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of its work product. Milliman's consent to release its work product to any third party may be conditioned on the third party signing a Release, subject to the following exceptions:

- (a) SamCERA may provide a copy of Milliman's work, in its entirety, to its professional service advisors who are subject to a duty of confidentiality and who agree to not use Milliman's work for any purpose other than to benefit SamCERA.
- (b) SamCERA may provide a copy of Milliman's work, in its entirety, to other governmental entities, as required by law.

No third party recipient of Milliman's work product should rely upon Milliman's work product. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

The signing actuaries are independent of the plan sponsors. We are not aware of any relationship that would impair the objectivity of our work.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices, which are consistent with the principles prescribed by the Actuarial Standards Board and the *Code of Professional Conduct and Qualification Standard for Actuaries Issuing Statements of Actuarial Opinion* in the United States, published by the American Academy of Actuaries. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

We would like to express our appreciation to Scott Hood, Chief Executive Officer of SamCERA, and to members of his staff, who gave substantial assistance in supplying the data on which this report is based.

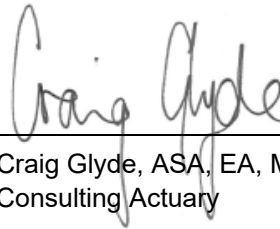
We respectfully submit the following report, and we look forward to discussing it with you.

Sincerely,

A handwritten signature in black ink, appearing to read "Nick Collier", written over a horizontal line.

Nick Collier, ASA, EA, MAAA  
Consulting Actuary

NC/CG/va

A handwritten signature in black ink, appearing to read "Craig Glyde", written over a horizontal line.

Craig Glyde, ASA, EA, MAAA  
Consulting Actuary

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## 1. Summary of Findings

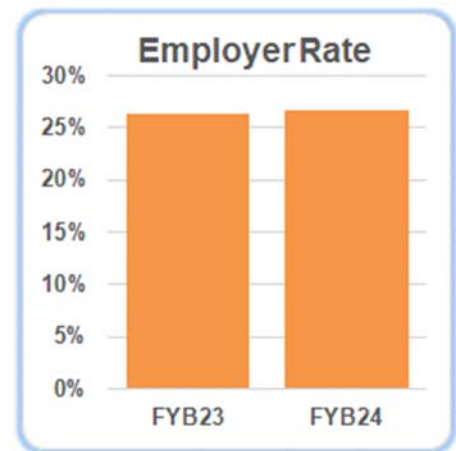
This report presents the results of the June 30, 2023 actuarial valuation, including the Employer Statutory Contribution Rate calculated for the fiscal year beginning July 1, 2024 and the Funded Ratio of SamCERA. The following table summarizes these key results from the current and prior valuations.

	June 30, 2023	June 30, 2022
Employer Statutory Contribution Rate (all employers)	26.64%	26.19%
County Statutory Contribution Rate	26.62%	26.19%
Funded Ratio	88.3%	90.7%

Key findings and results from the valuation are summarized below.

### Employer Statutory Contribution Rate

The Statutory Contribution Rate (SCR) is comprised of the Employer Normal Cost rate and a separate component to amortize the Unfunded Actuarial Accrued Liability (UAAL). The SCR increased by 0.45% of pay to 26.64% of pay, from 26.19% of pay (calculated in the prior valuation). The SCR is a weighted average of the statutory contribution rates for each individual SamCERA plan. The actual percent of payroll to be contributed by each employer varies by plan, as shown in Section 6 of this report. All employers will see increases in their SCR; however, the San Mateo County Mosquito and Vector Control District (SMCM&VCD) will see the largest increase due to the DSCA balance being almost entirely utilized as of June 30, 2024.



Although the SCR is relatively similar to the prior year there were several changes over the year that had significant impacts, such as changes in assumptions and funding methods, and the full amortization of the June 30, 2009 15-year amortization layer. Higher than assumed inflation and salary increases also had an impact on the SCR. In general, the impact of these changes was offset against each other. The “Analysis of Change” section that follows later in Section 1 provides an analysis of the sources of change in the SCR since last year. In addition, the section “Projected Future Employer Contribution Rates” below shows a 10-year projection of the statutory employer contribution rate.

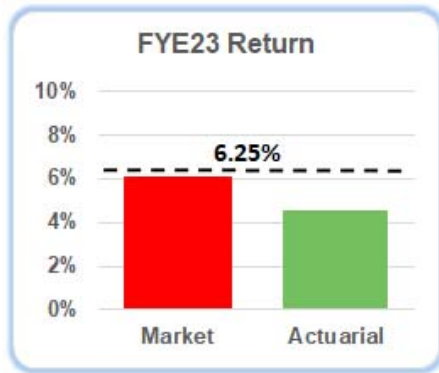
The County Supplementary Contributions Account (CSCA) provides an offset of 4.48% of pay (compared to 4.59% of pay in the prior valuation) to the County’s SCR, resulting in a County-only SCR of 26.62% of pay. Without the recognition of the CSCA, the County SCR would be 31.10% of pay.

The District Supplementary Contributions Account (DSCA) provides an offset of 0.10% of pay (compared to 2.72% of pay in the prior valuation) for SMCM&VCD. The decrease in the DSCA offset is due to the DSCA balance being almost entirely utilized as of June 30, 2024. As of June 30, 2024 the DSCA is projected to have a remaining balance of \$3,000.

Throughout this report we use the term SCA when referring to both of the CSCA and DSCA.



### Investment Return



SamCERA's money-weighted net investment return on the market value of assets of 6.0% for the fiscal year ended June 30, 2023, was less than the assumed rate of 6.25%.

Under the asset smoothing method there is approximately \$273 million of unrecognized investment losses that will be recognized over the next five years. The market value of assets as of June 30, 2023 is approximately \$6.0 billion, and the actuarial value of assets (including non-valuation reserves) is approximately \$6.3 billion.

Due to the asset smoothing method and the recognition of prior year investment losses, the net result was a return on Valuation Assets of 4.5%, which is less than the assumed rate of 6.25%, and caused an

increase in the Statutory Contribution Rate (SCR) of 1.56% of pay and a decrease of 1.5% in the Funded Ratio. Note that this impact is strictly due to the smoothed investment return. Other factors caused additional changes to the SCR and Funded Ratio, as described in this report.

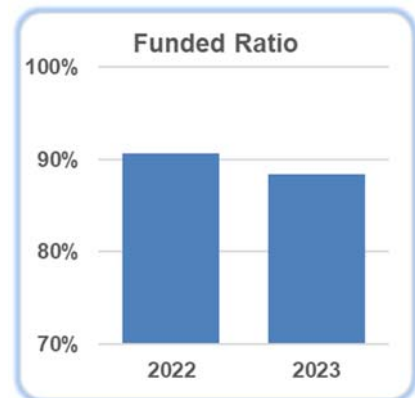
### Funding

The Funded Ratio decreased from 90.7% to 88.3%, primarily due to assumption changes and the recognition of investment returns less than expected by the assumptions. On a market-value basis, the Funded Ratio decreased from 86.5% to 85.4%.

The "Analysis of Change" section that follows later in Section 1 provides an analysis of the sources of change in the Funded Ratio since last year.

The assets used in the calculation of the Funded Ratio include the value of the SCAs.

The County contributed \$10.0 million in excess of the SCR for the year ended June 30, 2023 which was credited to the CSCA. The District did not contribute to the DSCA over the year ended June 30, 2023. In total, the CSCA has an actuarial value of \$224.7 million and the DSCA has an actuarial value of \$0.07 million as of June 30, 2023. Without the CSCA and DSCA the Funded Ratio would be 85.1% (instead of 88.3%) as of June 30, 2023.



### Economic and Demographic Assumptions

The assumptions developed as a result of the 2023 Investigation of Experience study, described in our report dated July 18, 2023, were adopted by the Board for use in this valuation. The net effect of all the assumption changes was an increase in the Unfunded Actuarial Accrued Liability (UAAL) of approximately \$162 million effective June 30, 2023, a decrease in the Funded Ratio of 2.1%, and an increase in the employer contribution rate of 2.56% of payroll.

The new assumptions generally caused increases in the member contribution rates for all plans, as discussed below in the "Member Contributions Rate" section.



**Funding Method**

As a result of the 2023 Investigation of Experience study, the Board adopted changes in the UAAL amortization funding method for use in this valuation. Effective with the June 30, 2023 valuation all outstanding UAAL layers are combined into a single layer and reamortized over a 15-year period (fresh-start method) beginning July 1, 2024. New layers will be established in future years to amortize newly emerging gains and losses over their own 15-year closed period.

In addition, for each member class (i.e. General, Safety, Probation) the UAAL rate will be set equal to the greater of 1) the UAAL contribution rate for that class under the 15-year layered amortization approach with fresh-start in 2023; and 2) the UAAL contribution rate in effect for that class for the fiscal year beginning July 1, 2023, before reflecting any Supplemental Contribution Accounts.

The development of the FYB 2024 UAAL rates is shown below.

	Preliminary FYB 2024 Gross UAAL Rate (1)	FYB 2023 Gross UAAL Rate (2)	FYB 2024 Gross UAAL Rate (3) = max [ (1), (2) ]	SCA Offset (4)	FYB 2024 UAAL Rate (3) + (4)
General - County	10.39%	15.86%	15.86%	-3.79%	12.07%
General - Courts	10.39%	15.86%	15.86%	0.00%	15.86%
SMCM&VCD	10.39%	15.86%	15.86%	-0.10%	15.76%
Probation	34.78%	44.77%	44.77%	-11.44%	33.33%
Safety	20.30%	36.97%	36.97%	-7.48%	29.49%
Total	12.27%	19.20%	19.16%	-4.27%	14.89%

Notes:

1. Column (1) is the UAAL contribution rates based on the 15-year fresh-start method as of June 30, 2023.
2. Column (2) is the FYB 2023 UAAL contribution rates before SCA offset, as calculated in the June 30, 2022 valuation. It reflects the remaining year of the phase-in of the June 30, 2021 assumption changes.
3. Column (3) is the FYB 2024 UAAL contribution rates before SCA offset. For individual classes and employers this is the greater of columns (1) and (2). The Total FYB 2024 Gross UAAL rate is an aggregate of the individual classes and may not equal the greater of the Total line for columns (1) and (2) due to the changing composition of the classes and employers.

The calculation of the Preliminary FYB 2024 Gross UAAL rates is shown in Exhibits 12a – 12c.

The aggregate FYB 2024 UAAL rate is 14.89% of pay after application of an aggregate 4.27% of pay credit for SCAs (shown above and in Exhibit 10). This compares to the aggregate FYB 2023 UAAL rate of 14.82% of pay after application of an aggregate 4.38% of pay credit for SCAs, as shown in Exhibit 10 of the June 30, 2022 valuation report.

These changes are projected to result in a smoother UAAL contribution rate over the upcoming years than the prior UAAL amortization funding method.

### Member Contribution Rates

New member contribution rates are recommended for all plans effective July 1, 2024 based on the new assumptions adopted with the 2023 Investigation of Experience study. Member contribution rates for all plans, except Plan 3 (non-contributory) and Plan 7 (PEPRA), vary based on a member's entry age to SamCERA and the underlying actuarial assumptions. Plan 7 member contribution rates are required to be equal to 50% of the Gross Normal Cost Rate of the respective plans.

Exhibit 1b includes a summary of recommended member contribution rates. In general, there are increases for all plans.

For contributory legacy plans (non-Plan 7) the member contribution rates increased by about 1% to 7% on a relative basis, with younger entry ages tending to have the larger relative increases. In Plan 7 the member contribution rates increased in the range of 0.6% to 3.5% on a relative basis.

Member contribution rates are discussed in Section 5 of this report, and a complete list of all member contribution rates is shown in Appendix D.

### Summary of Contribution Rates

The following exhibits summarize our recommendations to the Board.

**Exhibit 1a**  
**Summary of Recommended Minimum Statutory Contribution Rates**

**Recommendation #1: Adopt new Statutory Contribution Rates for fiscal year beginning July 1, 2024**

	Fiscal Year Beginning		Increase / (Decrease)
	July 1, 2024	July 1, 2023	
Gross Normal Cost Rate	24.16%	23.64%	0.52%
Average Member Contribution Rate	(12.41)%	(12.27)%	(0.14)%
Employer Normal Cost Rate	11.75%	11.37%	0.38%
UAAL Amortization Rate	14.89%	16.04%	(1.15)%
Calculated Employer Rate	26.64%	27.41%	(0.77)%
Deferred Recognition of 2021 Assumptions	-	(1.22)%	1.22%
Total Employer Rate	26.64%	26.19%	0.45%
County Contribution Rate	26.62%	26.19%	0.43%
Courts Contribution Rate	26.35%	26.02%	0.33%
SMCM&VCD Contribution Rate	28.03%	25.06%	2.97%

Notes:

- Detailed contribution rates by plan are shown in Section 6.
- The Total Employer Statutory Contribution Rate of 26.64% is the aggregate rate for all employers.
- The UAAL Amortization rate (before SCA offset) for each member class is the greater of the FYB 2023 UAAL Amortization rate (with phase-in and before SCA offset) for the respective class and those calculated in this year's valuation (shown in Exhibits 12a - 12c).

**Exhibit 1b**  
**Summary of Recommended Member Contribution Rates**

**Recommendation #2: Adopt new member contribution rates for fiscal year beginning July 1, 2024**

	Entry Age	Recommended Rates			Total as a % of Pay	Current	Ratio (New/Curr)
		Basic	50% COLA Sharing	Cost Sharing		Total as a % of Pay	
<b>General Members (not including SMCM&amp;VCD)</b>							
Plan 1	25	8.07%	2.82%	3.00%	13.89%	13.41%	103.6%
	35	9.27%	3.24%	3.00%	15.51%	15.15%	102.4%
	45	10.68%	3.74%	3.00%	17.42%	17.26%	100.9%
Plan 2	25	8.07%	3.38%	3.00%	14.45%	13.44%	107.5%
	35	9.27%	3.88%	3.00%	16.15%	15.19%	106.3%
	45	10.68%	4.47%	3.00%	18.15%	17.30%	104.9%
Plan 4	25	7.78%	2.15%	3.00%	12.93%	12.49%	103.5%
	35	8.94%	2.47%	3.00%	14.41%	14.07%	102.4%
	45	10.25%	2.84%	3.00%	16.09%	15.93%	101.0%
Plan 5	25	6.86%	1.86%	0.00%	8.72%	8.28%	105.3%
	35	7.88%	2.13%	0.00%	10.01%	9.65%	103.8%
	45	9.07%	2.46%	0.00%	11.53%	11.29%	102.1%
Plan 7	All	7.74%	1.89%	0.00%	9.63%	9.30%	103.5%
<b>SMCM&amp;VCD Members</b>							
Plan 1	25	8.07%	0.00%	0.00%	8.07%	7.71%	104.7%
	35	9.27%	0.00%	0.00%	9.27%	9.00%	103.0%
	45	10.68%	0.00%	0.00%	10.68%	10.56%	101.1%
Plan 2	25	8.07%	0.00%	0.00%	8.07%	7.71%	104.7%
	35	9.27%	0.00%	0.00%	9.27%	9.00%	103.0%
	45	10.68%	0.00%	0.00%	10.68%	10.56%	101.1%
Plan 4	25	7.78%	0.00%	0.00%	7.78%	7.45%	104.4%
	35	8.94%	0.00%	0.00%	8.94%	8.69%	102.9%
	45	10.25%	0.00%	0.00%	10.25%	10.15%	101.0%
Plan 7	All	7.73%	1.96%	0.00%	9.69%	9.45%	102.5%

Notes:

1. All General members contribute 50% of the cost of COLA benefits except for all members of SMCM&VCD.
2. Plan 7 COLA share represents one-half of the cost of the COLA.
3. See Appendix B of this report for a full description of members COLA share. See Appendix D of this report for a full schedule of rates.

**Exhibit 1b**  
**Summary of Recommended Member Contribution Rates (continued)**

**Recommendation #2: Adopt new member contribution rates for fiscal year beginning July 1, 2024**

	Entry Age	Recommended Rates			Total as a % of Pay	Current	Ratio (New/Curr)
		Basic	50% COLA Sharing	Cost Sharing		Total as a % of Pay	
<b>Safety Members</b>							
Plan 1	25	11.12%	5.33%	5.00%	21.45%	20.83%	103.0%
	35	12.52%	6.00%	5.00%	23.52%	23.06%	102.0%
	45	14.18%	6.80%	5.00%	25.98%	25.65%	101.3%
Plan 2	25	11.12%	6.79%	5.00%	22.91%	21.38%	107.1%
	35	12.52%	7.65%	5.00%	25.17%	23.70%	106.2%
	45	14.18%	8.66%	5.00%	27.84%	26.38%	105.6%
Plan 4	25	10.68%	4.59%	5.00%	20.27%	19.60%	103.4%
	35	12.03%	5.17%	5.00%	22.20%	21.65%	102.5%
	45	13.36%	5.74%	5.00%	24.10%	23.72%	101.6%
Plan 5	25	10.68%	4.19%	4.00%	18.87%	18.32%	103.0%
	35	12.03%	4.72%	4.00%	20.75%	20.33%	102.1%
	45	13.36%	5.24%	4.00%	22.60%	22.36%	101.1%
Plan 6	25	10.68%	3.47%	0.00%	14.15%	13.66%	103.6%
	35	12.03%	3.91%	0.00%	15.94%	15.58%	102.3%
	45	13.36%	4.34%	0.00%	17.70%	17.51%	101.1%
Plan 7	All	12.35%	3.56%	0.00%	15.91%	15.81%	100.6%
<b>Probation Members</b>							
Plan 1	25	11.12%	5.92%	3.50%	20.54%	19.89%	103.2%
	35	12.52%	6.66%	3.50%	22.68%	22.21%	102.1%
	45	14.18%	7.55%	3.50%	25.23%	24.89%	101.4%
Plan 2	25	11.12%	6.89%	3.50%	21.51%	19.95%	107.9%
	35	12.52%	7.76%	3.50%	23.78%	22.27%	106.8%
	45	14.18%	8.79%	3.50%	26.47%	24.96%	106.1%
Plan 4	25	10.68%	4.46%	3.50%	18.64%	18.01%	103.5%
	35	12.03%	5.02%	3.50%	20.55%	20.05%	102.5%
	45	13.36%	5.58%	3.50%	22.44%	22.11%	101.5%
Plan 5	25	10.68%	3.87%	3.50%	18.05%	17.59%	102.6%
	35	12.03%	4.36%	3.50%	19.89%	19.57%	101.6%
	45	13.36%	4.85%	3.50%	21.71%	21.57%	100.6%
Plan 6	25	10.68%	3.25%	0.00%	13.93%	13.45%	103.6%
	35	12.03%	3.66%	0.00%	15.69%	15.34%	102.3%
	45	13.36%	4.07%	0.00%	17.43%	17.24%	101.1%
Plan 7	All	12.57%	3.66%	0.00%	16.23%	15.78%	102.9%

Notes:

1. All Safety and Probation members contribute 50% of the cost of COLA benefits.
2. Plan 7 COLA share represents one-half of the cost of the COLA.
3. See Appendix B of this report for a full description of members COLA share. See Appendix D of this report for a full schedule of rates.
4. Safety member cost sharing shown is for all members who are not Deputy Sheriffs. Cost sharing varies for Deputy Sheriffs.

**Analysis of Change – Funded Ratio**

A detailed analysis of the sources of changes in both the Statutory Contribution Rate and the Funded Ratio was performed. There were several factors that caused the changes, with the overall impact of these factors being a decrease in the Funded Ratio and an increase in the Statutory Contribution Rate from the prior valuation.

The following chart shows how the various factors affected the overall funding of SamCERA as compared to the prior valuation.

Sources of Change	Statutory Contribution Rate	Funded Ratio
<b>Calculated Rate for 2023 (2022 valuation)</b>	<b>26.19%</b>	<b>90.7%</b>
Expected Year-to-Year Change	-11.96%	2.1%
Assumption Changes	2.56%	-2.1%
Fresh Start Amortization	-0.81%	0.0%
Minimum 2023 UAAL rate	6.89%	0.0%
<u>Recognized Investment Gain / Loss</u>		
From Current Year	0.08%	-0.1%
From Prior Years	1.48%	-1.4%
Combined Investment Gain / Loss	1.56%	-1.5%
Payroll increases different than assumed	-0.12%	0.0%
Contributions different than assumed	0.00%	0.0%
SCA Contribution Funding	-0.15%	0.2%
<u>Liability Gain / Loss</u>		
Salary increases different than assumed	0.48%	-0.5%
Retiree COLAs different than assumed	0.50%	-0.4%
Changes in Plan Membership	-0.05%	0.0%
Other	0.34%	-0.2%
Combined Liability Gain / Loss	1.27%	-1.1%
Deferred Recognition of 2021 Assumptions	1.22%	0.0%
<b>Total Change</b>	<b>0.45%</b>	<b>-2.4%</b>
<b>Calculated Rate for 2024 (2023 valuation)</b>	<b>26.64%</b>	<b>88.3%</b>

**Employer Statutory Contribution Rate**

The Statutory Contribution Rate (SCR) for each plan is equal to the payment of the Employer Normal Cost rate plus a 15-year layered amortization of the UAAL (excluding the CSCA and DSCA).

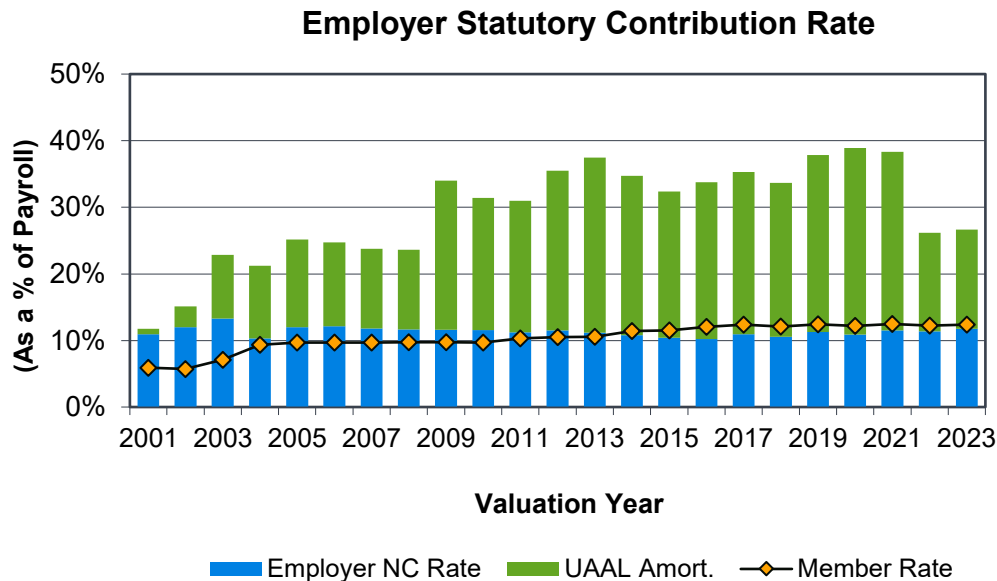
Effective with the June 30, 2023 valuation all outstanding UAAL layers are combined into a single layer and reamortized over a 15-year period (fresh-start method) beginning July 1, 2024. New layers will be established in future years to amortize newly emerging gains and losses over their own 15-year closed period. In addition, for each member class the UAAL rate will be set equal to the greater of 1) the UAAL rate for that class under the 15-year layered amortization approach with fresh-start in 2023; and 2) the UAAL contribution rate in effect for that class for the fiscal year beginning July 1, 2023 before reflecting any Supplemental Contribution Accounts.

The UAAL rate for the County is reduced to reflect the CSCA, as is the UAAL rate for SMCM&VCD to reflect the DSCA. The SCR (blended average for all employers) is 26.64% for the fiscal year beginning July 1, 2024.

It should be noted that these rates are a weighted average of each individual SamCERA plan. The actual percent of payroll to be contributed by each employer varies by plan. See Exhibit 10 for the SCR by classification and Exhibits 10a through 10d for the SCR by plan.

In our opinion, the SCR's calculated are adequate to maintain the funding of SamCERA based on the actuarial methods and assumptions shown in Appendix A of this report.

A historical perspective of the total SCR is shown in the following graph.



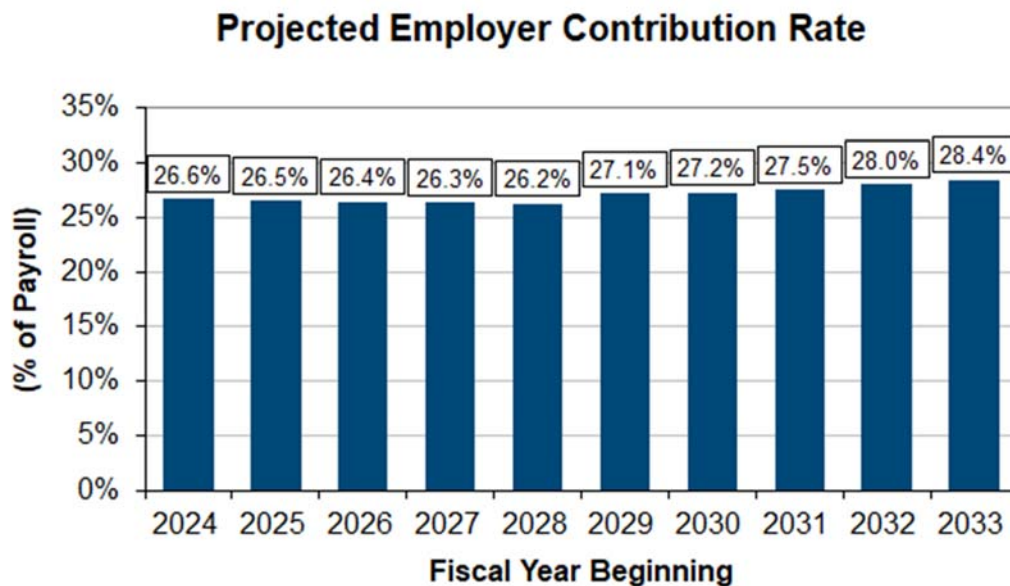


**Projected Future Statutory Employer Contribution Rate**

The statutory employer contribution rate beginning July 1, 2024 is 26.64% of payroll, which is a weighted average for all SamCERA plans. The actual percent of payroll to be contributed by the employers varies by plan as shown in Exhibit 10.

The new statutory employer contribution rate is effective for the fiscal year beginning July 1, 2024. Employer contribution rates in future years will be dependent on actual experience relative to that projected by the actuarial assumptions, particularly the investment return assumption. It is almost certain that actual experience will not exactly match the actuarial assumptions over the projection period, and a different pattern of projected employer contribution rate is likely to emerge. However, due to the funding method change there is a margin in the UAAL contribution rate to absorb some adverse experience without causing the SCR to increase.

We have performed a 10-year projection of the employer contribution rate that assumes all actuarial assumptions are met, and reflects the projected recognition of the deferred investment losses as of June 30, 2023 and the impact of the SCA offset as those layers begin to become fully amortized starting in 2029. This projection is shown in the graph below.



Notes:

1. Projections assume that all actuarial assumptions are met after June 30, 2023, and reflect the scheduled recognition of investment gains currently being deferred. Actual results will vary.
2. Projections assume no future SCA contributions.

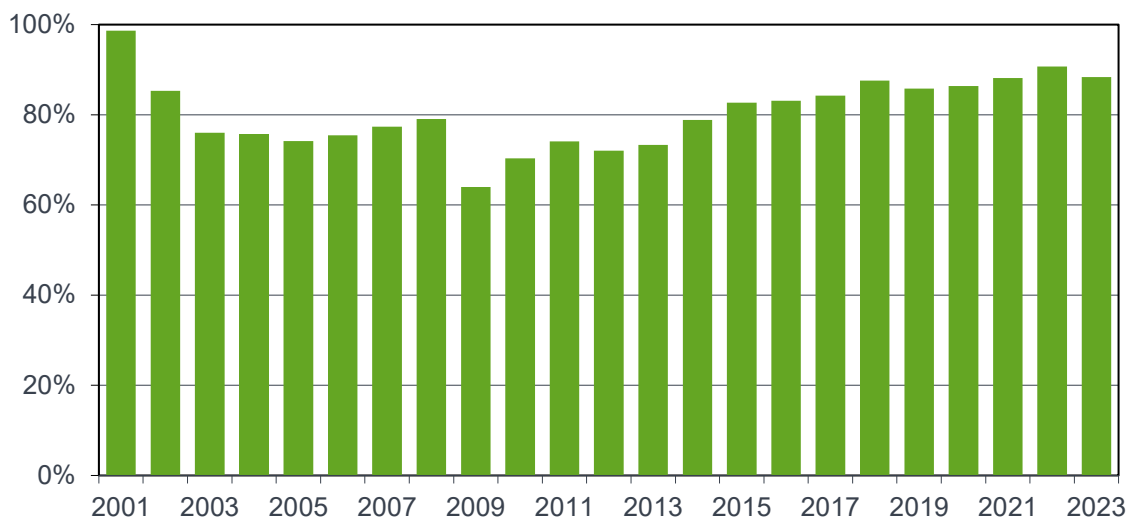
Under this projected contribution schedule, and assuming future experience is exactly as assumed, SamCERA is projected to be 100% funded as of June 30, 2036.

**Funding Progress**

Based on the 2022 valuation, the expected UAAL as of June 30, 2023 was \$634 million. The actual UAAL for the fiscal year ended June 30, 2023 is \$820 million. This difference is due to a combination of factors, including salary increases and retiree cost of living adjustments (COLAs) larger than assumed, assumption changes as a result of the 2023 Investigation of Experience, and investment returns less than assumed.

The Funded Ratio compares the value of the Actuarial Value of Assets (net of certain non-valuation reserves) to the Actuarial Accrued Liability (AAL) for all SamCERA plans combined. Due primarily to investment returns less than assumed from 2001 through 2009, SamCERA's Funded Ratio decreased significantly over those years. In recent years, the Funded Ratio has improved, due primarily to better-than-assumed investment performance and strong funding by the employers.

**Historical Funded Ratios**



**Assets**

For the fiscal year ended June 30, 2023, SamCERA earned 6.0% on a market value basis net of investment and administrative expenses. Note that this rate of return may differ from that calculated by SamCERA and shown in the Annual Comprehensive Financial Report (ACFR) based on the calculation method.

