

# **Stanislaus County Employees' Retirement Association**

**Actuarial Valuation as of  
June 30, 2023**

**Produced by Cheiron**

**February 2024**

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February 21, 2024

Board of Retirement  
Stanislaus County Employees' Retirement Association  
832 12<sup>th</sup> Street, Suite 600  
Modesto, California 95353

Dear Members of the Board,

At your request, we have conducted an actuarial valuation of the Stanislaus County Employees' Retirement Association (StanCERA, the Fund, the Plan) as of June 30, 2023. This report contains information on the Plan's assets and liabilities. This report also discloses employer contribution levels and required disclosures for the Plan's Annual Comprehensive Financial Report (ACFR). Your attention is called to the Foreword in which we refer to the general approach employed in the preparation of this report.

The purpose of this report is to present the results of the annual actuarial valuation of StanCERA. This report is for the use of StanCERA and its auditors in preparing financial reports in accordance with applicable law and accounting requirements. Any other user of this report is not an intended user and is considered a third party.

Cheiron's report was prepared solely for StanCERA for the purposes described herein, except that the Plan auditor may rely on this report solely for completing an audit related to the matters herein. It is not intended to benefit any third party, and Cheiron assumes no duty or liability to any such party.

This report and its contents have been prepared in accordance with generally recognized and accepted actuarial principles and practices and our understanding of the Code of Professional Conduct and applicable Actuarial Standards of Practice set out by the Actuarial Standards Board as well as applicable laws and regulations. Furthermore, as credentialed actuaries, we meet the Qualification Standards of the American Academy of Actuaries to render the opinion contained in this report. This report does not address any contractual or legal issues. We are not attorneys, and our firm does not provide any legal services or advice.

Sincerely,  
Cheiron

A handwritten signature in blue ink, reading "Graham Schmidt".

Graham A. Schmidt, FSA, EA, FCA, MAAA  
Principal Consulting Actuary

A handwritten signature in blue ink, reading "Jonathan B. Chipko".

Jonathan B. Chipko, FSA, EA, MAAA  
Consulting Actuary

## FOREWORD

Cheiron has performed the actuarial valuation of the Stanislaus County Employees' Retirement Association as of June 30, 2023. The valuation is organized as follows:

- In Section I, the **Executive Summary**, we describe the purpose of an actuarial valuation, summarize the key results found in this valuation, and disclose important trends;
- The **Main Body** of the report presents details on the Plan's
  - Section II – Disclosures Related to Risk
  - Section III – Assets
  - Section IV – Liabilities
  - Section V – Contributions
  - Section VI – Required ACFR Exhibits
- In the **Appendices** we conclude our report with detailed information describing Plan membership (Appendix A), actuarial assumptions and methods employed in the valuation (Appendix B), a summary of pertinent Plan provisions (Appendix C), a glossary of key actuarial terms (Appendix D), and tables containing member contribution rates (Appendix E).

Future results may differ significantly from the current projections presented in this report due to such factors as the following: plan experience differing from that anticipated by the assumptions; changes in assumptions; and, changes in plan provisions or applicable law.

In preparing our report, we relied on information (some oral and some written) supplied by the StanCERA staff. This information includes, but is not limited to, Plan provisions, employee data, and financial information. We performed an informal examination of the obvious characteristics of the data for reasonableness and consistency in accordance with Actuarial Standard of Practice No. 23, Data Quality.

Cheiron utilizes ProVal, an actuarial valuation application leased from Winklevoss Technologies (WinTech), to calculate liabilities and project benefit payments. We have relied on WinTech as the developer of ProVal. We have reviewed ProVal, have a basic understanding of it, and have used it in accordance with its original intended purpose. We have not identified any material inconsistencies in assumptions or output of ProVal that would affect this report.

The deterministic and stochastic projections shown in this report were developed using R-Scan, our proprietary stochastic projection tool used to illustrate the impact of changes in assumptions, methods, plan provisions, or actual experience (particularly investment experience) on the future financial status of the Plan. R-Scan uses standard roll-forward techniques that implicitly assume a stable active population. Because R-Scan does not automatically capture how changes in one variable affect all other variables, some scenarios may not be consistent. We have relied on Cheiron colleagues who developed the tool, and we have used the tool in accordance with its purpose.

## SECTION I – EXECUTIVE SUMMARY

The primary purpose of the actuarial valuation and this report is to measure, describe, and identify the following as of the valuation date:

- The funded status of the Plan,
- Past and expected trends in the funding progress of the Plan,
- Employer and employee contribution rates for Plan Year 2024-2025, and
- An assessment and disclosure of key risks.