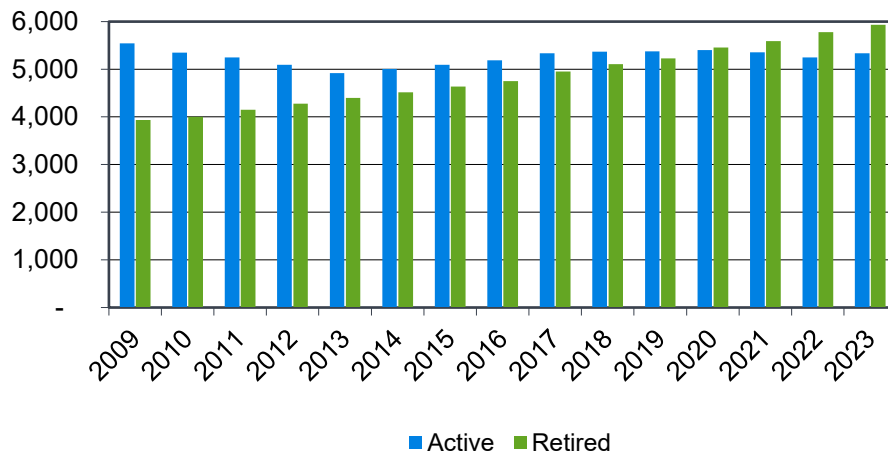
SamCERA uses a modified asset-smoothing method in the calculation of the UAAL contribution. Under this method, asset gains or losses for the most recently completed fiscal period are offset against prior period gains or losses and all remaining gains or losses are then smoothed over a five-year (10 six-month) period. Due to the recognition of current and deferred investment losses, the return on Actuarial Valuation Assets, at 4.5% net of expenses, was less than the assumed return of 6.25% for the fiscal year ended June 30, 2023. Additional detail on the asset smoothing method is included in Section 3.

**Member Information**

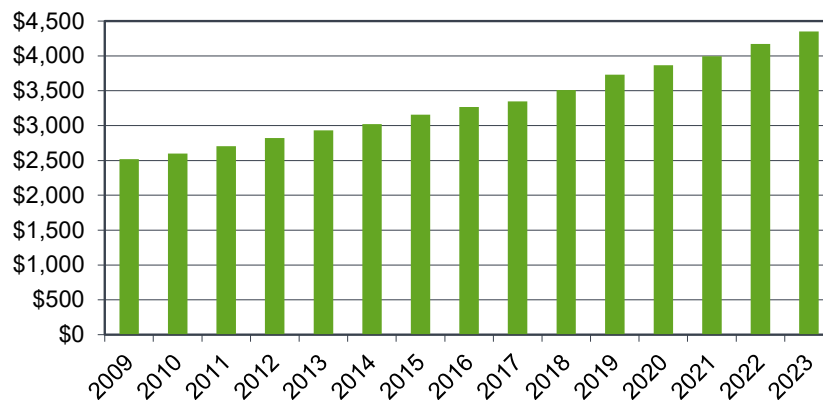
The number of active members included in the valuation increased from 5,249 in 2022 to 5,334 in 2023.

Retired member counts continue to increase steadily. For 2023, there were 5,932 retired members and beneficiaries with an average benefit of \$4,351 per month. This represents a 2.6% increase in count (up from 5,779 in 2022) and a 4.2% increase in the average monthly benefit (up from \$4,174 over the period). There are also 2,424 members who are no longer actively employed or retired but are entitled to a future retirement benefit or a refund of member contributions.

**Membership Count**



**Average Monthly Retirement Benefit**



**Analysis of Change in Member Population**

The following table summarizes the year-to-year change in member population.

	Active Members	Inactive Members	Service Retired Members	Disabled Retired Members	Beneficiaries in Pay	Total
<b>As of June 30, 2022</b>	<b>5,249</b>	<b>2,224</b>	<b>4,608</b>	<b>493</b>	<b>678</b>	<b>13,252</b>
New Members	587	59	3	-	53	702
Status Change:						
to Active	10	(10)	-	-	-	-
to Inactive	(276)	276	-	-	-	-
to Service Retirement	(186)	(79)	265	-	-	-
to Disabled Retirement	(6)	(2)	(24)	32	-	-
to Beneficiary	-	(1)	(25)	(1)	27	-
Refunds	(36)	(39)	-	-	-	(75)
Terminated non-vested	(1)	(1)	-	-	-	(2)
Deaths	(7)	(3)	(127)	(16)	(34)	(187)
<b>As of June 30, 2023</b>	<b>5,334</b>	<b>2,424</b>	<b>4,700</b>	<b>508</b>	<b>724</b>	<b>13,690</b>

**Summary Valuation Results**

Exhibit 2 presents a comparison of the key results from the June 30, 2023 and June 30, 2022 valuations. More detail on each of these elements can be found in the following sections and exhibits of this report.

**Exhibit 2**  
**Summary of Significant Valuation Results**

	June 30, 2023	June 30, 2022	Relative Change
1. Total Membership			
A. Active Members	5,334	5,249	1.6%
B. Retired Members & Beneficiaries	5,932	5,779	2.6%
C. Inactive Members	2,424	2,224	9.0%
D. Total	<u>13,690</u>	<u>13,252</u>	3.3 %
2. Pay Rate			
A. Annual Total (\$thousands)	\$ 650,698	\$ 613,703	6.0%
B. Monthly Average	10,166	9,743	4.3%
3. Average Monthly Benefit to Current Retirees and Beneficiaries			
A. Service Retirement	\$ 4,597	\$ 4,423	3.9%
B. Disability Retirement	4,433	4,117	7.7%
C. Surviving Spouse and Dependents	2,700	2,524	7.0%
D. Total Average	4,351	4,174	4.2%
4. Actuarial Accrued Liability (\$thousands)			
A. Active Members	\$ 2,412,207	\$ 2,289,384	5.4%
B. Retired Members	4,264,848	3,922,840	8.7%
C. Inactive Members	358,586	317,815	12.8%
D. Total	<u>\$ 7,035,641</u>	<u>\$ 6,530,039</u>	7.7%
5. Assets			
A. Market Value of Fund (\$thousands)	\$ 6,005,043	\$ 5,649,674	6.3%
B. Return on Market Value	6.0%	-6.1%	
C. Actuarial Value (\$thousands)	\$ 6,215,283	\$ 5,922,894	4.9%
D. Return on Actuarial Value	4.5%	7.1%	
6. Unfunded Actuarial Accrued Liability or Surplus Funding (\$thousands)	\$ 820,358	\$ 607,145	35.1%
7. Statutory Employer Contribution Rate for all plans combined as a percent of total payroll			
A. Gross Normal Cost	24.16%	23.64%	2.2%
B. Member Contributions	<u>(12.41)%</u>	<u>(12.27)%</u>	1.1%
C. Employer Normal Cost	11.75%	11.37%	3.3%
D. UAAL Amortization	<u>14.89%</u>	<u>16.04%</u>	(7.2)%
E. Calculated Employer Contribution Rate	26.64%	27.41%	(2.8)%
F. Deferred Recognition of 2021 Assumptions	<u>-</u>	<u>(1.22)%</u>	
G. Employer Rate	26.64%	26.19%	1.7%
8. Funded Ratio (5C / 4D)	88.3%	90.7%	(2.6)%
9. Results Based on Market Value (No Asset Smoothing) -- For Informational Purposes Only			
A. Total Employer Rate	29.48%	30.42%	(3.1)%
B. Funded Ratio (5A / 4D)	85.4%	86.5%	(1.4)%

## 2. Scope of the report

This report presents the actuarial valuation of the San Mateo County Employees' Retirement Association as of June 30, 2023. This valuation is made in accordance with SamCERA's annual valuation cycle. Section 31453 of the County Employees Retirement Law of 1937 (the CERL) requires an actuarial valuation to be performed at least every three years for the purposes of setting contribution rates.

In reading our cover letter, please pay particular attention to the guidelines employed in the preparation of this report. We also comment on the sources and reliability of both the data and the actuarial assumptions upon which our findings depend. Those comments are the basis for our certification that this report is complete and accurate to the best of our knowledge and belief.

In many respects, an actuarial valuation can be thought of as an inventory process as of the valuation date. On that date, the assets available for the payment of retirement benefits are appraised and compared with the accrued and future actuarial liabilities. The purpose of the valuation is to determine what future contributions by the members and employers are needed to pay all expected future benefits not funded by the current assets.

A summary of the findings resulting from this valuation is presented in the previous section. The following sections of the report provide the details of the actuarial valuation.

**Section 3** describes the assets and investment experience of SamCERA. The assets and investment income are presented in Exhibits 3-5. Exhibits 6-8 develop the Actuarial Value of Assets as of June 30, 2023.

**Section 4** describes the benefit obligations of SamCERA. Exhibits 9a and 9b show the Actuarial Balance Sheet. Additional analysis on the change in UAAL is also provided in this section.

**Sections 5 and 6** deal with the process for determining required contributions based on the relationship between the actuarial assets and the actuarial liabilities. Section 5 discusses the member contribution rates and Section 6 discusses the employer contributions needed to fund the benefits under the actuarial cost method in use.

**Section 7** discloses supplemental information that may be included in SamCERA's ACFR.

**Section 8** discusses risks that could potentially affect future valuation results.

This report includes several appendices:

- Appendix A A summary of the actuarial procedures and assumptions used to estimate liabilities and contributions.
- Appendix B A summary of the current benefit structure, as determined by the provisions of governing law as of June 30, 2023.
- Appendix C Schedules of valuation data classified by various categories of members by plan.
- Appendix D Member contribution rates by plan.
- Appendix E A glossary of actuarial terms used in this report.

### 3. Assets

This section of the report deals with the determination of assets used for funding purposes. A historical summary of SamCERA's assets is presented below:

Year	All dollar amounts in millions		
	Market Value of Total Assets	Actuarial Value	
		Non Valuation Assets	Valuation Assets
2004	\$ 1,435	\$ 31	\$ 1,453
2005	1,599	0	1,616
2006	1,790	0	1,769
2007	2,132	0	1,977
2008	2,011	0	2,219
2009	1,591	0	1,910
2010	1,816	0	2,179
2011	2,318	0	2,405
2012	2,360	0	2,480
2013	2,728	0	2,619
2014	3,292	30	2,993
2015	3,454	33	3,344
2016	3,541	36	3,625
2017	4,039	40	3,977
2018	4,374	44	4,352
2019	4,723	48	4,686
2020	4,781	51	4,998
2021	5,982	55	5,489
2022	5,650	60	5,923
2023	6,005	63	6,215

On June 30, 2023, the total market value of the fund was about \$6.01 billion. The actuarial value of the fund was determined to be \$6.28 billion, including the non-valuation reserves.

#### Financial Exhibits

Exhibit 3 presents a Statement of Plan Net Assets and Exhibit 4 presents a Statement of Changes in Plan Net Assets.

Exhibit 5 describes the allocation of SamCERA's assets by the various reserve values determined for accounting purposes.

Exhibits 3-5 are taken from data furnished to us by SamCERA for its annual financial report. We have accepted these tables for use in this report without audit, but we have reviewed them for reasonableness and consistency with previous reports.



**Actuarial Value of Assets**

The actuarial value of assets is equal to the market value of assets with a five-year (10 six-month periods) recognition of the difference between expected and actual investment returns. Effective with the June 30, 2018 valuation, all deferred gains and losses were combined into a single amount to be recognized over a five-year (10 six-month) period. Beginning with the six-month period immediately following the June 30, 2018 valuation, offsetting of current period gains or losses against prior period gains or losses occur, as follows: to the extent there is a loss for the period, it shall be used to offset any unrecognized gains from prior periods in the order of oldest to most recent. Any remaining loss for the period is recognized over a five-year (10 six-month) period. Similarly, any gain for the period shall be offset against unrecognized losses from prior periods.

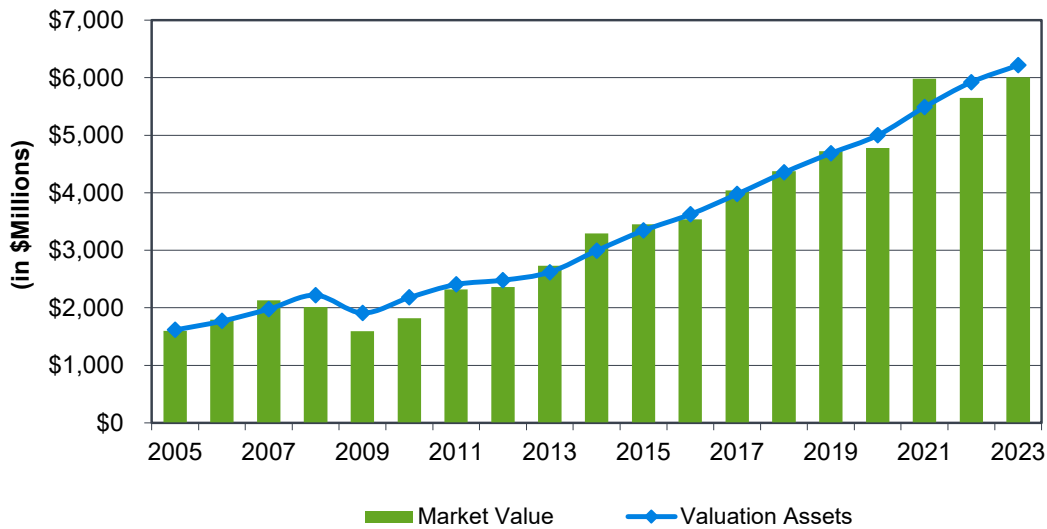
Beginning with the June 30, 2014 valuation, assets used to calculate the preliminary UAAL contribution rates exclude the value of the CSCA. The CSCA is used to adjust the County's Statutory Contribution Rate. Beginning with the June 30, 2016 valuation, assets used to calculate the preliminary UAAL contribution rates also exclude the value of the DSCA. The DSCA is used to adjust the SMCM&VCD's Statutory Contribution Rate. To adjust the Statutory Contribution Rate, we track the CSCA and DSCA assets separately.

The development of the June 30, 2023 actuarial value of assets is shown in Exhibits 6 and 7. Exhibits 6a and 7a show the development of the total actuarial value of assets. Exhibits 6b and 7b show the development excluding the Supplemental Contribution Account (SCA) assets. Exhibits 6c and 7c show the development of the actuarial value of assets for the CSCA. Exhibits 6d and 7d show the development of the actuarial value of assets for the DSCA.

The County and the SMCM&VCD each made their contributions for the year ended June 30, 2023 based on the SCR. Since the SCR reflected offsets due to the respective SCAs, each employer effectively used up an amount of the SCA equivalent to the offset. Therefore, we have shown this in the "Credits Used" column in Exhibits 6c and 6d.

The following graph shows a historical comparison of the total actuarial and market assets used for valuation purposes.

**Applicable Asset Values**



### **Valuation Assets**

Valuation Assets are the actuarial value of the fund, less the value of any reserves which have been set aside for current liabilities and special benefits (if any) that are to be funded outside of the actuarially determined contribution rates.

Valuation Assets are allocated by classification (General, Safety, and Probation) as shown in Exhibit 8. This allocation is necessary because the UAAL contribution rates are determined separately by employer and class.

### **Allocation of Assets**

In the calculation of the Statutory Contribution Rate, the Normal Cost Rate is determined separately for each plan. The UAAL portion of the rate is allocated proportionately to each classification. To determine the UAAL amount by classification, the actual UAAL is allocated in proportion to the expected UAAL after reflecting expected contributions from the prior year to pay down the UAAL. The allocation is done without consideration of the SCAs. Valuation Assets are equal to the AAL minus the UAAL for each classification. These calculations are shown in Exhibit 8.

CSCA valuation assets are allocated to each County member classification (General, Safety or Probation) in proportion to the actual UAAL excluding SCAs. These assets directly reduce the UAAL of each classification.

DSCA assets are allocated entirely to the SMCM&VCD General member classification.

**Exhibit 3**  
**Statement of Plan Net Assets as of June 30, 2023 and 2022**

	2023	2022
<b>ASSETS</b>		
Cash and short-term investments:		
Cash and cash equivalents	\$ 210,121,124	\$ 237,495,568
Cash management overlay	19,989,496	73,569,285
Securities lending cash collateral	3,737,378	4,120,692
Total cash and short-term investments	<u>233,847,998</u>	<u>315,185,545</u>
Receivables:		
Contributions	3,105,913	14,690,743
Due from broker for investments sold	131,151,929	60,199,734
Investment income	12,789,009	8,049,214
Securities lending income	35,260	16,435
Other	3,019,886	131,903
Total receivables	<u>150,101,997</u>	<u>83,088,029</u>
Prepaid Expenses	<u>214,663</u>	<u>352,332</u>
Investments at fair value:		
Public equity	2,435,036,194	2,065,993,116
Fixed income	1,358,012,682	1,365,666,389
Alternatives	742,188,710	807,907,593
Inflation hedge	1,022,566,835	1,105,638,764
Liquidity	270,101,574	-
Total investments at fair value	<u>5,827,905,995</u>	<u>5,345,205,862</u>
Capital assets	11,924,532	11,788,264
Less: accumulated depreciation	<u>(6,451,799)</u>	<u>(5,098,591)</u>
Capital assets, net of accumulated depreciation	<u>5,472,733</u>	<u>6,689,673</u>
<b>Total assets</b>	<b><u>6,217,543,386</u></b>	<b><u>5,750,521,441</u></b>
<b>LIABILITIES</b>		
Investment management fees payable	2,037,842	2,125,820
Due to broker for investments purchased	202,435,351	90,090,580
Securities lending collateral due to borrowers	3,737,379	4,120,692
Lease liability	2,443,817	2,890,295
Other	1,846,497	1,619,608
Total liabilities	<u>212,500,886</u>	<u>100,846,995</u>
<b>NET POSITION RESTRICTED FOR PENSIONS</b>	<b><u>\$ 6,005,042,500</u></b>	<b><u>\$ 5,649,674,446</u></b>

**Exhibit 4**  
**Statement of Changes in Plan Net Assets for the Fiscal Years Ended 2023 and 2022**

	2023	2022
<b>ADDITIONS</b>		
Contributions:		
Employer	\$ 238,938,203	\$ 234,746,179
Employer supplementary	10,000,000	15,200,000
Member	77,666,128	73,967,823
Total contributions	<u>326,604,331</u>	<u>323,914,002</u>
Investment income:		
Interest and dividends	133,336,480	111,425,057
Net increase (decrease) in the fair value of investments	253,087,820	(427,447,926)
Total investment income	<u>386,424,300</u>	<u>(316,022,869)</u>
Less: investment expenses	(45,366,003)	(50,676,576)
Net investment income	<u>341,058,297</u>	<u>(366,699,445)</u>
Securities lending activities:		
Securities lending income	267,081	32,658
Borrower rebates	10,568	61,277
Management fees	(90,114)	(20,645)
Net income from securities lending activities	<u>187,535</u>	<u>73,290</u>
<b>Total additions</b>	<b><u>667,850,163</u></b>	<b><u>(42,712,153)</u></b>
<b>DEDUCTIONS</b>		
Benefits:		
Service retirement benefits	266,316,948	246,250,375
Disability retirement benefits	30,196,733	28,674,627
Survivor, death, and other benefits	2,420,489	1,577,229
Total benefits	<u>298,934,170</u>	<u>276,502,231</u>
Member refunds	3,895,438	4,407,296
Administrative expenses	7,835,470	7,196,431
Information technology expenses	1,817,031	1,593,393
<b>Total deductions</b>	<b><u>312,482,109</u></b>	<b><u>289,699,351</u></b>
Net increase (decrease) in net position	355,368,054	(332,411,504)
<b>NET POSITION RESTRICTED FOR PENSIONS</b>		
Beginning of year	5,649,674,446	5,982,085,950
<b>End of year</b>	<b><u>\$ 6,005,042,500</u></b>	<b><u>\$ 5,649,674,446</u></b>
Estimated Return, Net of Investment Expenses	6.0%	-6.1%

**Exhibit 5**  
**Allocation of Assets by Accounting Reserve Amounts**  
**as of June 30, 2023 and 2022**

	2023	2022
<b>Valuation Reserves</b>		
1. Member Reserve	\$ 973,281,721	\$ 937,791,042
2. Employer Advance Reserve	1,729,066,194	1,523,311,607
3. Retiree Reserves	1,564,182,230	1,496,585,584
4. Cost of Living Adjustment Reserve	1,827,829,723	1,737,309,767
5. County Supplemental Contributions Account Reserve	213,031,763	215,660,082
6. District Supplemental Contributions Account Reserve	71,587	595,202
7. Undistributed Earnings / (Losses) Reserve	(103,839,146)	(2,859,547)
<b>Total Valuation Reserves</b>	<b>6,203,624,072</b>	<b>5,908,393,737</b>
<b>Non-Valuation Reserves</b>		
1. Contingency Reserve	62,780,628	59,827,218
<b>Total Non-Valuation Reserves</b>	<b>62,780,628</b>	<b>59,827,218</b>
<b>Market Stabilization Account</b>	<b>(261,362,200)</b>	<b>(318,546,509)</b>
<b>Total Reserves (Market Value of Assets)</b>	<b>\$ 6,005,042,500</b>	<b>\$ 5,649,674,446</b>

Note: These amounts were determined by SamCERA for accounting purposes.

**Exhibit 6a**  
**Five-Year Smoothing of Gains and Losses on Market Value (Total Assets) – History**

History of Unexpected Asset Gains and Losses								
Six-Month Period Ended	Market Value at Beginning of Period	Contributions	Benefit Payments	Market Value at End of Period	Assumed Rate of Return	Expected Return	Actual Return	Unexpected Gain / (Loss)
06/30/2023	\$ 5,707,845,869	\$ 172,696,149	\$ 154,103,188	\$ 6,005,042,500	3.125%	\$ 180,247,504	\$ 278,603,670	\$ 98,356,166
12/31/2022	5,649,674,446	153,908,182	148,726,420	5,707,845,869	3.125%	178,045,995	52,989,661	(125,056,334)
06/30/2022	6,176,561,202	161,928,657	144,035,148	5,649,674,446	3.125%	194,281,326	(544,780,265)	(739,061,591)
12/31/2021	5,982,085,950	161,985,345	136,874,380	6,176,561,202	3.125%	188,713,042	169,364,287	(19,348,755)
06/30/2021	5,604,786,769	92,110,542	133,842,465	5,982,085,950	3.250%	181,730,879	419,031,104	237,300,225
12/31/2020	4,780,502,313	246,858,414	128,309,469	5,604,786,769	3.250%	157,292,070	705,735,511	548,443,441
06/30/2020	4,950,278,117	141,276,359	126,289,581	4,780,502,313	3.250%	162,104,000	(184,762,582)	(346,866,582)
12/31/2019	4,723,109,935	127,937,403	119,531,561	4,950,278,117	3.250%	154,870,851	218,762,340	63,891,489
06/30/2019	4,251,567,361	102,883,854	116,505,474	4,723,109,935	3.375%	142,617,961	485,164,194	342,546,233
12/31/2018	4,373,961,514	210,310,184	110,679,649	4,251,567,361	3.375%	149,503,844	(222,024,688)	(371,528,532)

**Exhibit 6b**  
**Five-Year Smoothing of Gains and Losses on Market Value (excluding SCAs) – History**

History of Unexpected Asset Gains and Losses								
Six-Month Period Ended	Market Value at Beginning of Period	Contributions and SCA Credits	Benefit Payments	Market Value at End of Period	Assumed Rate of Return	Expected Return	Actual Return	Unexpected Gain / (Loss)
06/30/2023	\$ 5,489,572,140	\$ 188,873,480	\$ 154,103,188	\$ 5,791,939,150	3.125%	\$ 173,139,991	\$ 267,596,718	\$ 94,456,727
12/31/2022	5,433,419,162	153,908,182	148,726,420	5,489,572,140	3.125%	171,288,017	50,971,216	(120,316,801)
06/30/2022	5,921,524,752	178,303,937	144,035,148	5,433,419,162	3.125%	186,297,896	(522,374,379)	(708,672,275)
12/31/2021	5,744,004,263	151,985,345	136,874,380	5,921,524,752	3.125%	181,142,781	162,409,524	(18,733,257)
06/30/2021	5,403,232,963	73,393,630	133,842,465	5,744,004,263	3.250%	174,078,088	401,220,135	227,142,047
12/31/2020	4,604,453,572	246,858,414	128,309,469	5,403,232,963	3.250%	151,570,486	680,230,446	528,659,960
06/30/2020	4,750,877,586	157,364,783	126,289,581	4,604,453,572	3.250%	155,623,482	(177,499,216)	(333,122,698)
12/31/2019	4,532,439,649	127,937,403	119,531,561	4,750,877,586	3.250%	148,674,067	210,032,095	61,358,028
06/30/2019	4,114,925,851	64,852,245	116,505,474	4,532,439,649	3.375%	137,584,435	469,167,027	331,582,592
12/31/2018	4,230,263,350	210,310,184	110,679,649	4,114,925,851	3.375%	144,654,031	(214,968,034)	(359,622,065)



**Exhibit 6c**  
**Five-Year Smoothing of Gains and Losses on Market Value of CSCA – History**

History of Unexpected Asset Gains and Losses								
Six-Month Period Ended	Account Value at Beginning of Period	Contributions	Credits Used	Account Value at End of Period	Assumed Rate of Return	Expected Return	Actual Return	Unexpected Gain / (Loss)
06/30/2023	\$ 217,665,841	\$ 10,000,000	\$ 25,626,953	\$ 213,031,763	3.125%	\$ 7,088,516	\$ 10,992,875	\$ 3,904,359
12/31/2022	215,660,082	-	-	217,665,841	3.125%	6,739,378	2,005,759	(4,733,619)
06/30/2022	253,879,479	5,200,000	20,982,395	215,660,082	3.125%	7,947,275	(22,437,002)	(30,384,277)
12/31/2021	236,971,881	10,000,000	-	253,879,479	3.125%	7,535,580	6,907,598	(627,982)
06/30/2021	199,979,234	39,700,000	20,449,473	236,971,881	3.250%	7,601,617	17,742,120	10,140,503
12/31/2020	174,529,290	-	-	199,979,234	3.250%	5,672,202	25,449,944	19,777,742
06/30/2020	197,473,708	-	15,629,442	174,529,290	3.250%	6,417,896	(7,314,976)	(13,732,872)
12/31/2019	188,806,043	-	-	197,473,708	3.250%	6,136,196	8,667,665	2,531,469
06/30/2019	134,646,329	50,668,357	12,444,200	188,806,043	3.375%	4,966,189	15,935,557	10,969,368
12/31/2018	141,751,083	-	-	134,646,329	3.375%	4,784,099	(7,104,754)	(11,888,853)

**Exhibit 6d**  
**Five-Year Smoothing of Gains and Losses on Market Value of DSCA – History**

History of Unexpected Asset Gains and Losses									
Six-Month Period Ended	Account Value at Beginning of Period	Contributions	Credits Used	Account Value at End of Period	Assumed Rate of Return	Expected Return	Actual Return	Unexpected Gain / (Loss)	
06/30/2023	\$ 607,888	\$ -	\$ 550,378	\$ 71,587	3.125%	\$ 18,997	\$ 14,077	\$ (4,920)	
12/31/2022	595,202	-	-	607,888	3.125%	18,600	12,686	(5,914)	
06/30/2022	1,156,971	-	592,885	595,202	3.125%	36,155	31,116	(5,039)	
12/31/2021	1,109,806	-	-	1,156,971	3.125%	34,681	47,165	12,484	
06/30/2021	1,574,572	-	533,615	1,109,806	3.250%	51,174	68,849	17,675	
12/31/2020	1,519,451	-	-	1,574,572	3.250%	49,382	55,121	5,739	
06/30/2020	1,926,823	-	458,982	1,519,451	3.250%	62,622	51,610	(11,012)	
12/31/2019	1,864,243	-	-	1,926,823	3.250%	60,588	62,580	1,992	
06/30/2019	1,995,181	-	192,548	1,864,243	3.375%	67,337	61,610	(5,727)	
12/31/2018	1,947,081	-	-	1,995,181	3.375%	65,714	48,100	(17,614)	

**Exhibit 7a**  
**Five-Year Smoothing – Development of Valuation Assets (Total Assets)**

<b>Development of Market Stabilization Reserve</b>				
<u>Six-Month Period Ended</u>	<u>Investment Gain / (Loss)</u>	<u>Adjusted Investment Gain / (Loss)</u>	<u>Percent Excluded</u>	<u>Adjusted Gain / (Loss) Excluded</u>
06/30/2023	\$ 98,356,166	\$ -	x 90%	= \$ -
12/31/2022	(125,056,334)	(125,050,420)	x 80%	= (100,040,336)
06/30/2022	(739,061,591)	(247,116,872)	x 70%	= (172,981,810)
12/31/2021	(19,348,755)	3,145	x 60%	= 1,887
06/30/2021	237,300,225	0	x 50%	= 0
12/31/2020	548,443,441	0	x 40%	= 0
06/30/2020	(346,866,582)	0	x 30%	= 0
12/31/2019	63,891,489	0	x 20%	= 0
06/30/2019	342,546,233	0	x 10%	= 0
12/31/2018	(371,528,532)	0	x 0%	= 0
Total Gain / (Loss) Excluded				= \$ (273,020,259)

<b>Development of Valuation Assets</b>		
1. Market Value of Assets as of June 30, 2023		\$ 6,005,042,500
2. Preliminary Market Stabilization Reserve		<u>(273,020,259)</u>
3. Preliminary Actuarial Value of Assets (1) - (2)		6,278,062,759
4. Corridor Around Market Value		
a) Minimum = 80% of Market	\$ 4,804,034,000	
b) Maximum = 120% of Market	7,206,051,000	
c) Corridor Adjustment		0
5. Market Stabilization Reserve	(273,020,259)	
6. Gross Actuarial Valuation of Assets (3) - (4c)		\$ 6,278,062,759
7. Non-Valuation Reserves		
a) Contingency Reserve	62,780,628	
b) Other Specified Reserves	<u>0</u>	
c) Total		62,780,628
8. Valuation Assets (6) - (7c)		\$ 6,215,282,131

**Exhibit 7b  
 Five-Year Smoothing – Development of Valuation Assets (excluding SCAs)**

<b>Development of Market Stabilization Reserve</b>				
<u>Six-Month Period Ended</u>	<u>Investment Gain / (Loss)</u>	<u>Adjusted Investment Gain / (Loss)</u>	<u>Percent Excluded</u>	<u>Adjusted Gain / (Loss) Excluded</u>
06/30/2023	\$ 94,456,727	\$ -	x 90%	= \$ -
12/31/2022	(120,316,801)	(120,316,801)	x 80%	= (96,253,441)
06/30/2022	(708,672,275)	(235,869,656)	x 70%	= (165,108,759)
12/31/2021	(18,733,257)	0	x 60%	= 0
06/30/2021	227,142,047	0	x 50%	= 0
12/31/2020	528,659,960	0	x 40%	= 0
06/30/2020	(333,122,698)	0	x 30%	= 0
12/31/2019	61,358,028	0	x 20%	= 0
06/30/2019	331,582,592	0	x 10%	= 0
12/31/2018	(359,622,065)	0	x 0%	= 0
Total Gain / (Loss) Excluded =				\$ (261,362,200)

<b>Development of Valuation Assets</b>		
1. Market Value of Assets as of June 30, 2023		\$ 5,791,939,150
2. Preliminary Market Stabilization Reserve		(261,362,200)
3. Preliminary Actuarial Value of Assets (1) - (2)		6,053,301,350
4. Corridor Around Market Value		
a) Minimum = 80% of Market	\$ 4,633,551,320	
b) Maximum = 120% of Market	6,950,326,980	
c) Corridor Adjustment		0
5. Market Stabilization Reserve	(261,362,200)	
6. Gross Actuarial Valuation of Assets (3) - (4c)		\$ 6,053,301,350
7. Non-Valuation Reserves		
a) Contingency Reserve	62,780,628	
b) Other Specified Reserves	0	
c) Total		62,780,628
8. Valuation Assets (6) - (7c)		\$ 5,990,520,722

**Exhibit 7c  
 Five-Year Smoothing – Development of CSCA Assets**

<b>Development of Market Stabilization Reserve</b>					
<u>Six-Month Period Ended</u>	<u>Investment Gain / (Loss)<sup>1</sup></u>	<u>Adjusted Investment Gain / (Loss)</u>	<u>Percent Excluded</u>		<u>Adjusted Gain / (Loss) Excluded</u>
06/30/2023	\$ 3,904,359	\$ -	x 90%	=	\$ -
12/31/2022	(4,733,619)	(4,733,619)	x 80%	=	(3,786,895)
06/30/2022	(30,384,277)	(11,247,216)	x 70%	=	(7,873,051)
12/31/2021	(627,982)	0	x 60%	=	0
06/30/2021	10,140,503	0	x 50%	=	0
12/31/2020	19,777,742	0	x 40%	=	0
06/30/2020	(13,732,872)	0	x 30%	=	0
12/31/2019	2,531,469	0	x 20%	=	0
06/30/2019	10,969,368	0	x 10%	=	0
12/31/2018	(11,888,853)	0	x 0%	=	0
Total Gain / (Loss) Excluded =					\$ (11,659,946)

1. Historical amounts were recalculated as of June 30, 2019 for consistency with Addenda #1 of the MOU regarding retirement system funding.