In the balance of this Executive Summary, we present (A) the basis upon which this year's valuation was completed, (B) the key findings of this valuation including a summary of all key results, (C) an examination of the historical trends, and (D) the projected outlook for the Plan.

### A. Valuation Basis

This valuation determines the employer contributions required for the employers' fiscal years beginning July 1, 2024. The employers include the County of Stanislaus and related employers, the City of Ceres, and other participating Special Districts<sup>1</sup>.

The Plan's funding policy is to collect contributions from the employers and employees equal to the sum of:

- The Normal Cost under the Entry Age Normal Cost Method,
- Amortization of the Unfunded Actuarial Liability (UAL), and
- The Fund's expected administrative expenses.

This valuation was prepared based on the data summarized in Appendix A, the assumptions and methods described in Appendix B, and the Plan provisions shown in Appendix C.

Actuarial experience studies are performed every three years. This valuation was performed based on the economic and demographic assumptions that were determined in the Actuarial Experience Study performed by Cheiron as of June 30, 2021 and reviewed by the Board on December 14, 2021. This valuation is the third and final to use the assumptions determined in the above experience study. An experience study will be performed next year for the June 30, 2024 valuation.

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<sup>1</sup> Adjusted contribution rates for new employers – specifically for this valuation, the Stanislaus Regional Transit Authority – will be provided in a separate document.

## SECTION I – EXECUTIVE SUMMARY

### B. Key Findings of this Valuation

The key results of the June 30, 2023 actuarial valuation are as follows:

- The actuarially determined employer contribution rate increased from 32.91% of payroll to 33.24% of payroll for the current valuation.
- The Plan's funded ratio, the ratio of Actuarial Assets over Actuarial Liability, decreased from 77.0% to 76.6%. However, the Plan's funded ratio on a market value basis increased from 74.0% to 74.6%.
- The Unfunded Actuarial Liability (UAL) is the excess of the Plan's Actuarial Liability over the Actuarial Value of Assets. The Plan experienced an increase in the UAL from \$775.8 million to \$825.8 million as of June 30, 2023. This increase in UAL was largely due to investment and demographic experience losses.
- During the year ending June 30, 2023, the return on Plan assets was 6.92% on a market value basis net of investment (but not administrative) expenses, as compared to the 6.75% assumption. The Actuarial Value of Assets recognizes 20% of the difference between the expected and actual return on the Market Value of Assets (MVA). This method of smoothing the asset gains and losses returned 5.49% on the smoothed value of assets, an actuarial asset loss of \$30.7 million. The loss in the Actuarial Value of Assets reflects the continued recognition of past investment gains and losses, with past investment losses offsetting the impact of the gain for the current year and leading to a higher market value return than actuarial value return.
- During the 2022-23 Plan Year, the actuarial liabilities of the Plan increased more than expected, with key factors being losses associated with new retirements, larger Cost of Living Adjustments (COLAs) than expected for members in pay status, and higher pay increases than expected for continuing actives. These and other unexpected changes resulted in a liability loss of \$33.5 million.
- Overall participant membership increased from 10,116 to 10,293 total members compared to last year. There were 635 new hires and rehires during 2022-2023 and the total active population increased from 4,323 to 4,475. Total projected pensionable payroll increased from \$333,773,583 to \$357,235,307, or 7.0%.

STANISLAUS COUNTY EMPLOYEES' RETIREMENT ASSOCIATION  
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2023

**SECTION I – EXECUTIVE SUMMARY**

In Tables I-1 and I-2 below, we summarize the key results of the valuation with respect to assets and liabilities, contributions, and membership. The results are presented and compared for both the current and prior Plan year.

<b>Table I-1</b> <b>Stanislaus County Employees' Retirement Association</b> <b>Summary of Key Valuation Results</b> (in millions)			
<b>Valuation Date</b> <b>Fiscal Year End</b>	<b>June 30, 2022</b> <b>2024</b>	<b>June 30, 2023</b> <b>2025</b>	<b>Absolute</b> <b>Change</b>
Actuarial Liability	\$ 3,379.6	\$ 3,535.3	\$ 155.7
Actuarial Value of Assets <sup>1</sup>	<u>2,603.8</u>	<u>2,709.5</u>	<u>105.7</u>
Unfunded Actuarial Liability (Actuarial Value)	\$ 775.8	\$ 825.8	\$ 50.0
Funding Ratio (Actuarial Value)	77.0%	76.6%	-0.4%
Market Value of Assets <sup>1</sup>	<u>2,499.8</u>	<u>2,635.6</u>	<u>135.8</u>
Unfunded Actuarial Liability (Market Value)	\$ 879.8	\$ 899.7	\$ 19.9
Funding Ratio (Market Value)	74.0%	74.6%	0.6%
Net Employer Contribution Rate	32.91%	33.24%	0.33%

<sup>1</sup> Net of non-valuation reserves.