<b>Development of Valuation Assets</b>		
1. Market Value of Assets as of June 30, 2023		\$ 213,031,763
2. Preliminary Market Stabilization Reserve		<u>(11,659,946)</u>
3. Preliminary Actuarial Value of Assets (1) - (2)		224,691,709
4. Corridor Around Market Value		
a) Minimum = 80% of Market	\$ 170,425,410	
b) Maximum = 120% of Market	255,638,116	
c) Corridor Adjustment		0
5. Market Stabilization Reserve	(11,659,946)	
6. Gross Actuarial Valuation of Assets (3) - (4c)		\$ 224,691,709
7. Non-Valuation Reserves		
a) Contingency Reserve	0	
b) Other Specified Reserves	<u>0</u>	
c) Total		0
8. Valuation Assets (6) - (7c)		\$ 224,691,709

**Exhibit 7d  
 Five-Year Smoothing – Development of DSCA Assets**

<b>Development of Market Stabilization Reserve</b>						
Six-Month Period Ended	Investment Gain / (Loss) <sup>1</sup>	Adjusted Investment Gain / (Loss)	Percent Excluded		Adjusted Gain / (Loss) Excluded	
06/30/2023	\$ (4,920)	\$ 0	90%	x	= \$	0
12/31/2022	(5,914)	0	80%	x	=	0
06/30/2022	(5,039)	0	70%	x	=	0
12/31/2021	12,484	3,145	60%	x	=	1,887
06/30/2021	17,675	0	50%	x	=	0
12/31/2020	5,739	0	40%	x	=	0
06/30/2020	(11,012)	0	30%	x	=	0
12/31/2019	1,992	0	20%	x	=	0
06/30/2019	(5,727)	0	10%	x	=	0
12/31/2018	(17,614)	0	0%	x	=	0
Total Gain / (Loss) Excluded =					\$	1,887

*1 Historical amounts were recalculated as of June 30, 2019 for consistency with the District's MOU regarding retirement system funding.*

<b>Development of Valuation Assets</b>		
1. Market Value of Assets as of June 30, 2023		\$ 71,587
2. Preliminary Market Stabilization Reserve		<u>1,887</u>
3. Preliminary Actuarial Value of Assets (1) - (2)		69,700
4. Corridor Around Market Value		
a) Minimum = 80% of Market	\$ 57,270	
b) Maximum = 120% of Market	85,904	
c) Corridor Adjustment		0
5. Market Stabilization Reserve	1,887	
6. Gross Actuarial Valuation of Assets (3) - (4c)		\$ 69,700
7. Non-Valuation Reserves		
a) Contingency Reserve	0	
b) Other Specified Reserves	<u>0</u>	
c) Total		0
8. Valuation Assets (6) - (7c)		\$ 69,700

**Exhibit 8**  
**Allocation of Valuation Assets**

(Dollars in thousands)

**ALLOCATION OF VALUATION ASSETS**

**For the Year Ended June 30, 2023**

(Dollars in thousands)

	General	Safety	Probation	Total
1. Prior Year UAAL	\$ 596,835	\$ 170,429	\$ 70,637	\$ 837,901
2. Expected UAAL Contribution for Preceding Year	(131,543)	(42,200)	(12,302)	(186,045)
3. Expected Interest at 6.25%	33,254	9,353	4,036	46,643
4. Expected UAAL Based on Prior Year Assumptions	498,546	137,582	62,371	698,499
5. Percentage of Total Expected UAAL	71.37%	19.70%	8.93%	100.00%
6. Actual UAAL Based on Prior Year Assumptions				869,667
7. Actual AAL Based on Prior Year Assumptions	\$ 5,049,920	\$ 1,327,912	\$ 482,356	\$ 6,860,188
8. Allocated UAAL Based on Prior Year Assumptions	620,682	171,324	77,661	869,667
<b>9. Valuation Assets (excluding SCA assets)</b>	<b>\$ 4,429,238</b>	<b>\$ 1,156,588</b>	<b>\$ 404,695</b>	<b>\$ 5,990,521</b>
10. Actual UAAL excluding SCA Valuation Assets	\$ 755,563	\$ 202,525	\$ 87,032	\$ 1,045,120
11. Allocation of UAAL	72.29%	19.38%	8.33%	100.00%
<b>12. Valuation Assets (CSCA)</b>	<b>\$ 162,430</b>	<b>\$ 43,545</b>	<b>\$ 18,717</b>	<b>\$ 224,692</b>
<b>13. Valuation Assets (DSCA)</b>	<b>\$ 70</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 70</b>
<b>14. Valuation Assets (Total)</b>	<b>\$ 4,591,738</b>	<b>\$ 1,200,133</b>	<b>\$ 423,412</b>	<b>\$ 6,215,283</b>



#### 4. Actuarial Liabilities

This section of the report focuses on the commitments of SamCERA for retirement benefits, which are referred to as its actuarial liabilities. All liabilities reflect the benefits effective through June 30, 2023.

In an active retirement system, the combined current and future actuarial liabilities will almost always exceed the actuarial assets. This difference has to be provided by future contributions. An actuarial valuation method sets out a schedule of future contributions that will deal with this difference in an orderly fashion. The determination of the level of future contributions needed is discussed in the next section.

The actuarial assumptions used to determine the liabilities are based on the results of the 2023 Investigation of Experience study for the period ended April 30, 2023. At its meeting on July 25, 2023, the Board adopted new assumptions as recommended by Milliman. These assumptions are shown in Appendix A. The assumptions will next be reviewed in detail as part of the 2026 Investigation of Experience study.

##### **Actuarial Balance Sheet**

The Actuarial Balance Sheet compares the Present Value of Future Benefits for retired, inactive and active members to the resources available to meet them. The amount of any difference is called the Unfunded Actuarial Accrued Liability (UAAL). For the purpose of the Actuarial Balance Sheet, SamCERA's resources are equal to the sum of:

- (a) Assets currently available to pay benefits and considered for funding purposes, the Valuation Assets,
- (b) The present value of future contributions expected to be made by current active members, and
- (c) The present value of future contributions expected to be made by the employer.

Exhibit 9a contains an analysis of the Present Value of Future Benefits compared to total Valuation Assets.

Exhibit 9b contains an analysis using the Valuation Assets excluding the SCA assets (sum of the CSCA and DSCA). These analyses are displayed by class of membership and by type of benefit.

##### **Unfunded Actuarial Accrued Liability**

The Actuarial Accrued Liability (AAL) represents the value of benefits earned as of the valuation date, and is one component of the Present Value of Future Benefits. The difference between the AAL and Valuation Assets is referred to as the Unfunded Actuarial Accrued Liability (UAAL).

Exhibit 9c provides an analysis of the change in the UAAL since the prior valuation date.

**Exhibit 9a**  
**Actuarial Balance Sheet (Total Assets)**  
**June 30, 2023**

(Dollars in thousands)

<b>Resources</b>				
	<b>General</b>	<b>Safety</b>	<b>Probation</b>	<b>Total</b>
Valuation Assets (Actuarial)	\$ 4,591,738	\$ 1,200,133	\$ 423,412	\$ 6,215,283
Present Value of Future Member Contributions	511,452	105,517	23,360	640,329
Present Value of Future Employer Contributions to Fund:				
a) Normal Cost	445,249	101,390	24,593	571,232
b) Unfunded Actuarial Accrued Liability	593,063	158,980	68,315	820,358
<b>Total Resources</b>	<b>\$ 6,141,502</b>	<b>\$ 1,566,020</b>	<b>\$ 539,680</b>	<b>\$ 8,247,202</b>
<b>Liabilities</b>				
	<b>General</b>	<b>Safety</b>	<b>Probation</b>	<b>Total</b>
Present Value of Future Benefits				
1. Present Retired Members	\$ 2,950,871	\$ 983,182	\$ 330,795	\$ 4,264,848
2. Current Inactive Members	316,383	23,740	18,463	358,586
3. Current Active Members				
- Service Retirement	2,621,589	493,954	175,974	3,291,517
- Termination Benefits	134,956	16,722	3,088	154,766
- Death Benefits	27,857	4,056	860	32,773
- Disability Benefits	89,846	44,366	10,500	144,712
- Total Active	2,874,248	559,098	190,422	3,623,768
<b>Total Actuarial Liabilities</b>	<b>\$ 6,141,502</b>	<b>\$ 1,566,020</b>	<b>\$ 539,680</b>	<b>\$ 8,247,202</b>

**Exhibit 9b**  
**Actuarial Balance Sheet (excluding SCAs)**  
**June 30, 2023**

(Dollars in thousands)

Resources				
	General	Safety	Probation	Total
Valuation Assets (Actuarial)	\$ 4,429,238	\$ 1,156,588	\$ 404,695	\$ 5,990,521
Present Value of Future Member Contributions	511,452	105,517	23,360	640,329
Present Value of Future Employer Contributions to Fund:				
a) Normal Cost	445,249	101,390	24,593	571,232
b) Unfunded Actuarial Accrued Liability	755,563	202,525	87,032	1,045,120
<b>Total Resources</b>	<b>\$ 6,141,502</b>	<b>\$ 1,566,020</b>	<b>\$ 539,680</b>	<b>\$ 8,247,202</b>
Liabilities				
	General	Safety	Probation	Total
Present Value of Future Benefits				
1. Present Retired Members	\$ 2,950,871	\$ 983,182	\$ 330,795	\$ 4,264,848
2. Current Inactive Members	316,383	23,740	18,463	358,586
3. Current Active Members				
- Service Retirement	2,621,589	493,954	175,974	3,291,517
- Termination Benefits	134,956	16,722	3,088	154,766
- Death Benefits	27,857	4,056	860	32,773
- Disability Benefits	89,846	44,366	10,500	144,712
- Total Active	2,874,248	559,098	190,422	3,623,768
<b>Total Actuarial Liabilities</b>	<b>\$ 6,141,502</b>	<b>\$ 1,566,020</b>	<b>\$ 539,680</b>	<b>\$ 8,247,202</b>

**Exhibit 9c**  
**Analysis of Change in the Unfunded Actuarial Accrued Liability**  
**June 30, 2023**

(Dollars in thousands)

	Amount	As a Percent of June 30, 2023 Actuarial Accrued Liability
<b>Unfunded Actuarial Accrued Liability - June 30, 2022</b>	<b>\$ 607,145</b>	8.6%
Increase in UAAL due to new assumptions	161,882	2.3%
Interest Accrued	37,947	0.5%
Benefits Accrued (Normal Cost)	163,758	2.3%
<u>Contributions</u>		
Employers	\$ (246,292)	-3.5%
Members	(80,056)	-1.1%
CSCA and DSCA Contributions	<u>(10,000)</u>	-0.1%
Total	<u>(336,348)</u>	-4.8%
<b>Expected Unfunded Actuarial Accrued Liability - June 30, 2023</b>	<b>\$ 634,383</b>	9.0%
<b>Sources of Change:</b>		0.0%
(Gain) / Loss due to Investment Income	101,991	1.4%
<u>Liability (Gains) and Losses</u>		
Salary Increases Greater than Expected	\$ 31,440	0.4%
Active Member Experience (non salary)	17,732	0.3%
CPI Greater than Expected	33,389	0.5%
Mortality Experience	(890)	0.0%
All Other Experience	<u>2,312</u>	0.0%
Total	<u>83,983</u>	1.2%
<b>Total Changes</b>	<b>\$ 185,975</b>	2.6%
<b>Unfunded Actuarial Accrued Liability - June 30, 2023</b>	<b>\$ 820,358</b>	11.7%

## 5. Member Contributions

For SamCERA members in Plans 1-6, contributions are of three types: Basic contributions, Cost Sharing contributions, and COLA Cost Sharing contributions.

SamCERA members in Plan 7 pay contributions equal to one-half of the total Normal Cost rate for all members.

There are no member contributions under General Plan 3.

### Basic Member Contributions

Basic contribution member rates for General members in Plans 1, 2 and 4 are defined in Section 31621.9 of the County Employees Retirement Law (CERL). General Plan 5 member rates are defined in Section 31621, and Probation and Safety member rates in Plans 1-6 are defined in Section 31639.25.

Basic member contributions are determined using the Entry Age Normal Cost Method and the following actuarial assumptions:

1. Expected rate of return on assets
2. Individual salary increase rate (wage growth + merit)
3. Mortality for members based on service retirement
4. No COLAs are assumed

The basic member contribution rates for Plans 1-6 were recalculated as of the June 30, 2023 valuation to reflect assumptions adopted by the Board of Retirement on July 25, 2023. The rates are shown in Appendix D.

### Cost of Living Member Contributions

Members in Plans 1-6 (except Plan 3 and SMCM&VCD members) may share in the cost of the Cost of Living Adjustment (COLA) benefit by making additional contributions. The COLA level is described in detail in the Member Contributions section of Appendix B.

COLA member rates for Plans 1-6 are determined by calculating and applying a load factor to the basic member rates. New COLA load factors were calculated in the 2023 valuation to reflect the new assumptions as a result of the 2023 Investigation of Experience study. COLA load factors are determined for each class and plan of member separately, as shown in the following table:

Plan	COLA Share	COLA Load
General 1	50%	35.00%
General 2	50%	41.85%
General 4	50%	27.66%
General 5	50%	27.08%
Safety 1	50%	47.93%
Safety 2	50%	61.09%
Safety 4	50%	42.98%
Safety 5	50%	39.25%
Safety 6	50%	32.47%
Probation 1	50%	53.21%
Probation 2	50%	61.98%
Probation 4	50%	41.73%
Probation 5	50%	36.28%
Probation 6	50%	30.44%

As an example, a member who enters General Plan 5 at age 35 has a basic member contribution rate of 7.88% (Exhibit D-1). The General Plan 5 COLA load is 27.08% for a member COLA contribution of 2.13% ( $7.88\% \times 27.08\%$ ) of pay. The basic plus COLA member contribution rate is 10.01% ( $7.88\% + 2.13\%$ ).

The COLA load for each plan is determined as follows: the present value of future normal costs with and without COLA provisions is calculated. The difference is multiplied by the COLA share percentage, and then divided by the present value of future basic only member contributions.

### **Cost Sharing Contributions**

All Plan 1, 2, and 4 employees (except SMCM&VCD) and Plan 5 Safety and Probation employees make additional cost-sharing contributions as shown in Appendix B. Plan 5 General employees; Plan 6 and 7 employees do not participate in cost-sharing. For valuation purposes, cost-sharing contributions are assumed to be permanent. The cost-sharing contributions are fixed and not impacted by changes in assumptions.

### **Member Contribution Rates (Plan 7)**

Contributions for Plan 7 are defined in Section 7522.30 of the Government Code.

All employees of the same class who are members of Plan 7 shall contribute the same percentage of payroll. Such percentage will be 50% of the total Normal Cost rate for that class. The rates are recalculated annually.

## 6. Employer Contributions

Employer contribution rates are determined using the Entry Age Normal Cost Method. The portion of the actuarial present value of retirement benefits allocated to a valuation year by the Actuarial Cost Method is called the Normal Cost. These amounts are usually expressed as a percentage of payroll and called the Normal Cost Contribution Rate. Exhibit 11 shows the Normal Cost Rates by type of benefit and for each plan based on this valuation.

It should be noted that when we use the term "Gross Normal Cost rate," we are referring to the value of benefits earned by active members allocated to the valuation year. The Employer Normal Cost rate is the portion of the annual benefit that the employer is responsible for. This is simply the Gross Normal Cost rate less the contributions expected to be made by the members.

### Statutory Contribution Rate

A summary of the total Statutory Contribution Rate for each classification, along with a comparison to the prior year's rates, can be found in Exhibit 10, with additional detail for each plan in Exhibits 10a through 10d. These results are expressed as a percentage of payroll. Note that SamCERA's UAAL is determined separately for each class. Thus, the employers fund the UAAL evenly as a percentage of pay over salaries for all members within a class.

The current UAAL amortization method uses a 15-year closed period layered approach, which is consistent with guidelines published by the California Actuarial Advisory Panel (CAAP) and the Conference of Consulting Actuaries (CCA). Effective with the June 30, 2023 valuation the Board elected to combine all outstanding layers into a single layer and reamortize the newly established layer over a 15-year period (fresh-start method) beginning July 1, 2024. New layers will be established in future years to amortize newly emerging gains and losses over their own 15-year closed period. In addition, for each member class the UAAL rate will not be less than the UAAL contribution rate in effect for that member class for the fiscal year beginning July 1, 2023 before reflecting any Supplemental Contribution Accounts. The minimum rate would need to be reviewed if SamCERA reaches a 100% Funded Ratio in the future.

The SCA (CSCA for the County and DSCA for the SMCM&VCD) UAAL offset amounts are calculated using a similar layered approach to the UAAL amortization described above, except that these will not be subject to fresh-start as of June 30, 2023. The SMCM&VCD last contributed funds to the DSCA in the Fiscal Year Ended June 30, 2017. Projected amortization payments from the DSCA effective July 1, 2024 are small. Therefore, the entire balance remaining in the DSCA will be amortized each year until it is fully credited to the SMCM&VCD.

Exhibits 12a through 12c show detailed information on how the UAAL contribution rate is calculated using the layered method. The UAAL contribution rates are calculated prior to reflecting the SCAs.

Exhibits 12d through 12f show detailed information on how the CSCA offsets are calculated using the same layered approach as used for UAAL amortizations, and Exhibit 12g shows similar information on the DSCA offsets.

**Exhibit 10**  
**Employer Statutory Contribution Rates – All Plans**  
**For the 2024-2025 Fiscal Year**

All Plans								
	Employer Rates							
	Gross Normal Cost	Member Contributions	Basic Normal Cost	COLA Normal Cost	Total Normal Cost	UAAL Contribution Rate <sup>(1)(2)</sup>	Total Contribution Rate	Prior Year Total Contribution Rate
<u>General</u>								
County	21.83%	(11.42)%	8.11%	2.30%	10.41%	12.07%	22.48%	22.09%
Courts	21.97%	(11.48)%	8.17%	2.32%	10.49%	15.86%	26.35%	26.02%
<b>Total</b>	21.85%	(11.42)%	8.11%	2.32%	10.43%	12.26%	22.69%	22.31%
SMCM&VCD <sup>(3)</sup>	21.35%	(9.08)%	9.03%	3.24%	12.27%	15.76%	28.03%	25.06%
Safety	37.57%	(18.34)%	14.87%	4.36%	19.23%	29.49%	48.72%	47.35%
Probation	38.48%	(18.28)%	15.65%	4.55%	20.20%	33.33%	53.53%	53.75%
All Plans	24.16%	(12.41)%	9.12%	2.63%	11.75%	14.89%	26.64%	26.19%
County Only	24.25%	(12.47)%	9.16%	2.62%	11.78%	14.84%	26.62%	26.19%

1. The UAAL Contribution Rate for each member class is the greater of the FYB 2023 calculated UAAL Contribution Rate for the respective class and those calculated in this year's valuation (shown in Exhibits 12a - 12c).
2. County UAAL Contribution Rate includes an aggregate offset of 4.48% of payroll to reflect the County Supplementary Contributions Account. Offsets vary by class of member as follows:
  - General member UAAL offset is 3.79% of payroll
  - Safety member UAAL offset is 7.48% of payroll
  - Probation member UAAL offset is 11.44% of payroll
3. SMCM&VCD UAAL Contribution Rate includes an offset of 0.10% of payroll to reflect the District Supplementary Contributions Account.



**Exhibit 10a**  
**Employer Statutory Contribution Rates – General Members**  
**For the 2024-2025 Fiscal Year**

	Employer Rates							Prior Year Total Contribution Rate
	Gross Normal Cost	Member Contributions	Basic Normal Cost	COLA Normal Cost	Total Normal Cost	UAAL Contribution Rate <sup>(1)(2)</sup>	Total Contribution Rate	
<b>General Members</b>								
<u>Plan 1</u>								
County	30.59%	(14.02)%	11.70%	4.87%	16.57%	12.07%	28.64%	26.15%
Courts	30.59%	(14.02)%	11.70%	4.87%	16.57%	15.86%	32.43%	30.00%
<b>Total</b>	30.59%	(14.02)%	11.70%	4.87%	16.57%	12.07%	28.64%	26.15%
<u>Plan 2</u>								
County	26.64%	(15.09)%	7.69%	3.86%	11.55%	12.07%	23.62%	22.06%
Courts	26.64%	(15.09)%	7.69%	3.86%	11.55%	15.86%	27.41%	25.91%
<b>Total</b>	26.64%	(15.09)%	7.69%	3.86%	11.55%	12.24%	23.79%	22.19%
<u>Plan 3</u>								
County	9.39%	0.00%	9.39%	0.00%	9.39%	12.07%	21.46%	21.06%
Courts	9.39%	0.00%	9.39%	0.00%	9.39%	15.86%	25.25%	24.91%
<b>Total</b>	9.39%	0.00%	9.39%	0.00%	9.39%	12.20%	21.59%	21.18%
<u>Plan 4</u>								
County	25.03%	(14.12)%	8.22%	2.69%	10.91%	12.07%	22.98%	22.59%
Courts	25.03%	(14.12)%	8.22%	2.69%	10.91%	15.86%	26.77%	26.44%
<b>Total</b>	25.03%	(14.12)%	8.22%	2.69%	10.91%	12.27%	23.18%	22.79%
<u>Plan 5</u>								
County	23.61%	(10.20)%	10.97%	2.44%	13.41%	12.07%	25.48%	25.12%
Courts	23.61%	(10.20)%	10.97%	2.44%	13.41%	15.86%	29.27%	28.97%
<b>Total</b>	23.61%	(10.20)%	10.97%	2.44%	13.41%	12.31%	25.72%	25.37%
<u>Plan 7</u>								
County	19.26%	(9.63)%	7.73%	1.90%	9.63%	12.07%	21.70%	21.31%
Courts	19.26%	(9.63)%	7.73%	1.90%	9.63%	15.86%	25.49%	25.16%
<b>Total</b>	19.26%	(9.63)%	7.73%	1.90%	9.63%	12.25%	21.88%	21.50%
<u>All Plans</u>								
County	21.83%	(11.42)%	8.11%	2.30%	10.41%	12.07%	22.48%	22.09%
Courts	21.97%	(11.48)%	8.17%	2.32%	10.49%	15.86%	26.35%	26.02%
<b>Total</b>	21.85%	(11.42)%	8.11%	2.32%	10.43%	12.26%	22.69%	22.31%

1. UAAL Contribution Rate (before SCA offset) is the greater of 15.86% and the calculated UAAL Contribution Rate shown in Exhibit 12a.  
 2. UAAL Contribution Rate includes an offset of 3.79% of payroll to reflect the County Supplementary Contributions Account, except for Courts.

**Exhibit 10b  
 Employer Statutory Contribution Rates – SMCM&VCD Members  
 For the 2024-2025 Fiscal Year**

	<b>SMCM&amp;VCD Members</b>							
	<b>Gross Normal Cost</b>	<b>Member Contributions</b>	<b>Employer Rates</b>					<b>Total Contribution Rate</b>
<b>Basic Normal Cost</b>			<b>COLA Normal Cost</b>	<b>Total Normal Cost</b>	<b>UAAL Contribution Rate<sup>(1)(2)</sup></b>			
Plan 1 <sup>(3)</sup>	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Plan 2 <sup>(3)</sup>	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Plan 4	23.71%	(8.35)%	10.60%	4.76%	15.36%	15.76%	31.12%	27.92%
Plan 7	19.38%	(9.69)%	7.73%	1.96%	9.69%	15.76%	25.45%	22.58%
All Plans	21.35%	(9.08)%	9.03%	3.24%	12.27%	15.76%	28.03%	25.06%

1. UAAL Contribution Rate (before SCA offset) is the greater of 15.86% and the calculated UAAL Contribution Rate shown in Exhibit 12a.  
 2. UAAL Contribution Rate includes an offset of 0.10% of payroll to reflect the District Supplementary Contributions Account.  
 3. There are currently no active Plan 1 or Plan 2 members. Employer rates will be developed in the future if needed.

**Exhibit 10c  
 Employer Statutory Contribution Rates – Safety Members  
 For the 2024-2025 Fiscal Year**

Safety Members								
	Gross Normal Cost	Member Contributions	Employer Rates				Total Contribution Rate	Prior Year Total Contribution Rate
			Basic Normal Cost	COLA Normal Cost	Total Normal Cost	UAAL Contribution Rate <sup>(1)(2)</sup>		
Plan 1 <sup>(3)</sup>	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Plan 2	48.24%	(21.12)%	18.48%	8.64%	27.12%	29.49%	56.61%	50.66%
Plan 4	42.13%	(20.55)%	16.71%	4.87%	21.58%	29.49%	51.07%	49.18%
Plan 5	41.11%	(19.47)%	16.95%	4.69%	21.64%	29.49%	51.13%	49.49%
Plan 6 <sup>(3)</sup>	N/A	N/A	N/A	N/A	NA	NA	NA	NA
Plan 7	31.81%	(15.91)%	12.34%	3.56%	15.90%	29.49%	45.39%	44.59%
All Plans	37.57%	(18.34)%	14.87%	4.36%	19.23%	29.49%	48.72%	47.35%

1. UAAL Contribution Rate (before SCA offset) is the greater of 36.97% and the calculated UAAL Contribution Rate shown in Exhibit 12b.
2. UAAL Contribution Rate includes an offset of 7.48% of payroll to reflect the County Supplementary Contributions Account.
3. There are currently no active Safety Plan 1 or Plan 6 members. Employer rates will be developed in the future if needed.

**Exhibit 10d  
 Employer Statutory Contribution Rates – Probation Members  
 For the 2024-2025 Fiscal Year**

Probation Members								
	Gross Normal Cost	Member Contributions	Employer Rates				Total Contribution Rate	Prior Year Total Contribution Rate
			Basic Normal Cost	COLA Normal Cost	Total Normal Cost	UAAL Contribution Rate <sup>(1)(2)</sup>		
Plan 1 <sup>(3)</sup>	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Plan 2	44.98%	(12.25)%	21.97%	10.76%	32.73%	33.33%	66.06%	59.69%
Plan 4	40.72%	(19.14)%	16.82%	4.76%	21.58%	33.33%	54.91%	54.91%
Plan 5	36.03%	(18.41)%	13.37%	4.25%	17.62%	33.33%	50.95%	52.07%
Plan 6 <sup>(3)</sup>	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Plan 7	32.45%	(16.23)%	12.56%	3.66%	16.22%	33.33%	49.55%	50.26%
All Plans	38.48%	(18.28)%	15.65%	4.55%	20.20%	33.33%	53.53%	53.75%

1. UAAL Contribution Rate (before SCA offset) is the greater of 44.77% and the calculated UAAL Contribution Rate shown in Exhibit 12c.
2. UAAL Contribution Rate includes an offset of 11.44% of payroll to reflect the County Supplementary Contributions Account.
3. There are currently no active Probation Plan 1 or Plan 6 members. Employer rates will be developed in the future if needed.

**Exhibit 11**  
**Calculated Gross Normal Cost Rates**

All Plans					
Plan	Normal Cost				Total Gross Normal Cost
	Service Retirement	Disability Retirement	Death Benefits while Active	Termination Benefits	
General Plan 1	23.04%	2.23%	0.32%	4.99%	<b>30.59%</b>
General Plan 2	19.82%	1.07%	0.31%	5.44%	<b>26.64%</b>
General Plan 3	8.67%	0.00%	0.00%	0.72%	<b>9.39%</b>
General Plan 4	19.01%	1.09%	0.31%	4.62%	<b>25.03%</b>
General Plan 5	18.20%	1.44%	0.35%	3.62%	<b>23.61%</b>
General Plan 7	14.83%	1.21%	0.28%	2.94%	<b>19.26%</b>
<b>General Total</b>	<b>16.71%</b>	<b>1.17%</b>	<b>0.29%</b>	<b>3.68%</b>	<b>21.85%</b>
SMCM&VCD Plan 1	N/A	N/A	N/A	N/A	<b>N/A</b>
SMCM&VCD Plan 2	N/A	N/A	N/A	N/A	<b>N/A</b>
SMCM&VCD Plan 4	18.23%	1.01%	0.28%	4.19%	<b>23.71%</b>
SMCM&VCD Plan 7	14.56%	1.08%	0.36%	3.38%	<b>19.38%</b>
<b>SMCM&amp;VCD Total</b>	<b>16.23%</b>	<b>1.05%</b>	<b>0.32%</b>	<b>3.75%</b>	<b>21.35%</b>
Safety Plan 1	N/A	N/A	N/A	N/A	<b>N/A</b>
Safety Plan 2	37.91%	5.44%	0.46%	4.43%	<b>48.24%</b>
Safety Plan 4	33.28%	4.38%	0.43%	4.04%	<b>42.13%</b>
Safety Plan 5	30.79%	6.37%	0.44%	3.51%	<b>41.11%</b>
Safety Plan 6	N/A	N/A	N/A	N/A	<b>N/A</b>
Safety Plan 7	23.25%	5.35%	0.39%	2.82%	<b>31.81%</b>
<b>Safety Total</b>	<b>28.57%</b>	<b>5.17%</b>	<b>0.41%</b>	<b>3.42%</b>	<b>37.57%</b>
Probation Plan 1	N/A	N/A	N/A	N/A	<b>N/A</b>
Probation Plan 2	36.74%	3.55%	0.39%	4.30%	<b>44.98%</b>
Probation Plan 4	32.85%	3.62%	0.34%	3.91%	<b>40.72%</b>
Probation Plan 5	28.51%	3.97%	0.34%	3.21%	<b>36.03%</b>
Probation Plan 6	N/A	N/A	N/A	N/A	<b>N/A</b>
Probation Plan 7	24.85%	4.33%	0.33%	2.94%	<b>32.45%</b>
<b>Probation Total</b>	<b>30.69%</b>	<b>3.81%</b>	<b>0.34%</b>	<b>3.64%</b>	<b>38.48%</b>
<b>All Plans</b>	<b>18.49%</b>	<b>1.71%</b>	<b>0.31%</b>	<b>3.65%</b>	<b>24.16%</b>

**Exhibit 12a**  
**UAAL Amortization Detail – General Members**

(Dollars in Thousands)

<b>Unfunded Actuarial Liability Amortization Detail</b>							
<b>Date Established</b>	<b>Description</b>	<b>Balance as of June 30, 2023</b>	<b>Interest on Balance</b>	<b>Amortization Payment on June 30, 2024</b>	<b>Balance as of June 30, 2024</b>	<b>Remaining Period as of June 30, 2024</b>	<b>July 1, 2024 Amortization Payment</b>
June 30, 2023	Initial UAAL	\$ 755,563	\$ 47,223	\$ 94,197	\$ 708,589	15 Years	\$ 58,181
						Total Amortization Payment July 1, 2024:	\$ 58,181
						Projected Payroll July 1, 2024:	\$ 559,719
	<b>UAAL as of June 30, 2023:</b>	<b><u>\$ 755,563</u></b>				<b>UAAL Contribution Rate (as a % of Payroll) FYB July 1, 2024:</b>	<b><u>10.39%</u></b>

Notes:

1. Amortization Payments are based on a fixed schedule that increases by the payroll growth assumption each year.
2. The calculation of UAAL is as of June 30, 2023; whereas the contribution rates are effective as of July 1, 2024. The June 30, 2023 UAAL is adjusted to June 30, 2024 based on the July 1, 2023 contribution rates and June 30, 2023 valuation assumptions.
3. (Gain)/Loss includes new assumptions adopted in the June 30, 2023 valuation.

**Exhibit 12b**  
**UAAL Amortization Detail – Safety Members**

(Dollars in Thousands)

<b>Unfunded Actuarial Liability Amortization Detail</b>							
<b>Date Established</b>	<b>Description</b>	<b>Balance as of June 30, 2023</b>	<b>Interest on Balance</b>	<b>Amortization Payment on June 30, 2024</b>	<b>Balance as of June 30, 2024</b>	<b>Remaining Period as of June 30, 2024</b>	<b>July 1, 2024 Amortization Payment</b>
June 30, 2023	Initial UAAL	\$ 202,525	\$ 12,658	\$ 29,132	\$ 186,051	15 Years	\$ 15,276
						Total Amortization Payment July 1, 2024:	\$ 15,276
						Projected Payroll July 1, 2024:	\$ 75,247
	<b>UAAL as of June 30, 2023:</b>	<u><u>\$ 202,525</u></u>				<b>UAAL Contribution Rate (as a % of Payroll) FYB July 1, 2024:</b>	<u><u>20.30%</u></u>

Notes:

1. Amortization Payments are based on a fixed schedule that increases by the payroll growth assumption each year.
2. The calculation of UAAL is as of June 30, 2023; whereas the contribution rates are effective as of July 1, 2024. The June 30, 2023 UAAL is adjusted to June 30, 2024 based on the July 1, 2023 contribution rates and June 30, 2023 valuation assumptions.
3. (Gain)/Loss includes new assumptions adopted in the June 30, 2023 valuation.

**Exhibit 12c**  
**UAAL Amortization Detail – Probation Members**

(Dollars in Thousands)

Unfunded Actuarial Liability Amortization Detail							
Date Established	Description	Balance as of June 30, 2023	Interest on Balance	Amortization Payment on June 30, 2024	Balance as of June 30, 2024	Remaining Period as of June 30, 2024	July 1, 2024 Amortization Payment
June 30, 2023	Initial UAAL	\$ 87,032	\$ 5,440	\$ 9,193	\$ 83,279	15 Years	\$ 6,838
						Total Amortization Payment July 1, 2024:	\$ 6,838
						Projected Payroll July 1, 2024:	\$ 19,660
	<b>UAAL as of June 30, 2023:</b>	<b>\$ 87,032</b>				<b>UAAL Contribution Rate (as a % of Payroll) FYB July 1, 2024:</b>	<b>34.78%</b>

Notes:

1. Amortization Payments are based on a fixed schedule that increases by the payroll growth assumption each year.
2. The calculation of UAAL is as of June 30, 2023; whereas the contribution rates are effective as of July 1, 2024. The June 30, 2023 UAAL is adjusted to June 30, 2024 based on the July 1, 2023 contribution rates and June 30, 2023 valuation assumptions.
3. (Gain)/Loss includes new assumptions adopted in the June 30, 2023 valuation.



**Exhibit 12d**  
**CSCA Amortization Detail – General Members**

(Dollars in Thousands)

General Members							
Date Established	Description	Balance as of June 30, 2023	Interest on Balance	Amortization Payment on June 30, 2024	Balance as of June 30, 2024	Remaining Period as of June 30, 2024	July 1, 2024 Amortization Payment
June 30, 2014	Initial CSCA	\$ 23,572	\$ 1,473	\$ 4,511	\$ 20,534	5 Years	\$ 4,413
June 30, 2015	CSCA Addition	\$ 5,804	\$ 363	\$ 966	\$ 5,201	6 Years	\$ 945
June 30, 2016	CSCA Addition	\$ 11,253	\$ 703	\$ 1,664	\$ 10,292	7 Years	\$ 1,625
June 30, 2017	CSCA Addition	\$ 20,352	\$ 1,272	\$ 2,715	\$ 18,908	8 Years	\$ 2,648
June 30, 2018	CSCA Addition	\$ 17,890	\$ 1,118	\$ 2,180	\$ 16,828	9 Years	\$ 2,124
June 30, 2019	CSCA Addition	\$ 31,728	\$ 1,983	\$ 3,567	\$ 30,144	10 Years	\$ 3,471
June 30, 2020	CSCA Addition	\$ (915)	\$ (57)	\$ (96)	\$ (877)	11 Years	\$ (93)
June 30, 2021	CSCA Addition	\$ 33,449	\$ 2,091	\$ 3,276	\$ 32,263	12 Years	\$ 3,181
June 30, 2022	CSCA Addition	\$ 12,854	\$ 803	\$ 1,186	\$ 12,471	13 Years	\$ 1,150
June 30, 2023	CSCA Addition	\$ 6,443	\$ 403	\$ -	\$ 6,845	14 Years	\$ 594
Total CSCA County Offset Payment July 1, 2024:							\$ 20,057
Projected County Payroll July 1, 2024:							\$ 529,294
<b>CSCA Value as of June 30, 2023:</b>		<u><u>\$ 162,430</u></u>		<b>CSCA County Offset (as a % of Payroll) FYB July 1, 2024:</b>			<u><u>3.79%</u></u>

Notes:

- CSCA Offsets are based on a fixed schedule that increases by the payroll growth assumption each year.
- The calculation of CSCA amounts are as of June 30, 2023; whereas the contribution rates are effective as of July 1, 2024. The June 30, 2023 CSCA is adjusted to June 30, 2024 based on the July 1, 2023 contribution rates and June 30, 2023 valuation assumptions.

**Exhibit 12e**  
**CSCA Amortization Detail – Safety Members**

(Dollars in Thousands)

Safety Members							
Date Established	Description	Balance as of June 30, 2023	Interest on Balance	Amortization Payment on June 30, 2024	Balance as of June 30, 2024	Remaining Period as of June 30, 2024	July 1, 2024 Amortization Payment
June 30, 2014	Initial CSCA	\$ 7,988	\$ 499	\$ 1,529	\$ 6,958	5 Years	\$ 1,495
June 30, 2015	CSCA Addition	\$ 1,969	\$ 123	\$ 328	\$ 1,764	6 Years	\$ 320
June 30, 2016	CSCA Addition	\$ 3,413	\$ 213	\$ 505	\$ 3,122	7 Years	\$ 493
June 30, 2017	CSCA Addition	\$ 6,141	\$ 384	\$ 819	\$ 5,706	8 Years	\$ 799
June 30, 2018	CSCA Addition	\$ 5,535	\$ 346	\$ 675	\$ 5,207	9 Years	\$ 657
June 30, 2019	CSCA Addition	\$ 8,650	\$ 541	\$ 972	\$ 8,218	10 Years	\$ 946
June 30, 2020	CSCA Addition	\$ (615)	\$ (38)	\$ (64)	\$ (589)	11 Years	\$ (63)
June 30, 2021	CSCA Addition	\$ 8,111	\$ 507	\$ 794	\$ 7,823	12 Years	\$ 771
June 30, 2022	CSCA Addition	\$ 3,164	\$ 198	\$ 292	\$ 3,070	13 Years	\$ 283
June 30, 2023	CSCA Addition	\$ (810)	\$ (51)	\$ -	\$ (860)	14 Years	\$ (75)
Total CSCA County Offset Payment July 1, 2024:							\$ 5,628
Projected County Payroll July 1, 2024:							\$ 75,247
<b>CSCA Value as of June 30, 2023:</b>		<b>\$ 43,545</b>		<b>CSCA County Offset (as a % of Payroll) FYB July 1, 2024:</b>			<b>7.48%</b>

Notes:

- CSCA Offsets are based on a fixed schedule that increases by the payroll growth assumption each year.
- The calculation of CSCA amounts are as of June 30, 2023; whereas the contribution rates are effective as of July 1, 2024. The June 30, 2023 CSCA is adjusted to June 30, 2024 based on the July 1, 2023 contribution rates and June 30, 2023 valuation assumptions.

**Exhibit 12f**  
**CSCA Amortization Detail – Probation Members**

(Dollars in Thousands)

Probation Members							
Date Established	Description	Balance as of June 30, 2023	Interest on Balance	Amortization Payment on June 30, 2024	Balance as of June 30, 2024	Remaining Period as of June 30, 2024	July 1, 2024 Amortization Payment
June 30, 2014	Initial CSCA	\$ 2,172	\$ 136	\$ 416	\$ 1,892	5 Years	\$ 407
June 30, 2015	CSCA Addition	\$ 561	\$ 35	\$ 93	\$ 502	6 Years	\$ 91
June 30, 2016	CSCA Addition	\$ 1,191	\$ 74	\$ 176	\$ 1,089	7 Years	\$ 172
June 30, 2017	CSCA Addition	\$ 2,430	\$ 152	\$ 324	\$ 2,257	8 Years	\$ 316
June 30, 2018	CSCA Addition	\$ 1,866	\$ 117	\$ 227	\$ 1,755	9 Years	\$ 221
June 30, 2019	CSCA Addition	\$ 3,469	\$ 217	\$ 390	\$ 3,296	10 Years	\$ 380
June 30, 2020	CSCA Addition	\$ 954	\$ 60	\$ 100	\$ 913	11 Years	\$ 97
June 30, 2021	CSCA Addition	\$ 3,693	\$ 231	\$ 362	\$ 3,562	12 Years	\$ 351
June 30, 2022	CSCA Addition	\$ 2,257	\$ 141	\$ 208	\$ 2,190	13 Years	\$ 202
June 30, 2023	CSCA Addition	\$ 125	\$ 8	\$ -	\$ 133	14 Years	\$ 12
Total CSCA County Offset Payment July 1, 2024:							\$ 2,249
Projected County Payroll July 1, 2024:							\$ 19,660
<b>CSCA Value as of June 30, 2023:</b>		<b>\$ 18,717</b>		<b>CSCA County Offset (as a % of Payroll) FYB July 1, 2024:</b>			<b>11.44%</b>

Notes:

- CSCA Offsets are based on a fixed schedule that increases by the payroll growth assumption each year.
- The calculation of CSCA amounts are as of June 30, 2023; whereas the contribution rates are effective as of July 1, 2024. The June 30, 2023 CSCA is adjusted to June 30, 2024 based on the July 1, 2023 contribution rates and June 30, 2023 valuation assumptions.

**Exhibit 12g  
 Amortization Detail – District SCA Offsets**

(Dollars in Thousands)

<b>SMCM&amp;VCD Members</b>									
Date Established	Description	Balance as of June 30, 2023	Interest on Balance	Amortization Payment on June 30, 2024	Balance as of June 30, 2024	Remaining Period as of June 30, 2024	July 1, 2024 Amortization Payment		
June 30, 2016	Initial DSCA	\$ 49	\$ 3	\$ 52	\$ -	0 Years	\$ -		
June 30, 2017	DSCA Addition	\$ 8	\$ 1	\$ 9	\$ -	0 Years	\$ -		
June 30, 2018	DSCA Addition	\$ 0	\$ 0	\$ 0	\$ -	0 Years	\$ -		
June 30, 2019	DSCA Addition	\$ 1	\$ 0	\$ 1	\$ -	0 Years	\$ -		
June 30, 2020	DSCA Addition	\$ 0	\$ 0	\$ 0	\$ -	0 Years	\$ -		
June 30, 2021	DSCA Addition	\$ 1	\$ 0	\$ 1	\$ -	0 Years	\$ -		
June 30, 2022	DSCA Addition	\$ 7	\$ 0	\$ 7	\$ -	0 Years	\$ -		
June 30, 2023	DSCA Addition	\$ 3	\$ 0	\$ -	\$ 3	1 Year	\$ 3		
Total DSCA Offset Payment July 1, 2024:							\$ 3		
Projected District Payroll July 1, 2024:							\$ 2,737		
<b>DSCA Value as of June 30, 2023:</b>		<b>\$ 70</b>	<b>DSCA District Offset (as a % of Payroll) FYB July 1, 2024:</b>				<b>0.10%</b>		

Notes:

1. DSCA Offsets are based on a fixed schedule that increases by the payroll growth assumption each year.
2. The calculation of DSCA amounts are as of June 30, 2023; whereas the contribution rates are effective as of July 1, 2024. The June 30, 2023 DSCA is adjusted to June 30, 2024 based on the July 1, 2023 contribution rates and June 30, 2023 valuation assumptions.

## 7. Supplemental Information

We are providing several exhibits in this report for consistency with prior reports and as supporting information for inclusion in SamCERA's ACFR.

- Exhibit 13 – Schedule of Funding Progress
- Exhibit 14 – Funding Liabilities by Type
- Exhibit 15 – History of Employer Contribution Rates
- Exhibit 16 – Actuarial Analysis of Financial Experience
- Exhibit 17 – Summary of Significant Actuarial Statistics and Measures
- Exhibit 18 – Summary of SamCERA Membership
- Exhibit 19 – Summary of Active Member Valuation Data
- Exhibit 20 – Summary of Demographic Activity of Retirees and Beneficiaries
- Exhibit 21 – Average Salary and Active Counts by Employer

The Governmental Accounting Standards Board (GASB) Statement 67 sets standards for defined benefit pension plan reporting and disclosures. The reporting requirements for GASB 67 include certain supplementary information that must be added to the financial statements. GASB Statement 68 specifies financial reporting for pension accounting by state and local governmental employers. We will provide information required for GASB 67 and GASB 68 in a separate report.

All liability calculations shown in this Section 7 are based on an investment return assumption of 6.25%. GASB 67 and 68 calculations as of June 30, 2023 will use an investment return assumption of 6.42%, as the investment return for GASB 67 and 68 is required to be gross of expected administrative expenses.

**Exhibit 13**  
**Schedule of Funding Progress**

(Dollars in Thousands)

<u>Actuarial Valuation Date</u>	<u>(a) Actuarial Value of Valuation Assets</u>	<u>(b) Actuarial Accrued Liabilities</u>	<u>(b-a) Unfunded Actuarial Accrued Liabilities (UAAL)</u>	<u>(a/b) Funded Ratio</u>	<u>(c) Covered Payroll</u>	<u>[(b-a)/c] UAAL as a Percentage of Covered Payroll</u>
June 30, 2014	\$ 2,993,187	\$ 3,797,042	\$ 803,855	78.8%	\$ 416,274	193.11%
June 30, 2015	3,343,550	4,045,786	702,236	82.6%	439,018	159.96%
June 30, 2016	3,624,726	4,362,296	737,570	83.1%	472,385	156.14%
June 30, 2017	3,976,717	4,719,850	743,133	84.3%	510,132	145.67%
June 30, 2018	4,351,502	4,970,535	619,033	87.5%	535,938	115.50%
June 30, 2019	4,685,502	5,459,978	774,476	85.8%	554,734	139.61%
June 30, 2020	4,998,316	5,786,054	787,738	86.4%	593,295	132.77%
June 30, 2021	5,488,958	6,227,066	738,108	88.1%	600,369	122.94%
June 30, 2022	5,922,894	6,530,039	607,145	90.7%	611,957	99.21%
June 30, 2023	6,215,283	7,035,641	820,358	88.3%	631,144	129.98%

Note: The Covered Payroll amounts are consistent with the GASB 67/68 Disclosure report.

**Exhibit 14**  
**Funding Liabilities by Type**

(Dollars in Thousands)

Actuarial Valuation Date	Valuation Assets	Actuarial Accrued Liabilities for			Portion of Actuarial Accrued Liabilities Covered by Assets		
		Active Member Contributions (A)	Retirees and Beneficiaries <sup>(1)</sup> (B)	Active Members (Employer Financed Portion) (C)	(A)	(B)	(C)
June 30, 2014	\$ 2,993,187	\$ 584,080	\$ 2,285,328	\$ 927,634	100%	100%	13%
June 30, 2015	3,343,550	628,287	2,451,544	965,955	100%	100%	27%
June 30, 2016	3,624,726	679,246	2,635,409	1,047,641	100%	100%	30%
June 30, 2017	3,976,717	735,102	2,811,651	1,173,097	100%	100%	37%
June 30, 2018	4,351,502	783,887	3,032,813	1,153,835	100%	100%	46%
June 30, 2019	4,685,502	769,137	3,369,094	1,321,747	100%	100%	41%
June 30, 2020	4,998,316	858,906	3,609,214	1,317,934	100%	100%	40%
June 30, 2021	5,488,958	895,745	3,908,520	1,422,801	100%	100%	48%
June 30, 2022	5,922,894	937,791	4,240,655	1,351,593	100%	100%	55%
June 30, 2023	6,215,283	973,282	4,623,434	1,438,925	100%	100%	43%

1. Includes inactive members.

**Exhibit 15  
 History of Employer Statutory Contribution Rates**

Statutory Contribution Rates									
Valuation Year	General Members (County & Courts)			General Members (Nurses & UAPD)			General Members (SMCM&VCD)		
	Normal	UAAL	Total	Normal	UAAL	Total	Normal	UAAL	Total
2014	10.12%	20.27%	30.39%	9.14%	20.21%	29.35%	11.72%	21.16%	32.88%

Statutory Contribution Rates									
Valuation Year	General Members (County)			General Members (Courts)			General Members (SMCM&VCD)		
	Normal	UAAL	Total	Normal	UAAL	Total	Normal	UAAL	Total
2015	8.67%	18.37%	27.04%	9.04%	19.54%	28.58%	11.75%	19.54%	31.29%
2016	8.91%	19.81%	28.72%	9.09%	21.30%	30.39%	12.02%	12.50%	24.52%
2017	9.58%	20.55%	30.13%	9.65%	22.58%	32.23%	12.32%	12.37%	24.69%
2018	9.22%	19.32%	28.54%	9.27%	21.76%	31.03%	12.13%	0.00%	12.13%
2019	9.93%	22.18%	32.11%	10.01%	25.21%	35.22%	12.58%	0.00%	12.58%
2020	9.57%	23.22%	32.79%	9.63%	26.22%	35.85%	12.37%	0.39%	12.76%
2021	10.18%	21.84%	32.02%	10.28%	25.45%	35.73%	12.10%	0.00%	12.10%
2022	10.08%	12.01%	22.09%	10.16%	15.86%	26.02%	11.92%	13.14%	25.06%
2023	10.41%	12.07%	22.48%	10.49%	15.86%	26.35%	12.27%	15.76%	28.03%

Statutory Contribution Rates									
Valuation Year	Safety Member			Probation Members (excluding Managers)			Probation Members (Managers)		
	Normal	UAAL	Total	Normal	UAAL	Total	Normal	UAAL	Total
2014	18.99%	46.48%	65.47%	18.92%	28.09%	47.01%	18.79%	28.09%	46.88%
2015	15.14%	43.58%	58.72%	15.31%	26.77%	42.08%	17.23%	26.77%	44.00%
2016	16.31%	44.25%	60.56%	15.94%	31.72%	47.66%	Same as Probation (ex Managers)		
2017	17.28%	45.57%	62.85%	17.42%	32.87%	50.29%	Same as Probation (ex Managers)		
2018	16.98%	44.68%	61.66%	16.95%	32.88%	49.83%	Same as Probation (ex Managers)		
2019	18.02%	50.87%	68.89%	17.97%	42.55%	60.52%	Same as Probation (ex Managers)		
2020	17.57%	54.42%	71.99%	18.30%	47.68%	65.98%	Same as Probation (ex Managers)		
2021	18.84%	55.10%	73.94%	19.40%	50.12%	69.52%	Same as Probation (ex Managers)		
2022	18.56%	28.79%	47.35%	19.27%	34.48%	53.75%	Same as Probation (ex Managers)		
2023	19.23%	29.49%	48.72%	20.20%	33.33%	53.53%	Same as Probation (ex Managers)		

**Notes:**

- Contribution rates shown are those calculated in the corresponding actuarial valuation. In some cases, actual contributions were higher.
- Beginning with the 2010 actuarial valuation, the SMCM&VCD adopted the same benefit formula and member contribution rates as Plan 1, 2 & 4 General County members (excluding cost sharing and COLA sharing on member rates).
- Beginning with the 2011 actuarial valuation, Plan 1, 2, and 4 members of the CNA contribute 25% of the cost of COLA, in addition to current member rates and cost sharing.
- Beginning with the 2012 actuarial valuation, Plan 1, 2, and 4 Probation members (excluding Managers) contribute 25% of the cost of COLA, in addition to current member rates and cost sharing.
- Beginning with the 2013 actuarial valuation, Plan 1, 2, and 4 members of the UAPD contribute 25% of the cost of COLA, in addition to current member rates and cost sharing. In 2011 and 2012 these members contributed the same as County General members.
- Beginning with the 2015 actuarial valuation, Plan 1, 2, and 4 members of the UAPD and the CNA, and Probation members (Managers) contribute 50% of the cost of COLA, in addition to current member rates and cost sharing.
- Effective with the first pay period after June 30, 2016 all members (except those with benefits negotiated under Court Interpreters and Board of Supervisors bargaining units, and SMCM&VCD members) contribute 50% of the cost of COLA, in addition to current member rates and cost sharing. Additionally, pick-up contributions are discontinued for members with benefits negotiated under the PDA bargaining unit.
- Effective October 2016, all members (except those with benefits negotiated under Board of Supervisors bargaining unit, and SMCM&VCD members) contribute 50% of the cost of COLA, in addition to current member rates and cost sharing. This is reflected in 2016 values.
- Effective July 1, 2018, the Board of Supervisors contribute 50% of the cost of COLA, in addition to current member rates and cost sharing. Additionally, pick-up contributions were eliminated.



**Exhibit 16**  
**Actuarial Analysis of Financial Experience**

Summary of (Gains) / Losses	Change In Liability				
	2023	2022	2021	2020	2019
Unfunded Liability as of July 1	\$ 607,145,000	\$ 738,108,000	\$ 787,737,000	\$ 774,476,000	\$ 619,033,000
Expected Change in UAAL	(134,643,000)	(138,405,000)	(157,668,000)	(85,527,000)	(153,261,000)
Salary (Gain) / Loss	31,440,000	34,541,000	12,064,000	25,190,000	50,472,000
Retiree COLA more / (less) than expected	33,389,000	16,379,000	(25,973,000)	18,992,000	21,749,000
Asset (Gain) / Loss	101,991,000	(47,017,000)	(87,748,000)	15,884,000	46,909,000
Change due to Assumption Changes	161,882,000	0	197,720,000	11,593,000	173,944,000
Miscellaneous Experience	19,154,000	3,539,000	11,976,000	27,129,000	15,630,000
Unfunded Liability as of June 30	\$ 820,358,000	\$ 607,145,000	\$ 738,108,000	\$ 787,737,000	\$ 774,476,000

**Exhibit 17**  
**Summary of Significant Actuarial Statistics and Measures**

	June 30th of		Relative
	2023	2022	Change
<b>1. Active Members</b>			
Number of Members	5,334	5,249	1.6 %
Average Age	44.8	44.9	(0.2)%
Average Credited Service	10.1	10.3	(1.9)%
Covered Payroll (\$thousands)	\$ 631,144	\$ 611,957	3.1 %
Average Monthly Salary	\$ 10,166	\$ 9,743	4.3 %
<b>2. Retired Members</b>			
Number of Members			
Service Retirement	4,700	4,608	2.0 %
Disability Retirement	508	493	3.0 %
Beneficiaries	724	678	6.8 %
Average Age	71.5	71.4	0.1 %
Actual Retiree Benefits Paid (\$thousands)	\$ 298,934	\$ 276,502	8.1 %
Average Monthly Pension	\$ 4,351	\$ 4,174	4.2 %
<b>3. Number of Inactive Members</b>			
	2,424	2,224	9.0 %
<b>4. Assets</b>			
Market Value of Fund (\$thousands)	\$ 6,005,043	\$ 5,649,674	6.3 %
Return on Market Value	6.0%	-6.1%	
Valuation Assets (\$thousands)	\$ 6,215,283	\$ 5,922,894	4.9 %
Return on Valuation Assets	4.5%	7.1%	
<b>5. Liability Values (\$thousands)</b>			
Actuarial Accrued Liability	\$ 7,035,641	\$ 6,530,039	7.7 %
Unfunded Actuarial Accrued Liability	\$ 820,358	\$ 607,145	35.1%
Deferred Asset (Gains) / Losses	\$ 273,020	\$ 333,047	
<b>6. Funded Ratio</b>			
(based on valuation assets)	88.3%	90.7%	(2.6)%

**Exhibit 18**  
**Summary of SamCERA Membership**

Plan	One	Two	Three	Four	Five	Six	Seven	Total
<b>Retirees and beneficiaries currently receiving benefits:</b>								
General	1,110	2,292	124	1,272	41	-	55	4,894
Safety	250	269	-	181	9	-	9	718
Probation	86	123	-	110	-	-	1	320
Subtotal	1,446	2,684	124	1,563	50	-	65	5,932
<b>Inactive employees entitled to but not currently receiving benefits (Deferred):</b>								
General	4	174	67	779	134	-	1,079	2,237
Safety	-	6	-	36	10	-	65	117
Probation	-	10	-	41	1	-	18	70
Subtotal	4	190	67	856	145	-	1,162	2,424
<b>Current employees:</b>								
<b>Vested:</b>								
General	2	223	35	1,394	189	-	1,134	2,977
Safety	-	9	-	142	54	-	124	329
Probation	-	2	-	95	8	-	30	135
<b>Non-Vested:</b>								
General	-	-	2	2	58	-	1,688	1,750
Safety	-	1	-	-	16	-	115	132
Probation	-	-	-	-	-	-	11	11
Subtotal	2	235	37	1,633	325	-	3,102	5,334
<b>Total SamCERA Membership</b>	1,452	3,109	228	4,052	520	-	4,329	13,690

**Exhibit 19**  
**Summary of Active Member Valuation Data**

Valuation Date		Members	Annual Salary	Average Annual Salary	% Change Average Salary
2014	General	4,272	\$352,918,558	\$82,612	1.8%
	Safety	452	52,974,475	117,200	1.4%
	Probation	280	23,514,343	83,980	3.4%
	Total	5,004	429,407,375	85,813	1.8%
2015	General	4,334	382,303,295	88,210	6.8%
	Safety	479	55,917,864	116,739	-0.4%
	Probation	282	24,418,977	86,592	3.1%
	Total	5,095	462,640,136	90,803	5.8%
2016	General	4,421	408,191,518	92,330	4.7%
	Safety	495	61,564,028	124,372	6.5%
	Probation	271	24,034,819	88,689	2.4%
	Total	5,187	493,790,365	95,198	4.8%
2017	General	4,560	430,613,886	94,433	2.3%
	Safety	503	65,105,116	129,434	4.1%
	Probation	274	26,503,623	96,729	9.1%
	Total	5,337	522,222,625	97,849	2.8%
2018	General	4,603	448,931,595	97,530	3.3%
	Safety	508	66,799,289	131,495	1.6%
	Probation	256	25,741,800	100,554	4.0%
	Total	5,367	541,472,684	100,889	3.1%
2019	General	4,610	476,944,186	103,459	6.1%
	Safety	530	70,890,519	133,756	1.7%
	Probation	237	24,680,991	104,139	3.6%
	Total	5,377	572,515,696	106,475	5.5%
2020	General	4,655	496,992,584	106,765	3.2%
	Safety	522	72,724,015	139,318	4.2%
	Probation	223	24,856,263	111,463	7.0%
	Total	5,400	594,572,862	110,106	3.4%
2021	General	4,643	511,069,950	110,073	3.1%
	Safety	520	72,829,550	140,057	0.5%
	Probation	193	22,777,092	118,016	5.9%
	Total	5,356	606,676,591	113,270	2.9%
2022	General	4,603	522,675,192	113,551	3.2%
	Safety	476	69,870,562	146,787	4.8%
	Probation	170	21,156,904	124,452	5.5%
	Total	5,249	613,702,657	116,918	3.2%
2023	General	4,727	554,563,518	117,318	3.3%
	Safety	461	76,973,479	166,971	13.8%
	Probation	146	19,161,180	131,241	5.5%
	Total	5,334	650,698,177	121,991	4.3%

**Exhibit 20**  
**Summary of Demographic Activity of Retirees and Beneficiaries**

Year Ended	Added to Rolls <sup>(1)</sup>		Removed from Rolls		Rolls end of year			
	No.	Annual Allowances in Thousands	No.	Annual Allowances in Thousands	No.	Total Retiree Payroll in Thousands	% Increase in Payroll	Average Monthly Allowances
June 30, 2014	203	\$ 12,474	83	\$ 3,479	4,518	\$ 163,769	5.8 %	\$ 3,021
June 30, 2015	213	16,290	93	4,179	4,638	175,880	7.4	3,160
June 30, 2016	233	15,347	123	5,030	4,748	186,197	5.9	3,268
June 30, 2017	310	16,738	102	3,867	4,956	199,068	6.9	3,347
June 30, 2018	315	21,360	162	5,242	5,109	215,186	8.1	3,510
June 30, 2019	306	24,547	190	5,769	5,225	233,964	8.7	3,731
June 30, 2020	362	23,862	133	4,862	5,454	252,963	8.1	3,865
June 30, 2021	270	19,466	132	4,327	5,592	268,102	6.0	3,995
June 30, 2022	363	27,963	176	6,607	5,779	289,458	8.0	4,174
June 30, 2023	330	27,113	177	6,815	5,932	309,756	7.0	4,351

1. Amount added to rolls includes COLAs granted in year to continuing retirees and beneficiaries.

**Exhibit 21**  
**Average Salary and Active Counts by Employer**

	2023	2022	2021	2020	2019
General Plan 1	\$19,119	\$18,575	\$18,022	\$11,102	\$9,793
General Plan 2	11,908	11,516	10,957	10,665	10,088
General Plan 3	9,283	8,850	8,623	8,221	7,872
General Plan 4	11,163	10,680	10,087	9,671	9,302
General Plan 5	11,974	11,659	11,092	10,635	10,180
General Plan 7	8,730	8,291	8,014	7,726	7,395
General Plan Total	9,777	9,463	9,173	8,897	8,622
Safety Plan 1	0	0	0	0	0
Safety Plan 2	17,112	16,177	15,162	15,125	14,197
Safety Plan 4	15,851	14,157	13,494	13,204	12,391
Safety Plan 5	15,378	13,127	12,619	12,367	11,708
Safety Plan 6	0	0	0	0	0
Safety Plan 7	12,201	10,507	9,765	9,581	9,030
Safety Plan Total	13,914	12,232	11,671	11,610	11,146
Probation Plan 1	0	0	0	0	0
Probation Plan 2	11,699	11,203	10,641	10,174	9,908
Probation Plan 4	11,406	10,927	10,359	9,827	9,103
Probation Plan 5	11,024	10,219	9,911	9,343	8,587
Probation Plan 6	0	0	0	0	0
Probation Plan 7	9,794	8,983	8,378	7,598	6,973
Probation Plan Total	10,937	10,371	9,835	9,289	8,678
Grand Total	10,166	9,743	9,439	9,176	8,873

**Participating Employers and Active Members**

	2023	2022	2021	2020	2019
<i>County of San Mateo</i>					
General Members	4,424	4,294	4,375	4,379	4,350
Safety Members	461	476	520	522	530
Probation Members	146	170	193	223	237
Total	5,031	4,940	5,088	5,124	5,117
<i>San Mateo County Mosquito and Vector Control District</i>					
General Members Total	22	22	19	20	20
<i>Courts</i>					
General Members Total	281	287	249	256	240
<b>Total Active Membership</b>	<b>5,334</b>	<b>5,249</b>	<b>5,356</b>	<b>5,400</b>	<b>5,377</b>

## 8. Risk Discussion

### Overview

The results of any actuarial valuation are based on one set of reasonable assumptions. Although we believe the current assumptions provide a reasonable estimate of future expectations, it is almost certain that future experience will differ from the assumptions to some extent. It is therefore important to consider the potential impacts of these likely differences when making decisions that may affect the future financial health of the Plan, or of the Plan's members.