<b>Table I-2</b> <b>Membership Total<sup>2</sup></b>			
<b>Item</b>	<b>June 30, 2022</b>	<b>June 30, 2023</b>	<b>% Change</b>
Actives	4,323	4,475	3.5%
Deferred Members	1,317	1,225	-7.0%
Retired Members	<u>4,476</u>	<u>4,593</u>	<u>2.6%</u>
Total Members	10,116	10,293	1.7%
Ratio of Inactive Members to Active Members	134.0%	130.0%	
Active Member Payroll (FYE 2023/2024)	\$ 333,773,583	\$ 357,235,307	7.0%
Average Pay per Active	\$ 77,209	\$ 79,829	3.4%

<sup>2</sup> Excludes non-vested terminated members due refunds.

The ratio of inactive members (i.e., those receiving benefits or those entitled to a deferred benefit) to active members is a measure of the maturity of the plan. It shows how many inactive members are supported by each active member. A higher ratio indicates a more mature plan and potentially higher risk since the retiree benefits are larger relative to the contribution base, i.e., the active member payroll. Table I-2 shows that the ratio of inactive members to active members

## SECTION I – EXECUTIVE SUMMARY

decreased this year due to a larger increase in active members than inactive members, but the ratio remains well above 1.0, indicating the Plan is still relatively mature.

### Changes in UAL

The Unfunded Actuarial Liability (UAL) for StanCERA increased by \$50.0 million, from \$775.8 million to \$825.8 million. Table I-3 below presents the specific components of the change in the UAL.

Table I-3 Change in Unfunded Actuarial Liability	
Experience	in millions
1. Unfunded actuarial liability, 6/30/2022	\$ 775.8
2. Expected change in unfunded actuarial liability	\$ (19.9)
3. Unfunded increase due to investment loss	30.7
4. Unfunded increase due to contribution deficit	5.6
5. Unfunded increase due to liability loss	33.5
6. Total change in unfunded actuarial liability	<u>\$ 50.0</u>
7. Unfunded actuarial liability, 6/30/2023	\$ 825.8

As noted earlier, the return on the actuarial assets used to compute the UAL and the employer contribution rate was 5.49% during the 2022-23 Plan Year. Investment returns lower than the assumed rate of 6.75% increased the UAL by \$30.7 million.

Liability losses increased the UAL by \$33.5 million, driven by losses associated with new retirements, larger Cost of Living Adjustments (COLAs) than expected for members in pay status, and higher pay increases than expected for continuing actives.

The UAL also increased by \$5.6 million due to contributions lower than the actuarially determined cost. This is primarily a result of the 12-month lag in the implementation of contribution rates.

The expected change in the UAL due to the yearly amortization of the UAL balance – a decrease of \$19.9 million, as a result of the amortization schedule for the current year – combined with the above UAL changes to produce an overall increase of \$50.0 million.

## SECTION I – EXECUTIVE SUMMARY

### Changes in Employer Contributions

Thus far, the experience of the 2022-23 Plan year has been presented in terms of the UAL and funded ratio. Table I-4 below summarizes the impact of actuarial experience and changes in assumptions on the employer contribution rate.

Table I-4 Employer Contribution Reconciliation				
Item	Total	Normal Cost	Amortization	Admin Expense
<b><i>FYE 2024 Net Employer Contribution Rate</i></b>	<b><i>32.91%</i></b>	<b><i>11.00%</i></b>	<b><i>20.96%</i></b>	<b><i>0.95%</i></b>
Change Due to Asset Loss	0.65%	0.00%	0.65%	0.00%
Change Due to Contribution Deficit	0.12%	0.00%	0.12%	0.00%
Change Due to Liability Changes	0.50%	-0.21%	0.71%	0.00%
Change Due to Effect of Payroll on Amortization	<u>-0.94%</u>	<u>0.00%</u>	<u>-0.90%</u>	<u>-0.04%</u>
Total Change	0.33%	-0.21%	0.58%	-0.04%
<b><i>FYE 2025 Net Employer Contribution Rate</i></b>	<b><i>33.24%</i></b>	<b><i>10.79%</i></b>	<b><i>21.54%</i></b>	<b><i>0.91%</i></b>