Actuarial Standard of Practice 51 (ASOP 51) addresses these issues by providing actuaries with guidance for assessing and disclosing the risk associated with measuring pension liabilities and the determination of pension plan contributions. Specifically, it directs the actuary to:

- Identify risks that may be significant to the Plan.
- Assess the risks identified as significant to the Plan. The assessment does not need to include numerical calculations.
- Disclose plan maturity measures and historical information that are significant to understanding the Plan's risks.

ASOP 51 states that if in the actuary's professional judgment, a more detailed assessment would be significantly beneficial in helping the individuals responsible for the Plan to understand the risks identified by the actuary, then the actuary should recommend that such an assessment be performed.

In addition, the California Actuarial Advisory Panel (CAAP) has adopted a set of model disclosure elements for actuarial valuation reports of public retirement systems in California. Most of these elements are included in other areas of this report. The remaining CAAP-recommended disclosures are as follows:

Disclosure Element	Description	Value
Gross Normal Cost \$	Normal Cost allocated to valuation year, paid at mid-year.	\$ 155,648,623
Statutory Contribution \$	Expected Statutory Contribution, paid at mid-year.	\$ 171,625,799
Asset Smoothing Ratio	Actuarial Value of Assets divided by Market Value of Assets	103.5%
Asset Volatility Ratio	Market Value of Assets divided by Payroll	9.3
Liability Volatility Ratio	Actuarial Accrued Liability divided by Payroll	10.9

This risk discussion uses the framework of ASOP 51 and the Asset and Liability Volatility Ratios shown above to communicate important information about: significant risks to the Plan, the Plan's maturity, and relevant historical plan data.

## Factors Affecting Future Results

There are a number of factors that affect future valuation results. To the extent actual experience for these factors varies from the assumptions, this will likely cause either increases or decreases in the Plan's future funding level and employer Statutory Contribution Rates (SCR). The factors that can have the most significant impact on SamCERA's valuation results are:

- Investment returns

To the extent that actual investment returns differ from the assumed investment return, the Plan's future assets, SCR, and funded status may differ significantly from those presented in this valuation. Additional discussion of the impact of variance of investment returns is included below.

- Compensation increases

Individual member retirement benefits are linked to that member's compensation. As such, assumptions need to be made as to a member's future compensation increases. Higher future compensation increases will generally result in larger retirement benefits, liabilities, SCRs, and a lower funded status. Conversely, lower compensation increases than assumed will generally result in smaller retirement benefits, liabilities, SCRs, and a higher funded status.

- Payroll variation

In the valuation, an assumption is made for the overall rate of payroll growth of SamCERA from year-to-year. To the extent that the overall rate of payroll growth is greater than assumed, the SCR may decrease since the Unfunded Actuarial Accrued Liability (UAAL) will be amortized over a larger payroll base. The opposite will occur if the overall rate of payroll growth is lower than assumed.

This effect will often offset somewhat with individual compensation increases discussed above.

- Longevity and other demographic risks

The liabilities reported in this valuation have been calculated by assuming that members will follow specific patterns of demographic experience (e.g., mortality, retirement, termination, disability) as described in Appendix A. To the extent that actual demographic experience is different than is assumed to occur, future liabilities, SCRs, and funded status may differ from that presented in this valuation.

All of these assumptions are reviewed in detail during the triennial Investigation of Experience study, and are also reviewed annually during the valuation process. Changes in assumptions are generally recommended if actual experience has been materially different than assumed or forecasts have been changed significantly. Additionally, changes may be recommended and discussed at each valuation if they are deemed to be appropriate at that time.

## Investment Return Risk

Of these factors, we believe the factor with the greatest potential risk to impact future valuation results for SamCERA is future investment returns. For example, if actual returns fall short of the current assumption of 6.25% per year, this will cause an increase in the SCR and a decrease in the Funded Ratio, all other things being equal. Conversely, if actual returns exceed the current assumption of 6.25% per year, this will cause a decrease in the SCR and an increase in the Funded Ratio.

The magnitude of the increase or decrease in the SCR is affected by the maturity level, and specifically the asset volatility ratio. SamCERA has accumulated a significant amount of assets relative to its payroll and by several measures is considered a mature plan. Accumulating assets to pay for future benefit obligations is responsible funding, but it does mean changes in the investment markets can have a significant impact on the SCR.



In terms of the SCR, for SamCERA with a 9.3 asset volatility ratio, a 10% investment gain or loss relative to the assumed 6.25% investment return assumption (that is, an investment return of -3.75%, or of 16.25%, translates to an 8.0% of pay increase (or decrease) in the SCR, all other things being equal. Since SamCERA uses actuarial smoothing, the increase would not be immediate, but would occur gradually over five years and could potentially be offset, or further increased, by future investment gains or losses or other factors.

In terms of the Funded Ratio, this level of volatility would result in an increase or decrease of approximately 9.1% in the Funded Ratio (on a market-value basis) from the current Funded Ratio of 88.3%.

Over the last several years, the County has been able to reduce the year-to-year variation in its actual contribution rate by contributing at a rate that is higher than the SCR.

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

The Plan's target asset allocation reflects a balance of risk and return. Investing in asset classes with a low-default-risk is expected to reduce future investment returns and therefore increase future contributions. However, the lower risk levels would be expected to result in lower year-to-year volatility in the SCR and Funding Ratio. A portfolio with a lower default risk might provide more benefit security for members if the associated liabilities are adequately funded. Conversely, investing in asset classes with higher expected returns and volatility is expected to decrease future contributions, but would increase the year-to-year volatility of the SCR and Funding Ratio and could provide less benefit security for members.

Effective for measurement dates February 15, 2023 or later, Actuarial Standard of Practice No. 4 (ASOP 4) states that when performing a funding valuation, the actuary should calculate and disclose a low-default-risk obligation measure (LDRM) of the benefits earned or accrued under the actuarial cost method used as of the measurement date. The actuary should select a discount rate derived from low-default-risk fixed income securities. We have used the Bond Buyer General Obligation 20-Bond Municipal Bond Index. The index is a 20-year high quality AA municipal bond rate and, based on Section 3.11.c. of ASOP 4, we believe this index meets the requirements for a discount rate for the LDRM. The index was 3.65% as of June 30, 2023.

Note that the Governmental Accounting Standard Board (GASB) requires that the discount rate used for financial reporting after a pension plan has depleted its assets be based on an index such as the Bond Buyer index. If the Plan had no assets in an irrevocable trust meeting the requirements of GASB 68, the employers would reflect the entire Total Pension Liability using such a discount rate on the employers' balance sheets.

The following is a summary of the results comparing the LDRM to the Plan's current assumption.

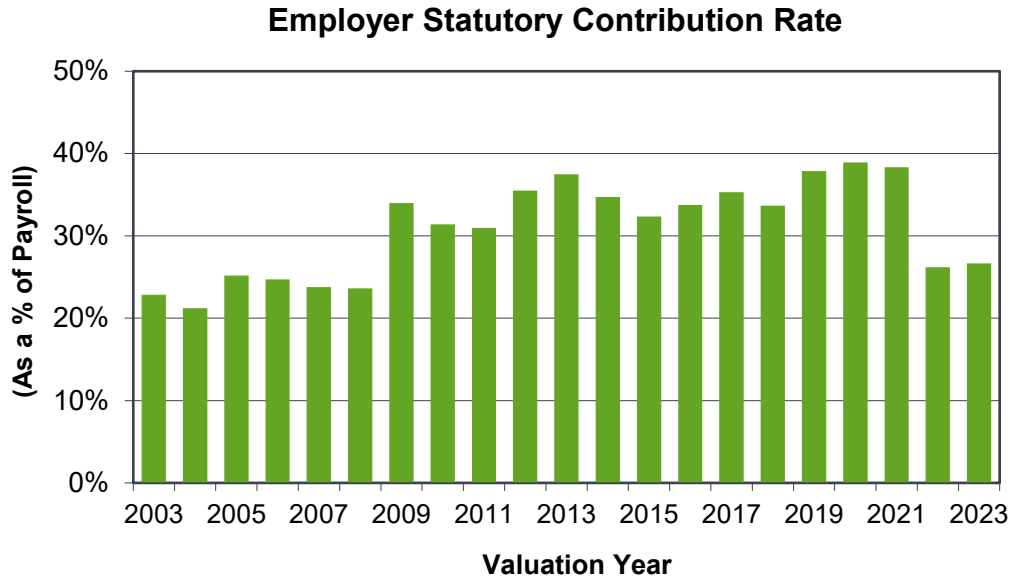
	Bond Buyer Index	Current Assumption
Discount Rate	3.65%	6.25%
Actuarial Accrued Liability as of June 30, 2023 <sup>1,2</sup>	\$10,257,977	\$7,035,641
Funding Ratio - Valuation Assets	60.6%	88.3%
Funding Ratio - Market Value of Assets	58.5%	85.4%

1. Calculated using the same actuarial assumptions and methods as used for this valuation, except for the discount rate.

2. Amounts in thousands of dollars

**Historical Variation in Statutory Contribution Rate**

One way to assess future risks is to look at historical measurements. The following graph shows how the SCR has varied over the last 20 years under various investment return and assumption environments.



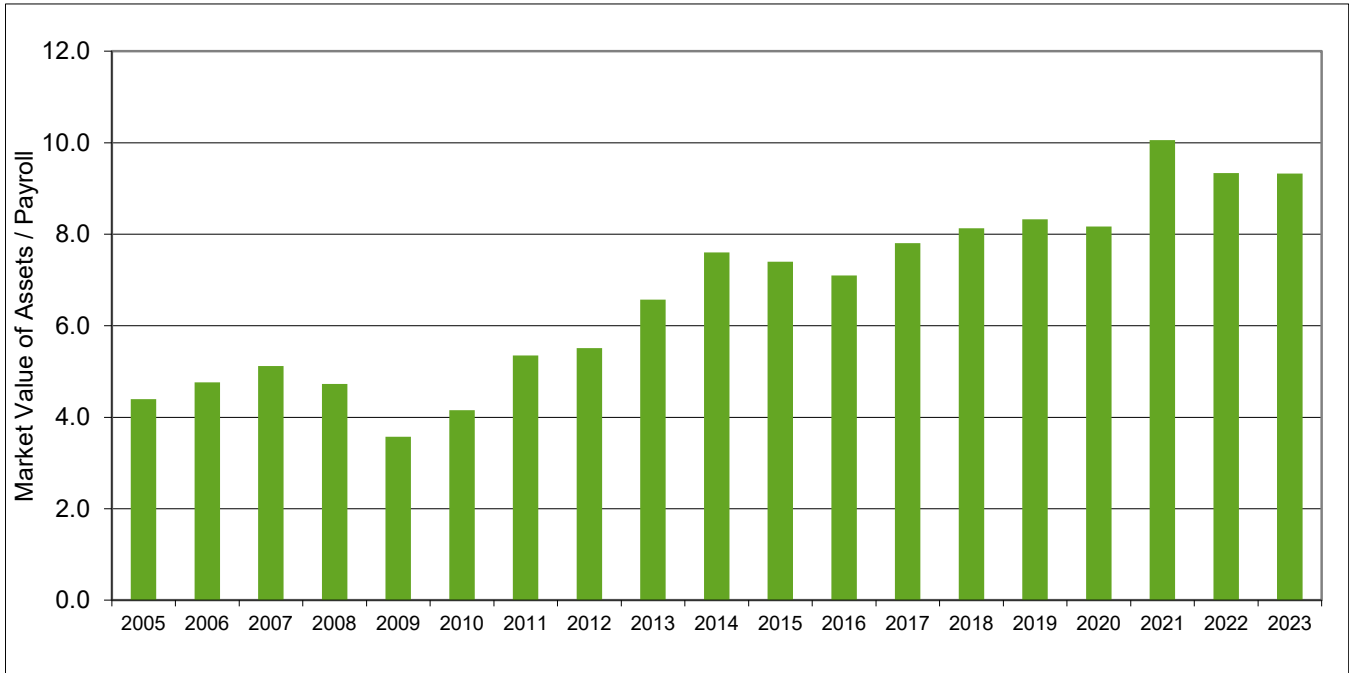
**Asset and Liability Volatility Ratios**

Asset and Liability Volatility Ratios are a measure of the level of assets (or liabilities) to payroll. In general, a higher ratio means that the SCR is more sensitive to changes in levels of assets or liabilities. Asset and Liability Volatility Ratios are shown in Exhibit 22.

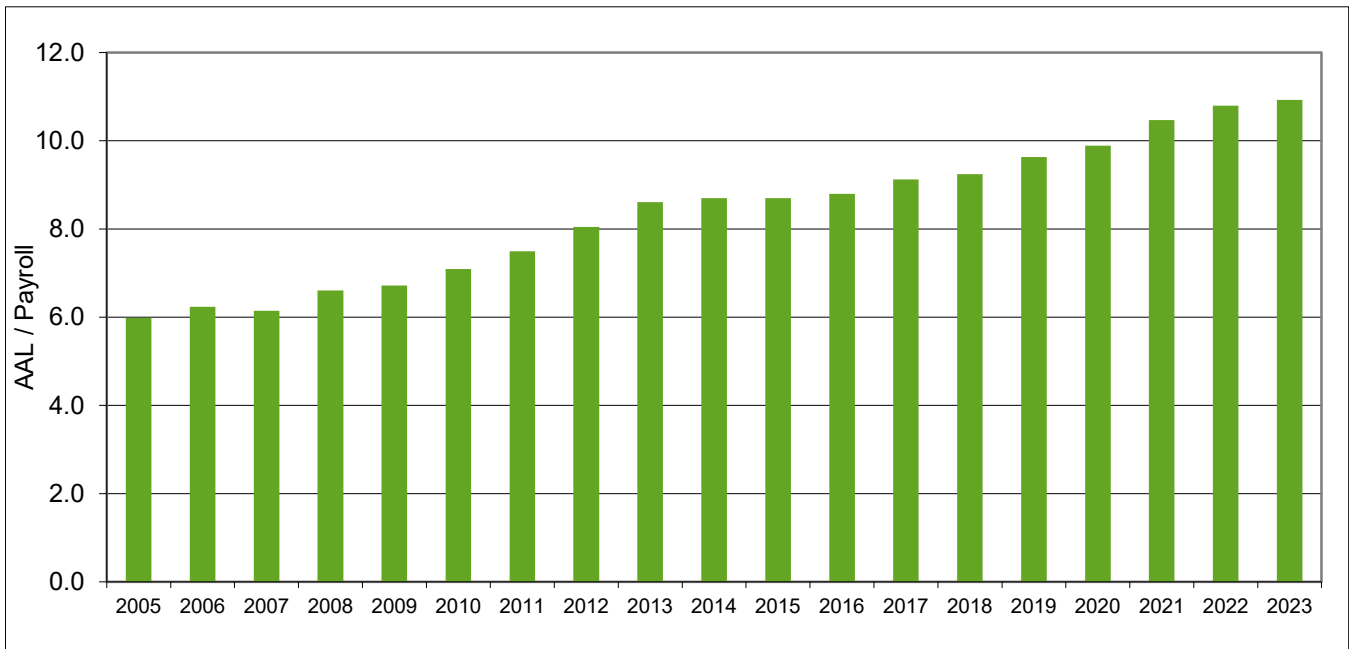
As shown in the table on the first page of this section and in Exhibit 22 (following), in the current valuation SamCERA has an Asset Volatility Ratio of 9.3 and a Liability Volatility Ratio of 10.9.

**Exhibit 22**  
**Asset and Liability Volatility Ratios**

**Asset Volatility Ratios**



**Liability Volatility Ratios**



This work product was prepared solely for SamCERA for the purposes described herein and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

## Appendix A Actuarial Procedures and Assumptions

The actuarial procedures and assumptions to be used in the June 30, 2023 valuation are described in this section. Except as noted, the assumptions were reviewed and changed as a result of the 2023 Investigation of Experience Study.

The actuarial assumptions used in the valuations are intended to estimate the future experience of the members of SamCERA and of SamCERA itself in areas that affect the projected benefit flow and anticipated investment earnings. Any variations in future experience from that expected from these assumptions will result in corresponding changes in the estimated costs of SamCERA's benefits.

Table A-1 summarizes the assumptions. The mortality rates are taken from the sources listed.

Tables A-2 and A-3 show how members are expected to leave retired status due to death.

Table A-4 presents the probability of refund of contributions upon termination of employment while vested.

Table A-5 presents the expected annual percentage increase in salaries.

Tables A-6 to A-9 present the probabilities a member will leave the system for various reasons.

NOTE: Assumptions for Probation members are assumed to be the same as Safety members unless otherwise noted.

### Actuarial Cost Method

The actuarial valuation is prepared using the entry age actuarial cost method (CERL 31453.5). Under the principles of this method, the actuarial present value of the projected benefits of each individual included in the valuation is allocated as a level percentage of the individual's projected compensation between entry age and assumed exit (until maximum retirement age).

The portion of the actuarial present value of benefits allocated to a valuation year is called the normal cost. The portion of the actuarial present value not provided for at a valuation date by the sum of (a) the actuarial value of the assets, and (b) the actuarial present value of future normal costs is called the Unfunded Actuarial Accrued Liability (UAAL).

### Funding Method

The UAAL as of June 30, 2023 is amortized as a level percentage of the projected salaries of present and future members of SamCERA over a 15-year period beginning July 1, 2024. This is commonly referred to as a "closed amortization method". Actuarial gains and losses after the June 30, 2023 valuation are amortized over new closed 15-year periods from the respective dates the new contribution layers are effective.

For each UAAL contribution rate group (General, Safety, and Probation), the UAAL contribution rate is the greater of 1) the UAAL rate under the 15-year layered amortization before reflecting any Supplemental Contribution Accounts (SCAs); and 2) the UAAL contribution rate that was effective July 2023 before reflecting any SCAs. The Statutory Contribution Rate is then set equal to the employer normal cost rate for the Plan plus the greater of 1) and 2) for each UAAL contribution rate group reduced for any offsets from the SCAs as of the current valuation date.

The SCA (CSCA for the County UAAL and DSCA for the SMCM&VCD) offset amounts are calculated using a similar closed amortization method to the UAAL rate described above except that the date of the first layers established were June 30, 2014 (CSCA) and June 30, 2016 (DSCA). Effective with the June 30, 2018 valuation, the DSCA balance is amortized over five years, beginning July 1, 2019. All layers were re-amortized as of June 30, 2018. Due to the relatively small remaining DSCA balance and layers as of June 30, 2023 and the

remaining period of the five-year amortizations, effective with the fiscal year beginning July 1, 2023 the remaining DSCA balance is recognized over a single fiscal year.

### **Records and Data**

The data used in this valuation consist of financial information and the age, service, and income records for active and inactive members and their survivors. All of the data were supplied by SamCERA and are accepted for valuation purposes without audit.

### **Replacement of Terminated Members**

The ages and relative salaries at entry of future members are assumed to follow a new entrant distribution based on the pattern of current members. Under this assumption, the normal cost rates for active members will remain fairly stable in future years unless there are changes in the governing law, the actuarial assumptions or the pattern of the new entrants.

### **Growth in Membership**

For benefit determination purposes, no growth in the membership of SamCERA is assumed. For funding purposes, if amortization is required, the total payroll of covered members is assumed to grow due to the combined effects of future wage increases of current active members and the replacement of the current active members by new employees. No growth in the total number of active members is assumed.

### **Internal Revenue Code Section 415 Limit**

The Internal Revenue Code Section 415 maximum benefit limitations are not reflected in the valuation for funding purposes. Any limitation is reflected in a member's benefit after retirement, except for Plan 7 members which cannot receive benefits in excess of the 415 limit. For Plan 7 members, the benefit levels, combined with the limited compensation are low enough that it is unlikely the 415 limit would apply.

### **Internal Revenue Code Section 401(a)(17)**

The Internal Revenue Code Section 401(a)(17) maximum compensation limitation is not reflected in the valuation for funding purposes. Any limitation is reflected in a member's benefit after retirement.

### **Government Code Section 7522.10**

The maximum compensation limit under Government Code 7522.10 is reflected in the valuation for funding purposes. Any limitation is also reflected in a member's benefit after retirement.

### **Employer Contributions**

The statutory employer contribution rate is set by the Retirement Board based on actuarial valuations.

### **Member Contributions**

The member contribution rates vary by entry age (except for Plan 7) and are described in the law. Code references are shown in Appendix B of the valuation report. The methods and assumptions used are detailed later in this section.

The individual member rates by entry age, plan, and class are illustrated in Appendix D of the valuation report.

**Valuation of Assets**

Assets are valued using a modified five-year smoothed method based on the difference between the expected market value and the actual market value of the assets as of the end of each six-month period (12/31 and 6/30). The expected market value is the prior period's market value increased with the net increase in the cash flow of funds, all increased with interest during the period at the expected investment return rate assumption.

Effective June 30, 2018 all deferred gains and losses were combined into a single amount to be recognized over a five-year (10 six-month) period. Beginning with the six-month period immediately following the June 30, 2018 valuation, offsetting of current period gains or losses against prior period gains or losses occur, as follows: to the extent there is a loss for the period, it shall be used to offset any unrecognized gains from prior periods in the order of oldest to most recent. Any remaining loss for the period is recognized over a five-year (10 six-month) period. Similarly, any gain for the period shall be offset against unrecognized losses from prior periods.

The gross preliminary Actuarial Value of Assets is equal to the Market Value of Assets less any of the remaining unrecognized differences. A 20% corridor is then applied, so that the gross Actuarial Value of Assets cannot be greater than 120% of the Market Value of Assets nor less than 80% of the Market Value of Assets.

The Valuation Assets used in the calculation of the SCR are equal to the gross Actuarial Value of Assets less any non-valuation reserves.

**Investment Earnings and Expenses**

The future investment earnings of the assets of SamCERA are assumed to accrue at an annual rate of 6.25% compounded annually, net of both investment and administrative expenses. This rate was adopted effective June 30, 2021.

**CPI Inflation**

The CPI inflation assumption is used in the determination of assumptions for individual salary increases, overall wage growth, and postretirement benefit increases. The CPI inflation assumption is 2.75% per year effective June 30, 2023.

**Postretirement Benefit Increases**

Postretirement increases are described in Appendix B. Assumed increases for valuation purposes are:

	General	Safety	Probation
Plan 1	2.75%	2.75%	2.75%
Plan 2	2.65%	2.65%	2.65%
Plan 3	0.00%	N/A	N/A
Plans 4, 5, and 7	1.90%	1.90%	1.90%
Plan 6	N/A	1.90%	1.90%

Assumed Plan 1 General and Safety COLAs are set at the CPI inflation assumption of 2.75% per year. Since Plan 2 and Plans 4-7 do not have a COLA bank, it is expected that increases will be limited in some years. This reduces the overall expected rate and is reflected in a lower assumed increase. These rates were adopted effective June 30, 2023.

### Interest on Member Contributions

The annual credited interest rate on member contributions is assumed to be 6.25% compounded semi-annually (3.125% per six-month period) for an annualized rate of 6.35%. This rate was adopted effective June 30, 2021 for valuation purposes; the change in member crediting is effective July 1, 2022.

### Individual Salary Increases

Salaries increases of individual members are assumed to include the following components: (1) a general wage growth assumption that applies to all members, and (2) an individual-specific increase due to promotion and longevity based on years of service.

The rates of annual salary increase due to promotion and longevity assumed for the purpose of the valuation are illustrated in Table A-5. The general wage growth assumption is 3.25% per year. This includes a 2.75% CPI inflation component and a 0.50% productivity (or "real wage growth") component. This assumption was adopted effective June 30, 2023.

Increases are assumed to occur mid-year. The mid-year timing reflects that salary increases occur throughout the year, or on average mid-year.

SamCERA supplied two types of compensation data:

- 1) pensionable pay from the most recent bi-weekly pay period; and
- 2) pensionable pay from the prior year.

We annualized bi-weekly pay and then used the greater of the two amounts.

Note that if annualized Final Average Compensation (provided by SamCERA) is greater than the above determined amount, then it is used to determine retirement benefits.

### Growth in Payroll

The overall pensionable payroll of SamCERA active members is assumed to increase at 3.25% per annum. This assumption was adopted effective June 30, 2023.

### PEPRA Compensation Limit

The PEPRA compensation limit is assumed to increase in line with the Consumer Prices Index for All Urban Consumers (CPI-U) U.S City Average. We assume that CPI-U will increase at the rate of 2.50% per year.

This assumption was adopted effective June 30, 2023.

### Social Security Wage Base

Plan 3 members have their benefits offset by an assumed Social Security Benefit. For valuation funding purposes, we need to project the Social Security Benefit. We assume the current Social Security provisions will continue and the annual Wage Base will increase at the rate of 2.75% per year. Note, statutory provisions describe how to compute a member's offset amount at time of termination or retirement. This assumption was adopted effective June 30, 2023.

**Retirement**

Retirement rates vary by age, service and plan, and are shown in Tables A-7 and A-9.

All General members who attain age 75 and all Safety members who attain age 65 are assumed to retire immediately. Additionally, if a member's benefit is equal to or greater than the 100% of compensation limit, they are also assumed to retire immediately. For purposes of the valuation, immediate retirement is assumed at:

- Age 62 with 38 years of service (General, Plans 1, 2, and 4)
- Age 65 with 41 years of service (General Plan 5)
- Age 67 with 40 years of service (General Plan 7)
- Age 50 with 33 years of service (Safety & Probation, Plans 1, 2, and 4)
- Age 55 with 33 years of service (Safety & Probation Plan 5)
- Age 55 with 38 years of service (Safety & Probation Plan 6)
- Age 57 with 38 years of service (Safety & Probation Plan 7)

Deferred vested members are assumed to retire at the later of current age and:

- Age 58 (General Members, except Plan 3 and Plan 7)
- Age 65 (General Plan 3 Members)
- Age 62 (General Plan 7 Members)
- Age 50 (Probation and Safety members)

The retirement rates were adopted effective June 30, 2023.

**Disability**

The rates of disability used in the valuation are shown in Tables A-6 and A-8. The disability rates were adopted effective June 30, 2023.

**Retiree Mortality – Other Than Disabled Members**

The same postretirement mortality rates are used in the valuation for active members, deferred members, members retired for service, and beneficiaries. These rates are shown in Table A-2. Beneficiary mortality is assumed to be the same as for healthy members. Beneficiaries are assumed to be of the opposite sex and have the same mortality as General members.

Class	Gender	Proposed Table
General	Male	PubG-2010 (90%) Healthy Retiree Male
General	Female	PubG-2010 (90%) Healthy Retiree Female
Safety	Male	PubS-2010 (90%) Healthy Retiree Male
Safety	Female	PubS-2010 (90%) Healthy Retiree Female

All mortality rates are projected with the MP-2021 Mortality Improvement Scale.

The rates of retired mortality were adopted effective June 30, 2023.



**Retiree Mortality – Disabled Members**

For current and future disabled members, the mortality rates used in the valuation are shown in Table A-3.

Class	Gender	Proposed Table
General	Male	PubG-2010 (100%) Disabled Retiree Male *
General	Female	PubG-2010 (100%) Disabled Retiree Female *
Safety	Male	PubS-2010 (100%) Disabled Retiree Male
Safety	Female	PubS-2010 (100%) Disabled Retiree Female

\* Disabled General mortality rates are 100% of the standard table at ages 85 and above; 60% at ages 65 and below; and graded from 60% to 100% at 2% per year between age 65 and age 85.

All mortality rates are projected with the MP-2021 Mortality Improvement Scale.

The rates of mortality were adopted effective June 30, 2023.

**Mortality while in Active Status**

For active members, the mortality rates used in the valuation rates are shown in Tables A-6 and A-8.

Class	Gender	Proposed Table
General	Male	PubG-2010 (90%) Employee Male
General	Female	PubG-2010 (90%) Employee Female
Safety	Male	PubS-2010 (90%) Employee Male
Safety	Female	PubS-2010 (90%) Employee Female

All mortality rates are projected with the MP-2021 Mortality Improvement Scale.

Safety members have an additional service-connected mortality rate of 0.01% per year.

These rates were adopted effective June 30, 2023.

**Other Terminations of Employment**

Tables A-6 and A-8 show the rates assumed in this valuation for future termination from active service other than for death, disability or retirement. These rates do not apply to members eligible for service retirement.

Terminating employees may withdraw their contributions immediately upon termination of employment and forfeit the right to further benefits, or they may leave their contributions with SamCERA. Former contributing members whose contributions are on deposit may later elect to receive a refund, may return to work or may remain inactive until becoming eligible to receive a retirement benefit under either SamCERA or a reciprocal retirement system. All terminating members who are not eligible for vested benefits are assumed to withdraw their contributions immediately.

The rates of termination were adopted effective June 30, 2023.

### Probability of Refund

Table A-4 shows the assumed probabilities that vested members will withdraw their contributions and elect a refund immediately upon termination and the probability the remaining members will elect a deferred vested benefit. For Plan 3, 100% of members are assumed to elect a vested benefit. All non-vested members are assumed to elect a refund and withdraw their contributions.

The probability of refund assumptions were adopted effective June 30, 2023.

### Probability of Eligible Survivor

For members not currently in pay status, 75% of all males and 55% of all females are assumed to have eligible survivors (spouses or qualified domestic partners). Survivors are assumed to be three years younger than male members and two years older than female members. Survivors are assumed to be of the opposite sex as the member. There is no explicit assumption for children's benefits. We believe the survivor benefits based on this assumption are sufficient to cover children's benefits as they occur.

### Reciprocal Benefits – current active members

Future former members (i.e., those currently active with SamCERA participating employers who are expected to terminate employment in the future but not immediately retire or elect a refund of contributions) are assumed to immediately join a reciprocal agency upon termination of employment at the following rates:

- 100% of General and Safety members who terminate employment before completing five years of service.
- 30% of General members who terminate employment after completing at least five years of service.
- 40% of Safety members who terminate employment after completing at least five years of service.

For future reciprocal members, salaries are assumed to increase at the same rate as if they had remained in active employment with SamCERA participating employers. For current deferred vested members, eligibility is based on the data supplied by SamCERA and future salaries are assumed to increase at 3.77% annually for General members and 4.13% annually for Safety members.

This assumption was adopted effective June 30, 2023.

### Part-Time Employees

For valuation purposes, part-time employees are assumed to continue working the same number of hours in the future.

### Adjustment to Plan 3 Normal Cost Rate

Plan 3 members are eligible to transfer to Plans 2, 4 or 5 (depending on entry date) after five years of service. We have adjusted the Plan 3 Normal Cost to account for this. The adjustment is equal to 50% of the difference between the unadjusted Plan 3 Normal Cost rate and the Plan 4 Normal Cost rate.

## Member Contribution Rate Assumptions

The following assumptions summarize the procedures used to compute member contribution rates based on entry age:

In general, the member rate is determined by the present value of the future benefit (PVFB) payable at retirement age, divided by the present value of all future salaries payable between age at entry and retirement age. For these purposes, per the CERL:

- A. The annuity factor used for General members is based on a 33% / 67% blend of the male and female annuity factors using current valuation assumptions and no COLA. For Safety members it is based on a 75% / 25% blend of the male and female annuity factors using current valuation assumptions. The valuation mortality tables use a static projection to 2044.
- B. The annuity factor used in determining the present value of future benefits (PVFB) at entry age is equal to the life only annuity factor at 6.25%.
- C. The Final Compensation is based on the salary paid in the year prior to attaining the retirement age.
- D. Example: For a Plan 4 member who enters at age 54 or earlier, the Final Compensation at retirement (age 55) will be the monthly average of the annual salary for age 54.
- E. For purposes of calculating the value of the member's future contribution, interest is assumed to be credited at 6.25% semiannually (3.125% for each six-month period) for a 6.35% annual rate.
- F. Member Rates are assumed to increase with entry age, except in Plan 7. There are a few exceptions at the higher entry ages where the calculated rate is less than the previous entry age. In these cases the member contribution rate is adjusted so that it is no less than the value for the previous entry age.

Member rates for all Plans 1, 2, 4, 5, and 6 members are loaded to account for a 50% COLA share. The COLA loads are applied to the otherwise applicable basic member rates prior to the addition of any cost-sharing rates.

For Plan 7, the member contribution rate is equal to one-half of the aggregate Normal Cost of the respective plan.

## Valuation of Current Deferred Members

For current deferred members, reciprocal status eligibility is based on the data supplied by SamCERA. These members are assumed to keep their accounts with SamCERA and retire as specified in this section. For these members, future salaries are assumed to increase at 3.77% annually for General members and 4.13% annually for Safety members.

Current vested deferred members without reciprocal status eligibility are assumed to keep their accounts with SamCERA and retire as specified in this section. An adjustment for these individuals such that the greater of the Final Average Compensation and annualized bi-weekly pay limited to two times the Final Average Compensation is used.

Current non-vested deferred members without reciprocal status eligibility are assumed to take a refund of their contributions.

## Deferred Member Mortality

Rates of mortality for members after termination from employment and before retirement are the same as Postretirement Mortality – Other Than Disabled Members.

**Table A-1**  
**Summary of Valuation Assumptions as of June 30, 2023**

Economic assumptions	
A. General wage increases	3.25%
B. Investment earnings	6.25%
C. Growth in active membership	0.00%
D. CPI-U inflation assumption	2.50%
E. CPI inflation assumption	2.75%
Demographic assumptions	
A. Salary increases due to service	Table A-5
B. Service Retirement from active service	Tables A-7 & A-9
C. Separation from active service (other than Service Retirement)	Tables A-6 & A-8
D. Probability of refund of contributions upon vested termination	Table A-4
E. Mortality for active members after termination and service retired members	Table A-2
F. Mortality for members retired for disability	Table A-3
G. Mortality for beneficiaries	Table A-2

**Table A-2**  
**Mortality for Members Retired for Service**

<b>Age</b>	<b>General Male</b>	<b>General Female</b>	<b>Safety Male</b>	<b>Safety Female</b>
20	0.067%	0.032%	0.055%	0.019%
25	0.050%	0.022%	0.050%	0.023%
30	0.065%	0.036%	0.055%	0.032%
35	0.085%	0.056%	0.063%	0.042%
40	0.119%	0.086%	0.079%	0.058%
45	0.176%	0.135%	0.110%	0.078%
50	0.268%	0.200%	0.173%	0.134%
55	0.388%	0.257%	0.275%	0.232%
60	0.554%	0.346%	0.457%	0.401%
65	0.822%	0.552%	0.793%	0.693%
70	1.373%	0.957%	1.411%	1.196%
75	2.404%	1.695%	2.543%	2.066%
80	4.297%	3.024%	4.593%	3.566%
85	7.732%	5.585%	8.222%	6.158%
90	13.205%	10.338%	14.274%	10.634%

Notes:

1. Mortality rates shown are those applicable for the fiscal year beginning in 2010 (base year).
2. Annual projected improvements are assumed in years after 2010 based on mortality improvement scale MP-2021.

**Table A-3**  
**Mortality for Members Retired for Disability**

<b>Age</b>	<b>General Male</b>	<b>General Female</b>	<b>Safety Male</b>	<b>Safety Female</b>
20	0.247%	0.140%	0.121%	0.053%
25	0.167%	0.098%	0.110%	0.065%
30	0.212%	0.154%	0.122%	0.089%
35	0.275%	0.241%	0.138%	0.121%
40	0.387%	0.377%	0.174%	0.164%
45	0.604%	0.591%	0.242%	0.223%
50	0.963%	0.890%	0.353%	0.304%
55	1.268%	1.045%	0.480%	0.461%
60	1.502%	1.174%	0.735%	0.699%
65	1.826%	1.354%	1.186%	1.061%
70	2.731%	2.003%	1.907%	1.610%
75	4.154%	3.202%	3.241%	2.443%
80	6.613%	5.406%	5.598%	3.962%
85	10.815%	9.331%	9.213%	6.842%
90	16.253%	13.665%	15.860%	11.815%

**Table A-4**  
**Immediate Refund of Contributions upon Termination of Employment**  
**(Excludes Plan 3)**

<b>Years of Service</b>	<b>General</b>	<b>Safety</b>
0	80%	60%
1	80%	60%
2	80%	60%
3	80%	60%
4	80%	60%
5	23%	25%
6	23%	25%
7	23%	25%
8	23%	25%
9	23%	25%
10	23%	25%
11	15%	25%
12	15%	21%
13	15%	18%
14	15%	15%
15	15%	12%
16	15%	9%
17	15%	6%
18	15%	3%
19	15%	0%
20	15%	0%
21	12%	0%
22	9%	0%
23	6%	0%
24	3%	0%
25	0%	0%
26	0%	0%
27	0%	0%
28	0%	0%
29	0%	0%
30 & Up	0%	0%

**Table A-5  
 Annual Increase in Salary**

Years of Service	Due to Promotion and Longevity		Total Annual Increase <sup>(1)</sup>	
	General	Safety	General	Safety
<1	6.50%	6.50%	9.96%	9.96%
1	4.60%	5.00%	8.00%	8.41%
2	3.50%	4.00%	6.86%	7.38%
3	2.60%	3.00%	5.94%	6.35%
4	2.00%	2.30%	5.32%	5.63%
5	1.60%	1.80%	4.90%	5.11%
6	1.30%	1.40%	4.59%	4.70%
7	1.10%	1.25%	4.39%	4.54%
8	0.95%	1.10%	4.23%	4.39%
9	0.85%	1.00%	4.13%	4.28%
10	0.80%	0.95%	4.08%	4.23%
11	0.75%	0.90%	4.02%	4.18%
12	0.70%	0.85%	3.97%	4.13%
13	0.65%	0.85%	3.92%	4.13%
14	0.60%	0.85%	3.87%	4.13%
15	0.55%	0.85%	3.82%	4.13%
16	0.50%	0.85%	3.77%	4.13%
17	0.50%	0.85%	3.77%	4.13%
18	0.50%	0.85%	3.77%	4.13%
19	0.50%	0.85%	3.77%	4.13%
20 or More	0.50%	0.85%	3.77%	4.13%

1. The total expected increase in salary is the increase due to promotion and longevity, adjusted for assumed 3.25% per annum increases in the general wage. The total result is compounded rather than additive.



### Rates of Separation from Active Service Tables A-6 to A-9

A schedule of the probabilities of termination of employment due to the following causes can be found on the following pages:

Service Retirement:	Member retires after meeting age and service requirements for reasons other than disability.
Withdrawal:	Member terminates and elects a refund of member contributions, or a deferred retirement benefit.
Service Disability:	Member receives disability retirement; disability is service related.
Ordinary Disability:	Member receives disability retirement; disability is not service related.
Service Death:	Member dies before retirement; death is service related.
Ordinary Death:	Member dies before retirement; death is not service related.

Each rate represents the probability that a member will separate from service at each age due to the particular cause. For example, a rate of 0.0300 for a member's service retirement at age 50 means we assume that 30 out of 1,000 members who are age 50 will retire at that age.

Each table represents the detailed rates needed for each SamCERA plan by sex:

- A-6: Rates of Separation from Active Service (other than Service Retirement) – General members
- A-7: Rates of Service Retirement from Active Service – General members
- A-8: Rates of Separation from Service (other than Service Retirement) – Safety members
- A-9: Rates of Service Retirement from Active Service – Safety members

**Table A-6**  
**Rate of Separation from Active Service (other than Service Retirement)**  
**General Plans – Male and Female**

Age	Plans 1, 2, 4, 5, 7 <sup>1</sup>			All Plans		Years of Service	All Plans
	Service Disability	Ordinary Disability	Service Death	Ordinary Death (Male)	Ordinary Death (Female)		Other Terminations
18	0.00025	0.00015	0.00000	0.00032	0.00012	0	0.15000
19	0.00025	0.00015	0.00000	0.00034	0.00012	1	0.13000
20	0.00025	0.00015	0.00000	0.00033	0.00012	2	0.10500
21	0.00025	0.00015	0.00000	0.00032	0.00011	3	0.08500
22	0.00025	0.00015	0.00000	0.00030	0.00010	4	0.07500
23	0.00025	0.00015	0.00000	0.00028	0.00009	5	0.06700
24	0.00025	0.00015	0.00000	0.00026	0.00008	6	0.06000
25	0.00025	0.00015	0.00000	0.00025	0.00008	7	0.05400
26	0.00025	0.00015	0.00000	0.00027	0.00009	8	0.04900
27	0.00025	0.00015	0.00000	0.00028	0.00010	9	0.04400
28	0.00025	0.00015	0.00000	0.00030	0.00011	10	0.04100
29	0.00025	0.00015	0.00000	0.00031	0.00012	11	0.03800
30	0.00025	0.00015	0.00000	0.00032	0.00014	12	0.03500
31	0.00025	0.00015	0.00000	0.00034	0.00014	13	0.03300
32	0.00025	0.00015	0.00000	0.00036	0.00016	14	0.03100
33	0.00025	0.00015	0.00000	0.00038	0.00017	15	0.02900
34	0.00025	0.00015	0.00000	0.00040	0.00019	16	0.02700
35	0.00025	0.00015	0.00000	0.00042	0.00021	17	0.02500
36	0.00025	0.00015	0.00000	0.00045	0.00023	18	0.02300
37	0.00025	0.00015	0.00000	0.00048	0.00025	19	0.02100
38	0.00025	0.00015	0.00000	0.00051	0.00027	20	0.01900
39	0.00025	0.00015	0.00000	0.00055	0.00030	21	0.01700
40	0.00035	0.00020	0.00000	0.00059	0.00032	22	0.01500
41	0.00045	0.00025	0.00000	0.00064	0.00036	23	0.01400
42	0.00055	0.00030	0.00000	0.00069	0.00039	24	0.01300
43	0.00065	0.00035	0.00000	0.00075	0.00042	25	0.01200
44	0.00075	0.00040	0.00000	0.00081	0.00046	26	0.01100
45	0.00080	0.00055	0.00000	0.00088	0.00050	27	0.01000
46	0.00085	0.00070	0.00000	0.00096	0.00055	28	0.01000
47	0.00090	0.00085	0.00000	0.00104	0.00059	29	0.01000
48	0.00095	0.00100	0.00000	0.00114	0.00064	30 & Above <sup>(2)</sup>	0.01000
49	0.00100	0.00105	0.00000	0.00124	0.00069		
50	0.00120	0.00110	0.00000	0.00134	0.00075		
51	0.00140	0.00115	0.00000	0.00146	0.00081		
52	0.00160	0.00120	0.00000	0.00158	0.00087		
53	0.00180	0.00120	0.00000	0.00170	0.00095		
54	0.00200	0.00120	0.00000	0.00183	0.00102		
55	0.00215	0.00120	0.00000	0.00197	0.00111		
56	0.00230	0.00120	0.00000	0.00212	0.00120		
57	0.00245	0.00120	0.00000	0.00230	0.00130		
58	0.00245	0.00120	0.00000	0.00248	0.00140		
59	0.00245	0.00120	0.00000	0.00266	0.00153		
60	0.00245	0.00120	0.00000	0.00287	0.00167		
61	0.00245	0.00120	0.00000	0.00310	0.00183		
62	0.00245	0.00120	0.00000	0.00334	0.00200		
63	0.00245	0.00120	0.00000	0.00361	0.00220		
64	0.00245	0.00120	0.00000	0.00390	0.00242		
65	0.00245	0.00120	0.00000	0.00421	0.00266		
66	0.00245	0.00120	0.00000	0.00455	0.00294		
67	0.00245	0.00120	0.00000	0.00493	0.00326		
68	0.00245	0.00120	0.00000	0.00535	0.00360		
69	0.00245	0.00120	0.00000	0.00581	0.00398		
70	0.00245	0.00120	0.00000	0.00633	0.00440		
71	0.00245	0.00120	0.00000	0.00690	0.00487		
72	0.00245	0.00120	0.00000	0.00753	0.00538		
73	0.00245	0.00120	0.00000	0.00824	0.00595		
74	0.00245	0.00120	0.00000	0.00901	0.00658		

1. General Plan 3 does not provide pre-retirement death or disability benefits. No assumptions are made for disability or service connected death benefits for active members of General Plan 3.

2. 0.00% probability of termination with 30 years of service and above for Plans 1, 2, 4, and 5.

**Table A-7**  
**Rates of Service Retirement from Active Service**  
**General Plans – Male and Female**

Age	Plans 1, 2, 4			Plans 5, 7			Plan 3
	Less than 20 Years of Service	20 to 29 Years of Service	30+ Years of Service	Less than 20 Years of Service	20 to 29 Years of Service	30+ Years of Service	All Years of Service
50	0.02250	0.03600	0.05100	0.01800	0.02880	0.04080	N/A
51	0.02250	0.03600	0.05100	0.01800	0.02880	0.04080	N/A
52	0.02250	0.03600	0.05100	0.01800	0.02880	0.04080	N/A
53	0.03000	0.04800	0.06800	0.02400	0.03840	0.05440	N/A
54	0.03750	0.06000	0.08500	0.03000	0.04800	0.06800	N/A
55	0.07500	0.12000	0.17000	0.06000	0.09600	0.13600	0.03000
56	0.03750	0.06000	0.08500	0.03000	0.04800	0.06800	0.03000
57	0.05625	0.09000	0.12750	0.04500	0.07200	0.10200	0.03000
58	0.07500	0.12000	0.17000	0.06000	0.09600	0.13600	0.03000
59	0.11250	0.18000	0.25500	0.09000	0.14400	0.20400	0.03000
60	0.11250	0.18000	0.25500	0.09000	0.14400	0.20400	0.03000
61	0.15000	0.24000	0.34000	0.12000	0.19200	0.27200	0.06000
62	0.18750	0.30000	0.42500	0.15000	0.24000	0.34000	0.15000
63	0.16500	0.26400	0.37400	0.13200	0.21120	0.29920	0.10000
64	0.16500	0.26400	0.37400	0.13200	0.21120	0.29920	0.15000
65	0.22500	0.36000	0.51000	0.18000	0.28800	0.40800	0.30000
66	0.22500	0.36000	0.36000	0.18000	0.28800	0.40800	0.30000
67	0.22500	0.36000	0.36000	0.27000	0.43200	0.61200	0.30000
68	0.30000	0.36000	0.36000	0.22500	0.36000	0.36000	0.30000
69	0.30000	0.36000	0.36000	0.22500	0.36000	0.36000	0.30000
70	0.30000	0.36000	0.36000	0.22500	0.36000	0.36000	0.40000
71	0.30000	0.36000	0.36000	0.22500	0.36000	0.36000	0.40000
72	0.30000	0.36000	0.36000	0.22500	0.36000	0.36000	0.40000
73	0.30000	0.36000	0.36000	0.22500	0.36000	0.36000	0.40000
74	0.30000	0.36000	0.36000	0.22500	0.36000	0.36000	0.40000
75	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000

Notes:

1. Rates of retirement are 0% prior to attaining retirement eligibility in their respective plan.
2. 100% probability of retirement is assumed as follows:
  - at ages 62 and above with 38 or more years of service for General Plans 1, 2, and 4.
  - at ages 65 and above with 41 or more years of service for General Plan 5.
  - at ages 67 and above with 40 or more years of service for General Plan 7.

**Table A-8**  
**Rate of Separation from Active Service (other than Service Retirement)**  
**Safety and Probation – Male and Female**

Age	Service Disability	Ordinary Disability	Service Death	Ordinary Death (Male)	Ordinary Death (Female)	Years of Service	Other Terminations
18	0.00100	0.00000	0.00010	0.00033	0.00013	0	0.10000
19	0.00100	0.00000	0.00010	0.00036	0.00014	1	0.08000
20	0.00100	0.00000	0.00010	0.00037	0.00014	2	0.06000
21	0.00100	0.00000	0.00010	0.00037	0.00015	3	0.04500
22	0.00100	0.00000	0.00010	0.00036	0.00015	4	0.03500
23	0.00100	0.00000	0.00010	0.00035	0.00016	5	0.03000
24	0.00100	0.00000	0.00010	0.00034	0.00017	6	0.02600
25	0.00110	0.00000	0.00010	0.00033	0.00018	7	0.02300
26	0.00120	0.00000	0.00010	0.00034	0.00019	8	0.02100
27	0.00130	0.00000	0.00010	0.00035	0.00020	9	0.01900
28	0.00140	0.00000	0.00010	0.00036	0.00022	10	0.01700
29	0.00150	0.00000	0.00010	0.00037	0.00023	11	0.01500
30	0.00165	0.00000	0.00010	0.00037	0.00024	12	0.01350
31	0.00180	0.00000	0.00010	0.00038	0.00025	13	0.01200
32	0.00195	0.00000	0.00010	0.00039	0.00027	14	0.01100
33	0.00210	0.00000	0.00010	0.00040	0.00029	15	0.01000
34	0.00225	0.00000	0.00010	0.00041	0.00031	16	0.00900
35	0.00240	0.00000	0.00010	0.00042	0.00032	17	0.00800
36	0.00255	0.00000	0.00010	0.00044	0.00034	18	0.00700
37	0.00270	0.00000	0.00010	0.00045	0.00037	19	0.00600
38	0.00285	0.00000	0.00010	0.00048	0.00039	20 & Above <sup>(1)</sup>	0.00500
39	0.00300	0.00000	0.00010	0.00050	0.00041		
40	0.00315	0.00000	0.00010	0.00053	0.00044		
41	0.00330	0.00000	0.00010	0.00056	0.00047		
42	0.00345	0.00000	0.00010	0.00060	0.00050		
43	0.00360	0.00000	0.00010	0.00064	0.00053		
44	0.00375	0.00000	0.00010	0.00068	0.00057		
45	0.00390	0.00000	0.00010	0.00074	0.00060		
46	0.00405	0.00000	0.00010	0.00079	0.00064		
47	0.00420	0.00000	0.00010	0.00086	0.00068		
48	0.00435	0.00000	0.00010	0.00092	0.00072		
49	0.00450	0.00000	0.00010	0.00100	0.00077		
50	0.01000	0.00000	0.00010	0.00108	0.00082		
51	0.01200	0.00000	0.00010	0.00116	0.00087		
52	0.01300	0.00000	0.00010	0.00126	0.00093		
53	0.01400	0.00000	0.00010	0.00136	0.00098		
54	0.01500	0.00000	0.00010	0.00146	0.00104		
55	0.02000	0.00000	0.00010	0.00158	0.00111		
56	0.02000	0.00000	0.00010	0.00171	0.00118		
57	0.02000	0.00000	0.00010	0.00185	0.00126		
58	0.02000	0.00000	0.00010	0.00201	0.00133		
59	0.02000	0.00000	0.00010	0.00219	0.00142		
60	0.01750	0.00000	0.00010	0.00238	0.00151		
61	0.01750	0.00000	0.00010	0.00259	0.00160		
62	0.01750	0.00000	0.00010	0.00284	0.00171		
63	0.01750	0.00000	0.00010	0.00310	0.00182		
64	0.01750	0.00000	0.00010	0.00338	0.00194		

1. 0.00% probability of termination with 20 years of service and above for all Safety/Probation plans except Plan 7.

**Table A-9**  
**Rates of Service Retirement from Active Service**  
**Safety and Probation – Male and Female**

Age	Plans 1, 2, 4				Plans 5, 6, 7			
	Less than 15 Years of Service	15 to 19 Years of Service	20 to 24 Years of Service	25+ Years of Service	Less than 15 Years of Service	15 to 19 Years of Service	20 to 24 Years of Service	25+ Years of Service
45	0.00000	0.00000	0.05000	0.07500	0.00000	0.00000	0.04000	0.06000
46	0.00000	0.00000	0.05000	0.07500	0.00000	0.00000	0.04000	0.06000
47	0.00000	0.00000	0.05000	0.07500	0.00000	0.00000	0.04000	0.06000
48	0.00000	0.00000	0.05000	0.07500	0.00000	0.00000	0.04000	0.06000
49	0.00000	0.00000	0.20000	0.30000	0.00000	0.00000	0.16000	0.24000
50	0.13000	0.19500	0.26000	0.39000	0.10400	0.15600	0.20800	0.31200
51	0.13000	0.19500	0.26000	0.39000	0.10400	0.15600	0.20800	0.31200
52	0.13000	0.19500	0.26000	0.39000	0.10400	0.15600	0.20800	0.31200
53	0.13000	0.19500	0.26000	0.39000	0.10400	0.15600	0.20800	0.31200
54	0.13000	0.19500	0.26000	0.39000	0.10400	0.15600	0.20800	0.31200
55	0.13000	0.19500	0.26000	0.39000	0.10400	0.15600	0.20800	0.31200
56	0.13000	0.19500	0.26000	0.39000	0.10400	0.15600	0.20800	0.31200
57	0.16000	0.24000	0.32000	0.48000	0.16000	0.24000	0.32000	0.48000
58	0.16000	0.24000	0.32000	0.48000	0.16000	0.24000	0.32000	0.48000
59	0.13000	0.19500	0.26000	0.39000	0.13000	0.19500	0.26000	0.39000
60	0.20000	0.30000	0.40000	0.60000	0.20000	0.30000	0.40000	0.60000
61	0.20000	0.30000	0.40000	0.60000	0.20000	0.30000	0.40000	0.60000
62	0.20000	0.30000	0.40000	0.60000	0.20000	0.30000	0.40000	0.60000
63	0.20000	0.30000	0.40000	0.60000	0.20000	0.30000	0.40000	0.60000
64	0.20000	0.30000	0.40000	0.60000	0.20000	0.30000	0.40000	0.60000
65	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000

Notes:

1. Rates of retirement are 0% prior to attaining retirement eligibility in their respective plan.
2. 100% probability of retirement is assumed as follows:
  - with 33 or more years of service for Safety and Probation Plans 1, 2, and 4.
  - at ages 55 and above with 33 or more years of service for Safety and Probation Plan 5.
  - at ages 55 and above with 38 or more years of service for Safety and Probation Plan 6.
  - at ages 57 and above with 38 or more years of service for Safety and Probation Plan 7.

## Appendix B Summary of Benefit Provisions

All actuarial calculations are based on our understanding of the statutes governing the SamCERA as contained in the County Employees Retirement Law (CERL) of 1937, with provisions adopted by the SamCERA Board, effective through June 30, 2023. The benefit and contribution provisions of this law are summarized briefly below, along with corresponding references to the Code Section. This summary does not attempt to cover all the detailed provisions of the law.

### MEMBERSHIP IN RETIREMENT PLANS

The County has established 12 defined benefit plans based on a member's date of entry into SamCERA. Plans 1, 2, 4, 5, 6, and 7 are open to all members depending on their date of entry. Only General members are eligible for Plan 3. **Government Code Section**

Employees of the SMCM&VCD are eligible for participation in all General retirement plans, except for Plans 3 and 5.

- Plan 1:** Employees hired on or before July 5, 1980.
- Plan 2:** Employees hired after July 5, 1980 but on or before July 12, 1997.
- Plan 3:** General members hired on or before December 22, 2012 may have elected to participate in Plan 3. After five years of service, Plan 3 members can elect membership under the open eligible contributory plan. Members currently working in a contributory plan with Plan 3 service may purchase an upgrade of their Plan 3 service. (31496)
- Plan 4:** Employees hired after July 12, 1997 and before August 7, 2011 (General members, except Plan 5 transfers; see below); before July 10, 2011 (Probation members); and before January 8, 2012 (Safety members).
- Plan 5:** General members hired on or after August 7, 2011, and Deputy Sheriffs hired on or after January 8, 2012. Probation members hired on or after July 10, 2011 and Safety members (except Deputy Sheriffs) may elect this Plan. Members must be first hired before January 1, 2013 to be eligible to elect this Plan.  
After 10 years of service, General Plan 5 members can elect to transfer to Plan 4 and must pay the total actuarial equivalent cost of the increase in past service benefits at the date of transfer.
- Plan 6:** Probation members hired on or after July 10, 2011 and Safety members (except Deputy Sheriffs) may elect this Plan. Members must be first hired before January 1, 2013 to be eligible to elect this Plan.
- Plan 7:** Employees first hired on or after January 1, 2013.

## MEMBER CONTRIBUTIONS

### Basic:

**Plans 1, 2, 4, 5, and 6:** Contributions are based on the entry age and class of each member and are required of all members. See section 5 for details on this calculation. Current member rates are shown in Appendix D.

Basic contributions cease when general members are credited with 30 years of service in a contributory plan provided they were members of SamCERA or a reciprocal system on March 7, 1973, and continuously thereafter. All Safety members are eligible for the 30-year cessation of contributions. (31625.2, 31664.1)

**Plan 7:** Members contribute 50% of the aggregate Normal Cost rate for their Plan.

**Plan 3:** No member contributions are required under Plan 3.

### Cost-of-Living:

**Plans 1, 2, and 4:** All members of Plans 1, 2 and 4 contribute 50% of the cost of COLA benefits in addition to other current member rates and cost sharing, except as described in the following paragraph.

Members of SMCM&VCD do not contribute towards the COLA benefit.

**Plans 5 and 6:** All members of Plans 5 and 6 contribute 50% of the cost of the COLA.

**Plan 7:** Members contribute 50% of the aggregate Normal Cost rate for their Plan.

### Cost Sharing:

**General Members:** All members of Plans 1, 2, and 4 (except SMCM&VCD) contribute an additional 3.0% for cost sharing. (31678.2)

All other General members do not participate in cost sharing.

**MEMBER CONTRIBUTIONS (Continued)**

<b>Safety Members:</b>	<p>Deputy Sheriffs in Plans 1, 2, 4, and 5 contribute the following additional cost sharing rates based on age and service:</p> <table border="0" style="margin-left: 40px;"> <tr> <td style="padding-right: 20px;">If age 45 or older</td> <td style="text-align: right;">4.5%</td> </tr> <tr> <td colspan="2">If age is less than 45</td> </tr> <tr> <td style="padding-left: 20px;">▪ Service is less than 5 years:</td> <td style="text-align: right;">3.0%</td> </tr> <tr> <td style="padding-left: 20px;">▪ Service between 5 and 15 years:</td> <td style="text-align: right;">3.5%</td> </tr> <tr> <td style="padding-left: 20px;">▪ Service is more than 15 years:</td> <td style="text-align: right;">4.5%</td> </tr> </table> <p>Safety members (except Deputy Sheriffs) in Plans 1, 2, and 4 contribute an additional 5.0% cost sharing.</p> <p>Safety members (except Deputy Sheriffs) in Plan 5 contribute an additional 4.0% cost sharing.</p> <p>Safety members in Plan 6 and 7 do not participate in cost sharing.</p>	If age 45 or older	4.5%	If age is less than 45		▪ Service is less than 5 years:	3.0%	▪ Service between 5 and 15 years:	3.5%	▪ Service is more than 15 years:	4.5%	
If age 45 or older	4.5%											
If age is less than 45												
▪ Service is less than 5 years:	3.0%											
▪ Service between 5 and 15 years:	3.5%											
▪ Service is more than 15 years:	4.5%											
<b>Probation Members:</b>	<p>Members of Plans 1, 2, 4, and 5 contribute an additional 3.5% for cost sharing.</p> <p>Members of Plans 6 and 7 do not participate in cost sharing.</p>											
<b><u>Interest Crediting:</u></b>	<p>Interest is credited to contributions semiannually on June 30 and December 31 at an interest rate set by the Board of Retirement on amounts that have been on deposit for at least six months.</p>	(31591, 31700)										
<b><u>Employer Pick-Up:</u></b>	<p>Effective with the first pay period in July 2016, no employer provides for employer pick-up contributions.</p>											



**EMPLOYER CONTRIBUTIONS**

The employer (County, Courts, or District) contributes to the retirement fund a percent of the total compensation provided for all members based on an actuarial valuation and the recommendation of the actuary. (31453, 31453.5, 31453.6, 31454 31581)

**SERVICE RETIREMENT ALLOWANCE**

**Eligibility:**

**General Members:** All members of Plans 1, 2, 4, and 5 are eligible to retire after meeting one of the following age and service requirements: (31672)

- Age 50 with 10 years of service\*;
- Any age with 30 years of service; or
- Age 70 regardless of service.

Plan 3 members are eligible to retire at age 65 with 10 years of service. A reduced benefit is also payable at age 55 with 10 years of service. (31496)

Plan 7 members are eligible to retire at age 52 with 5 years of service.

\* For part-time employees, age 50 is replaced with age 55. (31672.1)

**Safety and Probation Members:** Members of all plans except Plan 7 are eligible to retire after meeting one of the following age and service requirements: (31663.25)

- Age 50 with 10 years of service;
- Any age with 20 years of service.

Plan 7 members are eligible to retire at age 50 with 5 years of service.

**Final Average Compensation:**

**Plans 1 and 2:** Monthly average of a member's highest 12 consecutive months of compensation. (31462.1)

**All other Plans:** Monthly average of a member's highest compensation during any three years. Years do not have to be consecutive, except for Plan 7. [31462, 31496.3(d)]

**Compensation**

**Limit:**

**All Plans, except Plan 7:** The amount of compensation that is taken into account in computing benefits payable to any person who first becomes a member on or after July 1, 1996, shall not exceed the dollar limitations in Section 401(a)(17) of Title 26 of the US Code. (31671)

**SERVICE RETIREMENT ALLOWANCE (Continued)**

**Plan 7:** The amount of compensation taken into account shall not exceed the following applicable percentage of the Social Security Taxable Wage Base:

- 100% for a member covered by Social Security (County and Courts General members);
- 120% for a member not covered by Social Security (all other members).

The amount of compensation taken into account shall be adjusted based on changes in the Consumer Price Index for All Urban Consumers. Adjustments shall be effective annually on January 1.

**Monthly Allowance:**

<b>Plans 1, 2, 4, and 5:</b>	<p><b>General members:</b>  <math>1/60 \times \text{Final Average Compensation} \times \text{General age factor} \times \text{years of service.}</math></p> <p><b>Safety &amp; Probation members:</b>  <math>3\% \times \text{Final Average Compensation} \times \text{Safety age factor} \times \text{years of service.}</math></p>	<p>(31676.14) – Plans 1, 2 &amp; 4 (31676.1) – Plan 5 (31664.1) – Plans 1, 2 &amp; 4 (31664.2) – Plan 5</p>
<b>Plan 6:</b>	<p><b>Safety &amp; Probation members:</b>  <math>2\% \times \text{Final Average Compensation} \times \text{Safety age factor} \times \text{years of service.}</math></p>	<p>(31664)</p>
<b>Plan 7:</b>	<p><b>General members:</b>  <math>2\% \times \text{Final Average Compensation} \times \text{General age factor} \times \text{years of service.}</math></p> <p><b>Safety and Probation members:</b>  <math>2\% \times \text{Final Average Compensation} \times \text{Safety age factor} \times \text{years of service.}</math></p>	<p>7522.20(a)  7522.25(d)</p>
<b>Plan 3:</b>	<p><b>General members: (a)+(b)-(c) where:</b></p> <p>(a) <math>2\% \times \text{Final Average Compensation} \times (\text{Years of Service, up to 35 years}),</math> plus</p> <p>(b) <math>1\% \times \text{Final Average Compensation} \times \text{Years of Service in excess of 35}</math> (up to 10 years)</p> <p>(c) <math>\text{Estimated Primary Insurance Amount (PIA)} \times \text{Years of Covered Service}</math> (up to 35 years) divided by 35.</p> <p>The PIA is calculated based on certain assumptions specified by statute, and an assumed Social Security retirement age of 65.</p> <p>If retirement occurs prior to age 65, benefit amount is adjusted by an actuarial equivalent factor (see Sample Plan Age Factors).</p>	<p>(31496)</p>

**SERVICE RETIREMENT ALLOWANCE (Continued)**

**Percentage of Final Average Compensation at Sample Ages:**

<b>Plan</b>	<b>Age 50</b>	<b>Age 55</b>	<b>Age 60</b>	<b>Age 65</b>	
County General Plans 1, 2, & 4	1.475%	1.948%	2.440%	2.611%	(31676.14)
General Plan 3*	N/A	0.780%	1.220%	2.000%	(31496)
General Plan 5	1.182%	1.492%	1.917%	2.432%	(31676.1)
General Plan 7	N/A	1.300%	1.800%	2.300%	(7522.20(a))
SMCM&VCD Plans 1, 2, & 4	1.475%	1.948%	2.440%	2.611%	(31676.14)
SMCM&VCD Plan 7	N/A	1.300%	1.800%	2.300%	(7522.20(a))
Safety/Probation Plans 1, 2, & 4	3.000%	3.000%	3.000%	3.000%	(31664.1)
Safety/Probation Plan 5	2.290%	3.000%	3.000%	3.000%	(31664.2)
Safety/Probation Plan 6	2.000%	2.620%	2.620%	2.620%	(31664)
Safety/Probation Plan 7	2.000%	2.500%	2.700%	2.700%	(7522.25(d))

\* Prior to reduction for PIA benefit. Actual percentage will be less.

**Maximum**

**Allowance:**

Allowance may not exceed 100% of Final Average Compensation.

**All Plans**

**Except 3:**

**Plan 3:** The sum of the normal retirement allowance and the estimated PIA cannot exceed 70% of Final Average Compensation for a member with 35 or less years of service, and cannot exceed 80% of Final Average Compensation if service exceeds 35 years. (31496)

**SERVICE RETIREMENT ALLOWANCE (Continued)**

**Unmodified Retirement Allowance (Normal Form):**

<b>All Plans Except 3:</b>	Life Annuity payable to retired member with 60% continuance to an eligible survivor (or eligible children).	(31760.1)
<b>Plan 3:</b>	Life Annuity payable to retired member with 50% continuance to an eligible survivor (or eligible children).	(31497.71)

Eligible survivor includes certain domestic partners. (31780.2)

**Optional Retirement Allowance:**

A member may elect to have the actuarial equivalent of the service or disability retirement allowance applied to a lesser retirement allowance during the retired member's life in order to provide an optional survivor allowance.

**Option 1:** Member's allowance is reduced to pay a cash refund of any unpaid annuity payments (up to the amount of the member's contributions at retirement) to the member's estate or to a beneficiary having an insurable interest in the life of the member. (31761)

**Option 2:** 100% of member's reduced allowance is payable to an eligible survivor or beneficiary having an insurable interest in the life of the member. (31762)

**Option 3:** 50% of member's reduced allowance is payable to an eligible survivor or beneficiary having an insurable interest in the life of the member. (31763)

**Option 4:** Other % of member's reduced allowance is payable to an eligible survivor or beneficiary(ies) having an insurable interest in the life of the member. (31764)

For Options 2, 3 or 4, the continuance will not be paid if the member revokes their election and names another beneficiary after retirement. (31782)

**All Allowances:** All allowances are made on a pro rata basis (based on the number of days in that month) if not in effect for the entire month of retirement. For deaths that occur mid-month, the full month's payment is made. (31600)

**SERVICE-CONNECTED DISABILITY RETIREMENT ALLOWANCE**

<b><u>Eligibility:</u></b>		
<b>All Plans</b>	Any age or years of service; disability must result from occupational injury or disease, and member must be permanently incapacitated for the performance of duty.	(31720, 31720.5, 31720.6, 31720.7, 31720.9)
<b>Except 3:</b>		
<b>Plan 3:</b>	Not available under Plan 3.	(31487)
<b><u>Monthly Allowance:</u></b>	Greater of (1) 50% of Final Average Compensation or (2) the service retirement allowance, if eligible to retire.	(31727.4)
<b><u>Normal Form Of Payment:</u></b>	Life Annuity with 100% continuance to a surviving spouse (or eligible children).	(31760, 31786)

**NONSERVICE-CONNECTED DISABILITY RETIREMENT ALLOWANCE**

<b><u>Eligibility:</u></b>		
<b>All Plans Except 3:</b>	Any age with five years of service and permanently incapacitated for the performance of duty.	(31720, 31836)
<b>Plan 3:</b>	Not available under Plan 3.	(31487)
<b><u>Monthly Allowance:</u></b>	The monthly allowance is equal to a service retirement allowance if the member is eligible to retire, otherwise allowance equals (a) or (b) where:	(31726, 31726.5)
<b>General Members:</b>	(a) 90% of 1/60th of Final Average Compensation x years of service, if member must rely on service in another retirement system in order to be eligible to retire, or allowance exceeds 1/3 of Final Average Compensation.	(31727(a))
	(b) 90% of 1/60th of Final Average Compensation x years of service projected to age 65, not to exceed 1/3 of Final Average Compensation.	(31727(b))
<b>Safety Members:</b>	1/60 is replaced by 1/50 and age 65 is replaced by age 55 in (a) and (b) above.	(31727.2)
<b><u>Normal Form Of Payment:</u></b>	Life Annuity with 60% continuance to a surviving spouse (or eligible children).	(31760.1)

**SERVICE-CONNECTED DEATH BENEFITS**

**Eligibility**

**All Plans Except 3:** Active members who die in service as a result of injury or disease arising out of and in the course of employment. (31787)

**Plan 3:** Not available under Plan 3. (31487)

**Monthly Allowance:** An annual death allowance is payable monthly to an eligible survivor (or eligible children) equal to 50% of the member's Final Average Compensation. (31787)

**Optional Combined Benefit:** (31781.3)

In lieu of the monthly allowance above, an eligible survivor may elect:

- (a) A lump sum equal to 1/12 of the compensation earned in the preceding 12 months x years of service (benefit not to exceed 50% of the 12 months' compensation), plus
- (b) A monthly payment equal to 50% of the member's Final Average Compensation, reduced by a monthly amount, which is the actuarial equivalent of (a) above based on the age of eligible survivor.

**Death Benefit (Lump Sum):** (31781)  
 The member's normal contributions and interest, plus 1/12 of the compensation earned in the preceding 12 months x years of service (benefit not to exceed 50% of the 12 months' compensation).

**Additional Allowance for Children:** (31787.5)  
 25% of death allowance (whether or not the monthly allowance or combined benefit is chosen) for one child, 40% for two children, and 50% for three or more children.

**Additional Amount for Spouse of Safety Member:** (31787.6)  
 An eligible survivor of a Safety member is also entitled to receive a lump sum death benefit equal to 12 x monthly rate of compensation at the time of member's death in addition to all other benefits.

Note: For valuation purposes, an unmarried member is assumed to take the lump sum benefit. A married member is assumed to take the monthly allowance or the lump sum, whichever is more valuable.

**NONSERVICE-CONNECTED DEATH BENEFITS**

**Eligibility:**

**All Plans Except 3:** Active members who die while in service or while physically or mentally incapacitated for the performance of duty. (31780)

**Plan 3:** Not available under Plan 3.

**Death Benefit (Lump Sum):** (31781)

The member's normal contributions and interest, plus 1/12 of the Compensation earned in preceding 12 months x the number of completed years of service (benefit not to exceed 50% of the 12 months' compensation).

**Optional Death Benefit:**

In lieu of the lump sum death benefit, several optional death benefits are available to provide flexibility to survivors, as follows.

**First Optional Death Benefit:** (31781.1)

If a member who would have been entitled to a nonservice-connected disability retirement allowance dies prior to retirement as a result of such disability, the eligible survivor (or eligible children) may elect to receive an optional death allowance equal to 60% of the monthly retirement allowance to which the member would have been entitled as of the date of death.

**Second Optional Death Benefit:** (31781.2, 31765.2)

If a member dies prior to reaching the minimum retirement age but has 10 or more years of service, an eligible survivor (or eligible children) may elect to leave the amount of the death benefit on deposit until the earliest date the member could have retired and at that time receive the allowance provided for in 31765.2 (a 60% continuance).

**Third Optional Death Benefit:**

An eligible survivor of a member who dies after five years of service may elect a combined benefit equal to:

(a) A lump sum equal to 1/12 of the compensation earnable in the preceding 12 months x the number of completed years of service (benefit not to exceed 50% of the 12 months' compensation), plus (31781.3)

(b) A monthly payment equal to 60% of the monthly retirement allowance to which the member would have been entitled if the member retired or had been retired for a nonservice-connected disability as of the date of death, reduced by a monthly amount which is the actuarial equivalent of (a) above based on the age of the eligible survivor. (31781.1)

**NONSERVICE-CONNECTED DEATH BENEFITS (Continued)**

**Fourth Optional Death Benefit:**

If a member dies while eligible for a service retirement and the eligible survivor is designated as beneficiary, the spouse (or eligible children) may elect to receive 60% of the monthly retirement allowance to which the member would have been entitled as of the date of death. (31765.1)

Note for Third and Fourth Optional Death Benefits: In order to leave the eligible survivor the greatest benefit, the member is assumed to have retired for nonservice-connected disability, elected the Option 2 retirement allowance, and then died the next day.

**Fifth Optional Death Benefit:**

If a member dies while eligible for a service retirement and the eligible survivor is designated as beneficiary and survives the member by not less than 30 days the spouse (or eligible children) may elect to receive the same retirement allowance as the spouse would have received had the member retired on the date of death and selected Option 3. (31765)

Note: For valuation purposes, an unmarried member is assumed to take the lump sum benefit. A married member is assumed to receive an annuity or a lump sum, whichever is more valuable. The annuity is equal to the Option 2-100% Continuance calculation for the larger of either (1) a non-service connected disability benefit or (2) the member's earned service retirement benefit (if eligible).



**DEFERRED RETIREMENT BENEFITS**

**Eligibility:**

**All Plans, except Plans 3 and 7:** Age 50 with 10 years of membership. (31700)

Member contributions must be left on deposit (except Plan 3) and the member must have terminated with five years of service or entered a reciprocal agency. Members are eligible for service retirement when they would have reached eligibility if they would have remained in an active position.

**Plan 3:** Age 55 with 10 years of service. (31496)

**Plan 7: General members:**

Age 52 with 5 years of service.

**Safety and Probation members:**

Age 50 with 5 years of service.

**All Plans:** Member contributions must be left on deposit and the member must have terminated with 5 years of service or entered a reciprocal agency. Members (except for Plan 7) are eligible for service retirement when they would have reached eligibility if they would have remained in an active position.

**Monthly Allowance:**

**All Plans Except 3:** Same as service retirement allowance; payable any time after the member would have been eligible for service retirement. (31703, 31704, 31705)

If a terminated member dies before the effective date of the deferred retirement allowance, the member's accumulated contributions are paid to the estate or to the named beneficiary. (31702)

**Plan 3:** Same as service retirement allowance at normal retirement age 65 or in an actuarially equivalent reduced amount at early retirement, after age 55. (31496)

No benefit is paid for death while inactive.

**COST-OF-LIVING INCREASES**

Cost-of-living increases (or decreases) are applied to all retirement allowances (service and disability), optional death allowances, and annual death allowances effective April 1, based on changes in the Consumer Price Index (CPI) from the previous January 1 to the current January 1, to the nearest ½ of 1%.	(31870, 31870.1, 31870.2, 31874.4)
<b>Plan 1: General &amp; Safety</b> Members (and their beneficiaries) are limited to a maximum 5% cost-of-living increase.	(31870.2)
<b>Probation</b> Members (and their beneficiaries) are limited to a maximum 3% cost-of-living increase.	(31870.1)
<b>Plan 2: All members</b> Members (and their beneficiaries) are limited to a maximum 3% cost-of-living increase.	(31870.1)
<b>Plan 3: Plan 3</b> does not have a COLA.	(31487)
<b>Other Plans: All members</b> Members (and their beneficiaries) are limited to a maximum 2% cost-of-living increase.	(31870)
<b>COLA Bank</b>	
<b>Plan 1:</b> When the CPI exceeds the applicable percentage (3% or 5%), the difference between the actual CPI and the maximum cost-of-living increase given in any year is credited to the COLA Accumulation (COLA Bank). It may be used in future years to provide cost-of-living increases when the CPI falls below the applicable percentage.	(31870.1, 31870.2)
<b>Other Plans:</b> All other plans do not have a COLA bank.	(31874.4)

## Appendix C Valuation Data and Schedules

Data on SamCERA membership as of June 30, 2023 was supplied to us by SamCERA staff. On the following table, Exhibit C-1, we present a summary of SamCERA membership at June 30, 2023 for active members. Similar information is shown in Exhibit C-2 for inactive members and Exhibits C-3a and C-3b for retired members.

Note that salary amounts shown are annualized amounts based on the biweekly pay for the period prior to the valuation date. If the annualized amount was less than the total prior year earnings, total prior year earnings were used.

Additional statistical data on both active and retired members is shown in the following tables.

Exhibit C-4: Age, Service, Compensation Distribution of Active Members

Exhibit C-5: Age, Retirement Year, Benefit Amount and Plan Distribution of Retired Members

Exhibits C-4 and C-5 are shown for all plans combined as well as for classification separately.

**Exhibit C-1**  
**SamCERA Membership – Active Members as of June 30, 2023**

	<b>Total Number</b>	<b>Annual Salary</b>	<b>Average Age</b>	<b>Average Monthly Salary</b>	<b>Average Credited Service</b>
<b>General Members</b>					
Plan 1	2	\$ 458,864	72.5	\$ 19,119	46.3
Plan 2	223	31,866,089	57.7	11,908	29.4
Plan 3	37	4,121,558	55.7	9,283	19.2
Plan 4	1,396	187,004,107	51.6	11,163	18.4
Plan 5	247	35,491,120	48.8	11,974	7.9
Plan 7	2,822	295,621,779	40.4	8,730	4.3
<b>Total</b>	<b>4,727</b>	<b>\$ 554,563,518</b>	<b>45.1</b>	<b>\$ 9,777</b>	<b>9.9</b>
<b>Safety Members</b>					
Plan 1	-	\$ -	-	\$ -	-
Plan 2	10	2,053,426	54.9	17,112	25.1
Plan 4	142	27,010,585	48.5	15,851	17.8
Plan 5	70	12,917,102	43.7	15,378	7.8
Plan 7	239	34,992,366	36.7	12,201	5.2
<b>Total</b>	<b>461</b>	<b>\$ 76,973,479</b>	<b>41.8</b>	<b>\$ 13,914</b>	<b>9.9</b>
<b>Probation Members</b>					
Plan 1	-	\$ -	-	\$ -	-
Plan 2	2	280,768	53.5	11,699	29.4
Plan 4	95	13,003,345	46.9	11,406	19.2
Plan 5	8	1,058,261	39.8	11,024	10.7
Plan 6	-	-	-	-	-
Plan 7	41	4,818,806	36.2	9,794	6.7
<b>Total</b>	<b>146</b>	<b>\$ 19,161,180</b>	<b>43.6</b>	<b>\$ 10,937</b>	<b>15.4</b>
<b>Grand Total</b>	<b>5,334</b>	<b>\$ 650,698,177</b>	<b>44.8</b>	<b>\$ 10,166</b>	<b>10.1</b>

**Exhibit C-2**  
**SamCERA Membership – Inactive Members as of June 30, 2023**

	<b>Deferred Vested Number</b>	<b>Deferred Vested Average Age</b>	<b>Contingent Vested Number</b>	<b>Contingent Vested Average Age</b>
<b>General Members</b>				
Plan 1	4	66.8	-	-
Plan 2	172	58.7	2	56.0
Plan 3	67	60.4	-	-
Plan 4	694	49.1	85	48.5
Plan 5	108	44.8	26	44.9
Plan 7	368	40.2	711	39.9
Total	1,413	48.2	824	41.0
<b>Safety Members</b>				
Plan 1	-	-	-	-
Plan 2	6	60.8	-	-
Plan 4	31	46.9	5	52.4
Plan 5	10	43.0	-	-
Plan 7	35	34.0	30	37.1
Total	82	42.0	35	39.3
<b>Probation Members</b>				
Plan 1	-	-	-	-
Plan 2	10	54.1	-	-
Plan 4	40	47.6	1	38.0
Plan 5	-	-	1	43.0
Plan 6	-	-	-	-
Plan 7	6	36	12	33.3
Total	56	47.6	14	34.3
<b>Grand Total</b>	<b>1,551</b>	<b>47.8</b>	<b>873</b>	<b>40.8</b>

**Exhibit C-3a**  
**SamCERA Membership – Retired Members as of June 30, 2023**

	<b>Number</b>	<b>Average Age</b>	<b>Monthly Allowance</b>	<b>Average Monthly Benefit</b>
<b>General Members</b>				
Plan 1	1,110	81.4	\$ 5,210,280	\$ 4,382
Plan 2	2,292	71.3	9,570,860	4,049
Plan 3	124	73.8	230,502	618
Plan 4	1,272	67.2	3,459,523	2,692
Plan 5	41	62.3	72,011	1,675
Plan 7	55	65.2	69,200	1,236
<b>Total</b>	<b>4,894</b>	<b>72.5</b>	<b>\$ 18,612,376</b>	<b>\$ 3,803</b>
<b>Safety Members</b>				
Plan 1	250	78.1	\$ 1,997,298	\$ 7,957
Plan 2	269	64.2	2,426,711	8,922
Plan 4	181	59.0	971,628	5,281
Plan 5	9	58.2	27,067	3,007
Plan 7	9	61.0	19,621	2,180
<b>Total</b>	<b>718</b>	<b>67.6</b>	<b>\$ 5,442,324</b>	<b>\$ 7,580</b>
<b>Probation Members</b>				
Plan 1	86	80.3	\$ 408,687	\$ 4,541
Plan 2	123	63.3	772,170	5,555
Plan 4	110	57.0	575,285	4,834
Plan 7	1	59.0	2,168	2,168
<b>Total</b>	<b>320</b>	<b>65.7</b>	<b>\$ 1,758,309</b>	<b>\$ 5,495</b>
<b>Grand Total</b>	<b>5,932</b>	<b>71.5</b>	<b>\$ 25,813,010</b>	<b>\$ 4,351</b>

**Exhibit C-3b**  
**SamCERA Membership – Retired Members as of June 30, 2023**  
**Subtotaled by Class and Retirement Type**

<u>Plan</u>	<u>Retirement Type</u>	<u>Number</u>	<u>Monthly Benefit</u>	<u>Average Monthly Benefit</u>
<b>General Plans:</b>				
	Healthy	3,965	\$ 16,056,635	\$ 3,711
	Disabled	359	1,230,318	3,343
	Beneficiaries	<u>570</u>	<u>1,325,424</u>	<u>2,155</u>
	Total	4,894	\$ 18,612,376	\$ 3,803
<b>Safety Plans:</b>				
	Healthy	462	\$ 3,980,980	\$ 8,543
	Disabled	130	911,193	6,903
	Beneficiaries	<u>126</u>	<u>550,152</u>	<u>4,332</u>
	Total	718	\$ 5,442,324	\$ 7,580
<b>Probation Plans:</b>				
	Healthy	273	\$ 1,568,457	\$ 5,317
	Disabled	19	110,280	4,595
	Beneficiaries	<u>28</u>	<u>79,572</u>	<u>2,652</u>
	Total	320	\$ 1,758,309	\$ 5,495
<b>Grand Totals</b>				
	Healthy	4,700	\$ 21,606,071	\$ 4,597
	Disabled	508	2,251,790	4,433
	Beneficiaries	<u>724</u>	<u>1,955,148</u>	<u>2,700</u>
	Total	5,932	\$ 25,813,010	\$ 4,351

**Exhibit C-4**  
**Age & Service Distribution of Active Members by Count and Average Compensation**  
**as of June 30, 2023 – All Members**

<b>Count</b>	<b>Years of Service</b>									<b>Total Count</b>	
	<b>Age</b>	<b>0-1</b>	<b>1-4</b>	<b>5-9</b>	<b>10-14</b>	<b>15-19</b>	<b>20-24</b>	<b>25-29</b>	<b>30-34</b>		<b>35&amp;Over</b>
Under 25	36	23	0	0	0	0	0	0	0	0	59
25-29	124	213	30	0	0	0	0	0	0	0	367
30-34	122	349	223	14	0	0	0	0	0	0	708
35-39	82	241	342	84	38	0	0	0	0	0	787
40-44	51	161	250	112	146	31	0	0	0	0	751
45-49	42	116	170	93	192	137	13	0	0	0	763
50-54	37	92	128	93	160	164	70	10	0	0	754
55-59	30	72	95	46	115	111	66	34	11	11	580
60-64	16	52	77	38	70	67	28	21	8	8	377
65 & Over	11	23	37	33	35	17	10	11	11	11	188
<b>Total Count</b>	<b>551</b>	<b>1,342</b>	<b>1,352</b>	<b>513</b>	<b>756</b>	<b>527</b>	<b>187</b>	<b>76</b>	<b>30</b>	<b>30</b>	<b>5,334</b>

<b>Compensation</b>	<b>Years of Service</b>									<b>Average Comp.</b>	
	<b>Age</b>	<b>0-1</b>	<b>1-4</b>	<b>5-9</b>	<b>10-14</b>	<b>15-19</b>	<b>20-24</b>	<b>25-29</b>	<b>30-34</b>		<b>35&amp;Over</b>
Under 25	\$73,181	\$84,318	-	-	-	-	-	-	-	-	\$77,523
25-29	86,858	100,952	112,030	-	-	-	-	-	-	-	97,095
30-34	93,347	102,032	119,457	123,606	-	-	-	-	-	-	106,450
35-39	102,006	108,547	120,228	135,581	121,084	-	-	-	-	-	116,433
40-44	109,683	113,387	121,971	143,103	139,160	123,387	-	-	-	-	125,848
45-49	101,816	111,705	121,328	143,921	139,353	144,048	121,324	-	-	-	130,160
50-54	107,572	109,601	121,798	161,085	136,490	142,023	143,152	128,225	-	-	134,042
55-59	104,771	111,058	121,204	144,234	134,632	151,585	139,854	153,512	144,528	-	133,856
60-64	93,910	112,209	115,976	127,003	123,595	123,135	132,039	139,117	131,674	144,528	121,134
65 & Over	105,776	130,848	127,488	142,313	127,360	132,230	187,404	135,109	149,428	149,428	134,553
<b>Avg. Annual Compensation</b>	<b>\$95,857</b>	<b>\$106,817</b>	<b>\$120,553</b>	<b>\$143,605</b>	<b>\$135,059</b>	<b>\$140,750</b>	<b>\$141,173</b>	<b>\$143,544</b>	<b>\$142,897</b>	<b>\$142,897</b>	<b>\$121,991</b>



**Exhibit C-4a**  
**Age & Service Distribution of Active Members by Count and Average Compensation**  
**as of June 30, 2023 – General Members**

<b>Count</b>										
<b>Age</b>	<b>Years of Service</b>									<b>Total Count</b>
	<b>0-1</b>	<b>1-4</b>	<b>5-9</b>	<b>10-14</b>	<b>15-19</b>	<b>20-24</b>	<b>25-29</b>	<b>30-34</b>	<b>35&amp;Over</b>	
Under 25	35	20	0	0	0	0	0	0	0	55
25-29	118	179	23	0	0	0	0	0	0	320
30-34	116	316	160	8	0	0	0	0	0	600
35-39	79	227	295	66	29	0	0	0	0	696
40-44	47	149	227	87	114	26	0	0	0	650
45-49	40	112	158	81	160	97	10	0	0	658
50-54	32	86	122	73	143	140	63	10	0	669
55-59	29	64	84	39	106	103	59	32	11	527
60-64	16	51	76	33	69	66	27	21	8	367
65 & Over	11	23	36	31	35	17	10	11	11	185
<b>Total Count</b>	<b>523</b>	<b>1,227</b>	<b>1,181</b>	<b>418</b>	<b>656</b>	<b>449</b>	<b>169</b>	<b>74</b>	<b>30</b>	<b>4,727</b>

<b>Compensation</b>										
<b>Age</b>	<b>Years of Service</b>									<b>Average Comp.</b>
	<b>0-1</b>	<b>1-4</b>	<b>5-9</b>	<b>10-14</b>	<b>15-19</b>	<b>20-24</b>	<b>25-29</b>	<b>30-34</b>	<b>35&amp;Over</b>	
Under 25	\$71,379	\$76,834	-	-	-	-	-	-	-	\$73,363
25-29	85,368	93,309	101,216	-	-	-	-	-	-	90,949
30-34	91,025	98,948	108,770	105,500	-	-	-	-	-	100,123
35-39	99,966	106,704	115,419	129,345	111,211	-	-	-	-	111,968
40-44	104,324	111,963	118,841	135,208	130,336	114,785	-	-	-	120,259
45-49	97,973	110,775	118,963	137,068	135,955	134,353	101,183	-	-	124,652
50-54	96,015	105,961	119,702	151,026	131,387	136,422	136,656	128,225	-	127,941
55-59	103,191	106,247	116,772	139,288	134,145	149,495	131,494	151,300	144,528	130,627
60-64	93,910	111,663	115,619	121,628	122,828	121,979	131,510	139,117	131,674	120,026
65 & Over	105,776	130,848	126,161	139,525	127,360	132,230	187,404	135,109	149,428	133,782
<b>Avg. Annual Compensation</b>	<b>\$92,889</b>	<b>\$103,858</b>	<b>\$116,252</b>	<b>\$136,465</b>	<b>\$130,757</b>	<b>\$135,439</b>	<b>\$134,936</b>	<b>\$142,318</b>	<b>\$142,897</b>	<b>\$117,318</b>

**Exhibit C-4b**  
**Age & Service Distribution of Active Members by Count and Average Compensation**  
**as of June 30, 2023 – Safety Members**

<b>Count</b>											
<b>Age</b>	<b>Years of Service</b>									<b>Total Count</b>	
	<b>0-1</b>	<b>1-4</b>	<b>5-9</b>	<b>10-14</b>	<b>15-19</b>	<b>20-24</b>	<b>25-29</b>	<b>30-34</b>	<b>35&amp;Over</b>		
Under 25	1	3	0	0	0	0	0	0	0	4	
25-29	5	31	7	0	0	0	0	0	0	43	
30-34	6	28	49	5	0	0	0	0	0	88	
35-39	3	14	38	13	5	0	0	0	0	73	
40-44	4	12	18	20	16	3	0	0	0	73	
45-49	2	3	10	11	12	19	1	0	0	58	
50-54	5	6	5	19	12	14	5	0	0	66	
55-59	1	7	11	7	3	6	7	1	0	43	
60-64	0	1	1	5	1	1	1	0	0	10	
65 & Over	0	0	1	2	0	0	0	0	0	3	
<b>Total Count</b>	<b>27</b>	<b>105</b>	<b>140</b>	<b>82</b>	<b>49</b>	<b>43</b>	<b>14</b>	<b>1</b>	<b>0</b>	<b>461</b>	

<b>Compensation</b>											
<b>Age</b>	<b>Years of Service</b>									<b>Average Comp.</b>	
	<b>0-1</b>	<b>1-4</b>	<b>5-9</b>	<b>10-14</b>	<b>15-19</b>	<b>20-24</b>	<b>25-29</b>	<b>30-34</b>	<b>35&amp;Over</b>		
Under 25	\$136,248	\$134,208	-	-	-	-	-	-	-	\$134,718	
25-29	122,165	144,190	147,562	-	-	-	-	-	-	142,178	
30-34	138,236	135,619	153,938	152,006	-	-	-	-	-	146,929	
35-39	155,708	138,434	157,158	170,604	170,129	-	-	-	-	156,791	
40-44	172,654	131,058	163,034	181,851	212,296	189,011	-	-	-	175,325	
45-49	178,665	154,726	157,277	195,454	193,703	195,165	265,329	-	-	186,934	
50-54	181,537	161,785	170,422	198,986	198,848	195,623	223,462	-	-	193,234	
55-59	150,574	155,990	155,046	171,791	178,388	165,855	210,318	233,895	-	171,790	
60-64	-	140,067	143,105	162,479	176,541	199,443	146,338	-	-	161,789	
65 & Over	-	-	175,250	185,529	-	-	-	-	-	182,103	
<b>Avg. Annual Compensation</b>	<b>\$153,697</b>	<b>\$141,405</b>	<b>\$156,652</b>	<b>\$182,093</b>	<b>\$197,341</b>	<b>\$190,895</b>	<b>\$214,372</b>	<b>\$233,895</b>	<b>-</b>	<b>\$166,971</b>	

**Exhibit C-4c**  
**Age & Service Distribution of Active Members by Count and Average Compensation**  
**as of June 30, 2023 – Probation Members**

<b>Count</b>										
<b>Age</b>	<b>Years of Service</b>									<b>Total Count</b>
	<b>0-1</b>	<b>1-4</b>	<b>5-9</b>	<b>10-14</b>	<b>15-19</b>	<b>20-24</b>	<b>25-29</b>	<b>30-34</b>	<b>35&amp;Over</b>	
Under 25	0	0	0	0	0	0	0	0	0	0
25-29	1	3	0	0	0	0	0	0	0	4
30-34	0	5	14	1	0	0	0	0	0	20
35-39	0	0	9	5	4	0	0	0	0	18
40-44	0	0	5	5	16	2	0	0	0	28
45-49	0	1	2	1	20	21	2	0	0	47
50-54	0	0	1	1	5	10	2	0	0	19
55-59	0	1	0	0	6	2	0	1	0	10
60-64	0	0	0	0	0	0	0	0	0	0
65 & Over	0	0	0	0	0	0	0	0	0	0
<b>Total Count</b>	<b>1</b>	<b>10</b>	<b>31</b>	<b>13</b>	<b>51</b>	<b>35</b>	<b>4</b>	<b>1</b>	<b>0</b>	<b>146</b>

<b>Compensation</b>										
<b>Age</b>	<b>Years of Service</b>									<b>Average Comp.</b>
	<b>0-1</b>	<b>1-4</b>	<b>5-9</b>	<b>10-14</b>	<b>15-19</b>	<b>20-24</b>	<b>25-29</b>	<b>30-34</b>	<b>35&amp;Over</b>	
Under 25	-	-	-	-	-	-	-	-	-	-
25-29	\$86,133	\$110,191	-	-	-	-	-	-	-	\$104,177
30-34	-	108,853	120,911	126,450	-	-	-	-	-	118,173
35-39	-	-	121,946	126,839	131,355	-	-	-	-	125,396
40-44	-	-	116,260	125,472	128,891	136,776	-	-	-	126,588
45-49	-	86,806	128,446	132,173	133,924	142,581	150,024	-	-	137,204
50-54	-	-	134,447	175,250	132,772	145,392	146,987	-	-	143,234
55-59	-	104,431	-	-	121,363	216,413	-	143,923	-	140,936
60-64	-	-	-	-	-	-	-	-	-	-
65 & Over	-	-	-	-	-	-	-	-	-	-
<b>Avg. Annual Compensation</b>	<b>\$86,133</b>	<b>\$106,608</b>	<b>\$121,384</b>	<b>\$130,418</b>	<b>\$130,553</b>	<b>\$147,271</b>	<b>\$148,505</b>	<b>143,923</b>	<b>-</b>	<b>\$131,241</b>

**Exhibit C-5**  
**Distribution of Retired Members by Age and Retirement Year**  
**as of June 30, 2023 – All Plans Combined**

Age	Retirement Year								Total Count	Average Monthly Benefit
	Pre-1990	1990-94	1995-99	2000-04	2005-09	2010-14	2015-19	2020-24		
Under 35	-	-	-	-	-	4	2	2	8	\$ 1,658
35-39	-	-	1	-	1	-	-	-	2	1,634
40-44	-	-	-	1	-	2	10	3	16	3,640
45-49	-	-	-	-	4	8	15	25	52	4,077
50-54	-	-	-	2	9	12	39	145	207	4,688
55-59	-	-	4	9	11	18	195	210	447	4,942
60-64	-	-	6	10	26	148	285	292	767	4,776
65-69	-	2	13	31	121	216	387	258	1,028	4,651
70-74	2	10	28	114	230	365	288	92	1,129	4,240
75-79	3	15	106	169	300	231	116	41	981	4,578
80-84	10	61	118	174	174	75	35	26	673	4,031
85-89	24	63	90	75	22	22	18	15	329	3,270
90-94	39	40	53	13	14	13	14	5	191	3,056
95-99	34	16	11	2	5	3	6	5	82	2,407
100 & Over	9	5	3	-	-	1	1	1	20	2,725
<b>Total Count</b>	121	212	433	600	917	1,118	1,411	1,120	<b>5,932</b>	
<b>Avg Monthly Benefit</b>	\$ 2,536	\$ 2,868	\$ 2,961	\$ 4,087	\$ 4,974	\$ 4,249	\$ 4,465	\$ 4,957		\$ 4,351

**Exhibit C-5a**  
**Distribution of Retired Members by Age and Retirement Year**  
**as of June 30, 2023 – General Plans Combined**

Age	Retirement Year								Total Count	Average Monthly Benefit
	Pre-1990	1990-94	1995-99	2000-04	2005-09	2010-14	2015-19	2020-24		
Under 35	-	-	-	-	-	4	2	1	7	\$ 1,456
35-39	-	-	1	-	1	-	-	-	2	1,634
40-44	-	-	-	1	-	2	5	2	10	3,596
45-49	-	-	-	-	3	5	7	8	23	3,103
50-54	-	-	-	-	6	10	14	59	89	2,359
55-59	-	-	2	4	5	13	100	158	282	3,339
60-64	-	-	5	7	17	106	231	264	630	4,240
65-69	-	1	8	24	92	175	351	239	890	4,151
70-74	1	6	21	99	190	336	271	84	1,008	3,854
75-79	-	9	88	102	274	214	107	33	827	4,102
80-84	5	50	74	140	167	66	30	20	552	3,627
85-89	21	56	78	71	20	21	16	10	293	3,180
90-94	35	40	51	11	14	12	12	5	180	2,879
95-99	34	16	11	2	5	3	6	5	82	2,407
100 & Over	9	5	2	-	-	1	1	1	19	2,579
<b>Total Count</b>	105	183	341	461	794	968	1,153	889	<b>4,894</b>	
<b>Avg Monthly Benefit</b>	\$ 2,216	\$ 2,506	\$ 2,385	\$ 3,318	\$ 4,495	\$ 3,736	\$ 3,844	\$ 4,456		\$ 3,803

**Exhibit C-5b**  
**Distribution of Retired Members by Age and Retirement Year**  
**as of June 30, 2023 – Safety Plans Combined**

Age	Retirement Year								Total Count	Average Monthly Benefit
	Pre-1990	1990-94	1995-99	2000-04	2005-09	2010-14	2015-19	2020-24		
Under 35	-	-	-	-	-	-	-	1	1	\$ 3,071
35-39	-	-	-	-	-	-	-	-	-	-
40-44	-	-	-	-	-	-	4	1	5	3,816
45-49	-	-	-	-	1	2	4	6	13	5,750
50-54	-	-	-	2	3	2	11	48	66	6,402
55-59	-	-	2	4	5	3	59	32	105	8,478
60-64	-	-	1	3	8	30	37	22	101	7,585
65-69	-	1	5	4	22	26	30	17	105	8,475
70-74	1	4	6	14	32	19	16	6	98	7,774
75-79	3	5	16	55	14	9	8	7	117	7,833
80-84	5	8	32	18	2	4	4	6	79	6,714
85-89	3	5	5	1	-	-	2	3	19	5,629
90-94	4	-	2	-	-	1	1	-	8	6,954
95-99	-	-	-	-	-	-	-	-	-	-
100 & Over	-	-	1	-	-	-	-	-	1	5,494
<b>Total Count</b>	16	23	70	101	87	96	176	149	<b>718</b>	
<b>Avg Monthly Benefit</b>	\$ 4,637	\$ 5,694	\$ 5,504	\$ 7,577	\$ 9,503	\$ 8,531	\$ 7,696	\$ 7,291		\$ 7,580

**Exhibit C-5c**  
**Distribution of Retired Members by Age and Retirement Year**  
**as of June 30, 2023 – Probation Plans Combined**

Age	Retirement Year								Total Count	Average Monthly Benefit
	Pre-1990	1990-94	1995-99	2000-04	2005-09	2010-14	2015-19	2020-24		
Under 35	-	-	-	-	-	-	-	-	-	\$ -
35-39	-	-	-	-	-	-	-	-	-	-
40-44	-	-	-	-	-	-	1	-	1	3,197
45-49	-	-	-	-	-	1	4	11	16	4,117
50-54	-	-	-	-	-	-	14	38	52	6,499
55-59	-	-	-	1	1	2	36	20	60	6,285
60-64	-	-	-	-	1	12	17	6	36	6,292
65-69	-	-	-	3	7	15	6	2	33	5,968
70-74	-	-	1	1	8	10	1	2	23	6,112
75-79	-	1	2	12	12	8	1	1	37	4,932
80-84	-	3	12	16	5	5	1	-	42	4,294
85-89	-	2	7	3	2	1	-	2	17	2,197
90-94	-	-	-	2	-	-	1	-	3	3,320
95-99	-	-	-	-	-	-	-	-	-	-
100 & Over	-	-	-	-	-	-	-	-	-	-
<b>Total Count</b>	-	6	22	38	36	54	82	82	<b>320</b>	
<b>Avg Monthly Benefit</b>	\$ -	\$ 3,094	\$ 3,799	\$ 4,136	\$ 4,599	\$ 5,842	\$ 6,261	\$ 6,154		\$ 5,495

## Appendix D Member Contribution Rates

This section illustrates the member basic contribution rates and COLA sharing contribution rates by entry age for Plans 1 through 6. For different COLA sharing percentages, the COLA contribution rates may be adjusted ratably, and should be rounded to two decimal places.

Member contribution rates for Plan 7 are not defined by entry age. Plan 7 members contribute 50% of the total Normal Cost rate. For the 2024-2025 fiscal year, Plan 7 member contribution rates are:

- General Plan 7 members: 9.63%
- SMCM&VCD Plan 7 members: 9.69%
- Safety Plan 7 members: 15.91%
- Probation Plan 7 members: 16.23%

Please refer to Appendix B for a detailed description of member contribution rates.



**Exhibit D-1  
 General Member Contribution Rates (including SMCM&VCD)**

Entry Age <sup>(1)</sup>	Basic Member Rates				
	General & SMCM&VCD			General	SMCM&VCD
	Plans 1&2	Plan 4	Plan 5	Plan 7	Plan 7
16	7.12%	6.86%	6.05%	9.63%	9.69%
17	7.22%	6.96%	6.13%	9.63%	9.69%
18	7.32%	7.06%	6.22%	9.63%	9.69%
19	7.42%	7.16%	6.31%	9.63%	9.69%
20	7.53%	7.26%	6.40%	9.63%	9.69%
21	7.63%	7.36%	6.49%	9.63%	9.69%
22	7.74%	7.46%	6.58%	9.63%	9.69%
23	7.85%	7.56%	6.67%	9.63%	9.69%
24	7.95%	7.67%	6.76%	9.63%	9.69%
25	8.07%	7.78%	6.86%	9.63%	9.69%
26	8.18%	7.88%	6.96%	9.63%	9.69%
27	8.29%	7.99%	7.05%	9.63%	9.69%
28	8.41%	8.11%	7.15%	9.63%	9.69%
29	8.53%	8.22%	7.25%	9.63%	9.69%
30	8.64%	8.33%	7.35%	9.63%	9.69%
31	8.77%	8.45%	7.45%	9.63%	9.69%
32	8.89%	8.57%	7.56%	9.63%	9.69%
33	9.01%	8.69%	7.66%	9.63%	9.69%
34	9.14%	8.81%	7.77%	9.63%	9.69%
35	9.27%	8.94%	7.88%	9.63%	9.69%
36	9.41%	9.07%	7.99%	9.63%	9.69%
37	9.54%	9.20%	8.10%	9.63%	9.69%
38	9.68%	9.33%	8.22%	9.63%	9.69%
39	9.83%	9.46%	8.33%	9.63%	9.69%
40	9.97%	9.60%	8.45%	9.63%	9.69%
41	10.11%	9.73%	8.57%	9.63%	9.69%
42	10.25%	9.86%	8.70%	9.63%	9.69%
43	10.39%	9.99%	8.82%	9.63%	9.69%
44	10.53%	10.12%	8.95%	9.63%	9.69%
45	10.68%	10.25%	9.07%	9.63%	9.69%
46	10.83%	10.38%	9.20%	9.63%	9.69%
47	10.97%	10.50%	9.32%	9.63%	9.69%
48	11.11%	10.61%	9.45%	9.63%	9.69%
49	11.24%	10.69%	9.57%	9.63%	9.69%
50	11.35%	10.74%	9.69%	9.63%	9.69%
51	11.44%	10.74%	9.81%	9.63%	9.69%
52	11.47%	10.74%	9.93%	9.63%	9.69%
53	11.47%	10.97%	10.03%	9.63%	9.69%
54	11.47%	11.30%	10.11%	9.63%	9.69%
55	11.47%	11.30%	10.15%	9.63%	9.69%
56	11.47%	11.30%	10.15%	9.63%	9.69%
57	11.47%	11.30%	10.15%	9.63%	9.69%
58	11.47%	11.30%	10.37%	9.63%	9.69%
59	11.47%	11.30%	10.68%	9.63%	9.69%
60	11.47%	11.30%	10.68%	9.63%	9.69%

1. For General and SMCM&VCD members entering after age 60, the rate equals the rate at age 60.

**Exhibit D-2  
 Safety/Probation Member Contribution Rates**

Entry Age <sup>(1)</sup>	Basic Member Rates			
	Safety & Probation		Safety	Probation
	Plans 1&2	Plans 4&5&6	Plan 7	Plan 7
16	10.02%	9.63%	15.91%	16.23%
17	10.14%	9.74%	15.91%	16.23%
18	10.25%	9.85%	15.91%	16.23%
19	10.37%	9.97%	15.91%	16.23%
20	10.49%	10.08%	15.91%	16.23%
21	10.62%	10.20%	15.91%	16.23%
22	10.74%	10.32%	15.91%	16.23%
23	10.86%	10.44%	15.91%	16.23%
24	10.99%	10.56%	15.91%	16.23%
25	11.12%	10.68%	15.91%	16.23%
26	11.25%	10.81%	15.91%	16.23%
27	11.38%	10.94%	15.91%	16.23%
28	11.51%	11.06%	15.91%	16.23%
29	11.65%	11.19%	15.91%	16.23%
30	11.79%	11.33%	15.91%	16.23%
31	11.93%	11.46%	15.91%	16.23%
32	12.07%	11.60%	15.91%	16.23%
33	12.22%	11.74%	15.91%	16.23%
34	12.37%	11.89%	15.91%	16.23%
35	12.52%	12.03%	15.91%	16.23%
36	12.68%	12.19%	15.91%	16.23%
37	12.85%	12.34%	15.91%	16.23%
38	13.02%	12.50%	15.91%	16.23%
39	13.19%	12.66%	15.91%	16.23%
40	13.37%	12.81%	15.91%	16.23%
41	13.54%	12.97%	15.91%	16.23%
42	13.72%	13.11%	15.91%	16.23%
43	13.89%	13.24%	15.91%	16.23%
44	14.05%	13.33%	15.91%	16.23%
45	14.18%	13.36%	15.91%	16.23%
46	14.26%	13.36%	15.91%	16.23%
47	14.27%	13.36%	15.91%	16.23%
48	14.27%	13.60%	15.91%	16.23%
49	14.27%	14.01%	15.91%	16.23%
50	14.27%	14.01%	15.91%	16.23%

1. For Safety and Probation members entering after age 50, the rate equals the rate at age 50.

**Exhibit D-3  
 General Member Contribution Rates (except SMCM&VCD)**

Entry Age <sup>(1)</sup>	50% Member COLA Rates			
	Plan 1	Plan 2	Plan 4	Plan 5
16	2.49%	2.98%	1.90%	1.64%
17	2.53%	3.02%	1.93%	1.66%
18	2.56%	3.06%	1.95%	1.68%
19	2.60%	3.11%	1.98%	1.71%
20	2.64%	3.15%	2.01%	1.73%
21	2.67%	3.19%	2.04%	1.76%
22	2.71%	3.24%	2.06%	1.78%
23	2.75%	3.29%	2.09%	1.81%
24	2.78%	3.33%	2.12%	1.83%
25	2.82%	3.38%	2.15%	1.86%
26	2.86%	3.42%	2.18%	1.88%
27	2.90%	3.47%	2.21%	1.91%
28	2.94%	3.52%	2.24%	1.94%
29	2.99%	3.57%	2.27%	1.96%
30	3.02%	3.62%	2.30%	1.99%
31	3.07%	3.67%	2.34%	2.02%
32	3.11%	3.72%	2.37%	2.05%
33	3.15%	3.77%	2.40%	2.07%
34	3.20%	3.83%	2.44%	2.10%
35	3.24%	3.88%	2.47%	2.13%
36	3.29%	3.94%	2.51%	2.16%
37	3.34%	3.99%	2.54%	2.19%
38	3.39%	4.05%	2.58%	2.23%
39	3.44%	4.11%	2.62%	2.26%
40	3.49%	4.17%	2.66%	2.29%
41	3.54%	4.23%	2.69%	2.32%
42	3.59%	4.29%	2.73%	2.36%
43	3.64%	4.35%	2.76%	2.39%
44	3.69%	4.41%	2.80%	2.42%
45	3.74%	4.47%	2.84%	2.46%
46	3.79%	4.53%	2.87%	2.49%
47	3.84%	4.59%	2.90%	2.52%
48	3.89%	4.65%	2.93%	2.56%
49	3.93%	4.70%	2.96%	2.59%
50	3.97%	4.75%	2.97%	2.62%
51	4.00%	4.79%	2.97%	2.66%
52	4.01%	4.80%	2.97%	2.69%
53	4.01%	4.80%	3.03%	2.72%
54	4.01%	4.80%	3.13%	2.74%
55	4.01%	4.80%	3.13%	2.75%
56	4.01%	4.80%	3.13%	2.75%
57	4.01%	4.80%	3.13%	2.75%
58	4.01%	4.80%	3.13%	2.81%
59	4.01%	4.80%	3.13%	2.89%
60	4.01%	4.80%	3.13%	2.89%

1. For General and SMCM&VCD members entering after age 60, the rate equals the rate at age 60.

**Exhibit D-4**  
**Safety Member Contribution Rates**

Entry Age <sup>(1)</sup>	50% Member COLA Rates				
	Plan 1	Plan 2	Plan 4	Plan 5	Plan 6
16	4.80%	6.12%	4.14%	3.78%	3.13%
17	4.86%	6.19%	4.19%	3.82%	3.16%
18	4.91%	6.26%	4.23%	3.87%	3.20%
19	4.97%	6.34%	4.29%	3.91%	3.24%
20	5.03%	6.41%	4.33%	3.96%	3.27%
21	5.09%	6.49%	4.38%	4.00%	3.31%
22	5.15%	6.56%	4.44%	4.05%	3.35%
23	5.21%	6.63%	4.49%	4.10%	3.39%
24	5.27%	6.71%	4.54%	4.14%	3.43%
25	5.33%	6.79%	4.59%	4.19%	3.47%
26	5.39%	6.87%	4.65%	4.24%	3.51%
27	5.45%	6.95%	4.70%	4.29%	3.55%
28	5.52%	7.03%	4.75%	4.34%	3.59%
29	5.58%	7.12%	4.81%	4.39%	3.63%
30	5.65%	7.20%	4.87%	4.45%	3.68%
31	5.72%	7.29%	4.93%	4.50%	3.72%
32	5.79%	7.37%	4.99%	4.55%	3.77%
33	5.86%	7.47%	5.05%	4.61%	3.81%
34	5.93%	7.56%	5.11%	4.67%	3.86%
35	6.00%	7.65%	5.17%	4.72%	3.91%
36	6.08%	7.75%	5.24%	4.78%	3.96%
37	6.16%	7.85%	5.30%	4.84%	4.01%
38	6.24%	7.95%	5.37%	4.91%	4.06%
39	6.32%	8.06%	5.44%	4.97%	4.11%
40	6.41%	8.17%	5.51%	5.03%	4.16%
41	6.49%	8.27%	5.57%	5.09%	4.21%
42	6.58%	8.38%	5.63%	5.15%	4.26%
43	6.66%	8.49%	5.69%	5.20%	4.30%
44	6.73%	8.58%	5.73%	5.23%	4.33%
45	6.80%	8.66%	5.74%	5.24%	4.34%
46	6.83%	8.71%	5.74%	5.24%	4.34%
47	6.84%	8.72%	5.74%	5.24%	4.34%
48	6.84%	8.72%	5.85%	5.34%	4.42%
49	6.84%	8.72%	6.02%	5.50%	4.55%
50	6.84%	8.72%	6.02%	5.50%	4.55%

1. For Safety members entering after age 50, the rate equals the rate at age 50.

**Exhibit D-5**  
**Probation Member Contribution Rates**

Entry Age <sup>(1)</sup>	50% Member COLA Rates				
	Plan 1	Plan 2	Plan 4	Plan 5	Plan 6
16	5.33%	6.21%	4.02%	3.49%	2.93%
17	5.40%	6.28%	4.06%	3.53%	2.96%
18	5.45%	6.35%	4.11%	3.57%	3.00%
19	5.52%	6.43%	4.16%	3.62%	3.03%
20	5.58%	6.50%	4.21%	3.66%	3.07%
21	5.65%	6.58%	4.26%	3.70%	3.10%
22	5.71%	6.66%	4.31%	3.74%	3.14%
23	5.78%	6.73%	4.36%	3.79%	3.18%
24	5.85%	6.81%	4.41%	3.83%	3.21%
25	5.92%	6.89%	4.46%	3.87%	3.25%
26	5.99%	6.97%	4.51%	3.92%	3.29%
27	6.06%	7.05%	4.57%	3.97%	3.33%
28	6.12%	7.13%	4.62%	4.01%	3.37%
29	6.20%	7.22%	4.67%	4.06%	3.41%
30	6.27%	7.31%	4.73%	4.11%	3.45%
31	6.35%	7.39%	4.78%	4.16%	3.49%
32	6.42%	7.48%	4.84%	4.21%	3.53%
33	6.50%	7.57%	4.90%	4.26%	3.57%
34	6.58%	7.67%	4.96%	4.31%	3.62%
35	6.66%	7.76%	5.02%	4.36%	3.66%
36	6.75%	7.86%	5.09%	4.42%	3.71%
37	6.84%	7.96%	5.15%	4.48%	3.76%
38	6.93%	8.07%	5.22%	4.54%	3.81%
39	7.02%	8.18%	5.28%	4.59%	3.85%
40	7.11%	8.29%	5.35%	4.65%	3.90%
41	7.20%	8.39%	5.41%	4.71%	3.95%
42	7.30%	8.50%	5.47%	4.76%	3.99%
43	7.39%	8.61%	5.53%	4.80%	4.03%
44	7.48%	8.71%	5.56%	4.84%	4.06%
45	7.55%	8.79%	5.58%	4.85%	4.07%
46	7.59%	8.84%	5.58%	4.85%	4.07%
47	7.59%	8.84%	5.58%	4.85%	4.07%
48	7.59%	8.84%	5.68%	4.93%	4.14%
49	7.59%	8.84%	5.85%	5.08%	4.26%
50	7.59%	8.84%	5.85%	5.08%	4.26%

1. For Probation members entering after age 50, the rate equals the rate at age 50.

## Appendix E Glossary

The following definitions include excerpts from a list adopted by the major actuarial organizations in the United States. In some cases, the definitions have been modified for specific applicability to SamCERA and include terms used exclusively by SamCERA. Defined terms are capitalized throughout this Appendix.

### **Accrued Benefit**

The amount of an individual's benefit (whether or not vested) as of a specific date, determined in accordance with the terms of a pension plan and based on compensation and service to that date.

### **Actuarial Accrued Liability**

That portion, as determined by a particular Actuarial Cost Method, of the Actuarial Present Value of pension plan benefits and expenses which is not provided for by future Normal Costs.

### **Actuarial Assumptions**

Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disability, and retirement; changes in compensation; rates of investment earnings and asset appreciation or depreciation; procedures used to determine the Actuarial Value of Assets; and other relevant items.

### **Actuarial Gain (Loss)**

A measure of the difference between actual experience and that expected based on a set of Actuarial Assumptions during the period between two Actuarial Valuation dates, as determined in accordance with a particular Actuarial Cost Method.

### **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.

### **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 pension plan.

### **Actuarial Value of Assets**

The value of cash, investments and other property belonging to a pension plan, as used by the actuary for the purpose of an Actuarial Valuation.

### **Actuarially Equivalent**

Of equal Actuarial Present Value, determined as of a given date with each value based on the same set of Actuarial Assumptions.

### **Amortization Payment**

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

## **COLA**

Cost of living adjustments to benefit payments are made each April 1. See full description in Appendix B.

## **Cost of Living Adjustment Reserve**

This is the reserve for employer Cost of Living Adjustment contributions.

## **County Supplementary Contributions Account (CSCA) Reserve**

This is a reserve for supplemental contributions from the County of San Mateo that are over and above the County's required statutory contribution rates.

## **District Supplementary Contributions Account (DSCA) Reserve**

This is a reserve for supplemental contributions from the San Mateo County Mosquito and Vector Control District ("District") that are over and above the District's required statutory contribution rates.

## **Employer Advance Reserve**

This is the reserve for statutorily determined contributions from all employers.

## **Entry Age Actuarial Cost Method**

A method under which the Actuarial Present Value of the Projected Benefits of each individual included in an Actuarial Valuation is allocated on a level basis over the earnings or service of the individual between entry age and assumed exit ages. The portion of this Actuarial Present Value allocated to a valuation year is called the Normal Cost. The portion of this Actuarial Present Value not provided for at a valuation date by the Actuarial Present Value of future Normal Costs is called the Actuarial Accrued Liability.

## **Funded Ratio**

A measurement of funded status. The Funded Ratio is calculated by dividing the Valuation Assets by the Actuarial Accrued Liability. For example, a Funded Ratio of 90% indicates assets are 10% less than liabilities.

## **Member Reserve**

This is the reserve for member contributions.

## **Non-Valuation Reserves**

Reserves excluded from the calculation of contribution rates. These include the statutorily defined Contingency Reserve(s) and any other reserves that may be created or designated by the Board for a specified purpose.

## **Normal Cost**

That portion of the Actuarial Present Value of pension plan benefits and expenses which is allocated to a valuation year by the Actuarial Cost Method.

## **Plan Year**

A 12-month period beginning July 1 and ending June 30.

### **Projected Benefits**

Those pension plan benefit amounts which are 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 and past and anticipated future compensation and service credits.

### **Retiree Reserve**

This is the reserve for retirees. Funds from the Member Reserve and the Employer Advance Reserve are transferred to the Retiree Reserve when a member retires.

### **Undistributed Earnings/Losses Reserve**

This reserve is for cumulative undistributed actuarial earnings and losses.

### **Unfunded Actuarial Accrued Liability**

The excess, if any, of the Actuarial Accrued Liability over the Actuarial Value of Assets.

### **Valuation Date**

The date upon which the Normal Cost, Actuarial Accrued Liability, and Actuarial Value of Assets are determined. Generally, the Valuation Date will coincide with the ending of a Plan Year.

### **Valuation Reserves**

Valuation Reserves are used to determine the employers' and members' statutory contribution rates. They include all reserves that are not Non-Valuation Reserves.