- Asset experience produced an investment loss on a smoothed basis, as described earlier. The smoothed loss increased the contribution rate by 0.65% of pay. The ratio of Actuarial to Market Value of Assets is 102.8%. There are \$74.0 million in net deferred losses as of June 30, 2023. There is also \$25.0 million in a non-valuation Contingency Reserve.
- The Plan received a smaller contribution than the actuarially determined cost for the prior plan year. The net impact of the deficit was an increase in the employer contribution rate by 0.12% of pay.
- The liability experience of the Plan – rates of retirement, death, disability, and termination, as well as salary and COLA changes – caused an increase in employer contribution rate of 0.50% of pay. Losses associated with new retirees, COLA increases, and higher than expected pay increases for continuing active members were the largest factors contributing to an increase in the UAL and the associated amortization payment. The increase in the amortization payment was offset by a reduction in the employer-paid normal cost as a result of the continued transition of the active workforce to membership in the new PEPPRA tiers, which reflect lower benefit levels for new hires.
- Overall projected payroll is higher than expected by about \$14.3 million, increasing 7.0% compared to the 2.75% assumption. As a result, the unfunded liability amortization payment and administrative expenses are spread over a larger payroll base than expected, and the employer contribution rate decreased by 0.94% of pay.

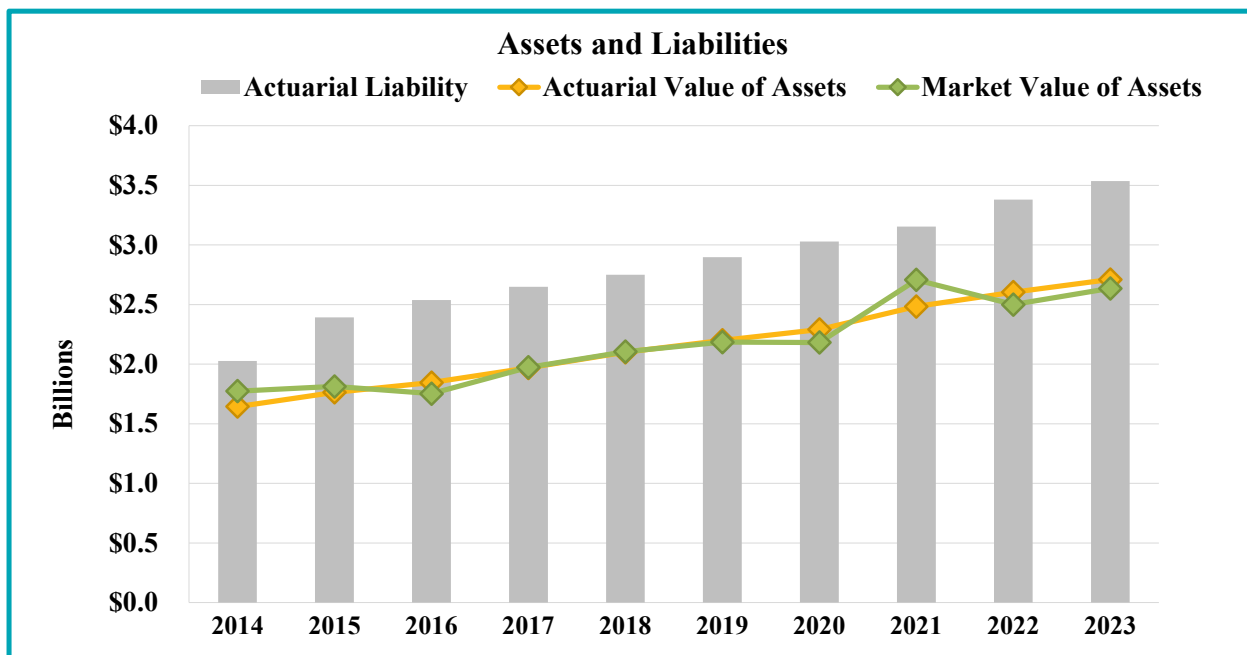
## SECTION I – EXECUTIVE SUMMARY

### C. Historical Trends

Despite the fact that for most retirement plans the greatest attention is given to the current valuation results and in particular, the size of the current UAL and the employer contribution, it is important to remember that each valuation is merely a snapshot in the long-term progress of a pension fund. It is more important to judge a current year's valuation result relative to historical trends, as well as trends expected into the future.

#### Assets and Liabilities

The chart below compares the Market Value of Assets (MVA) and Actuarial Value of Assets (AVA) to the Actuarial Liabilities. The percentage shown in the table below the graph is the ratio of the Actuarial Value of Assets to the Actuarial Liability (the funded ratio). The funded ratio has decreased from 81.1% in 2014 to 76.6% as of June 30, 2023. The large drop in the funded ratio in 2015 was primarily due to changes in assumptions. The decrease in the funded ratio from last year to this year was primarily a result of investment losses and higher than expected COLAs and pay increases.

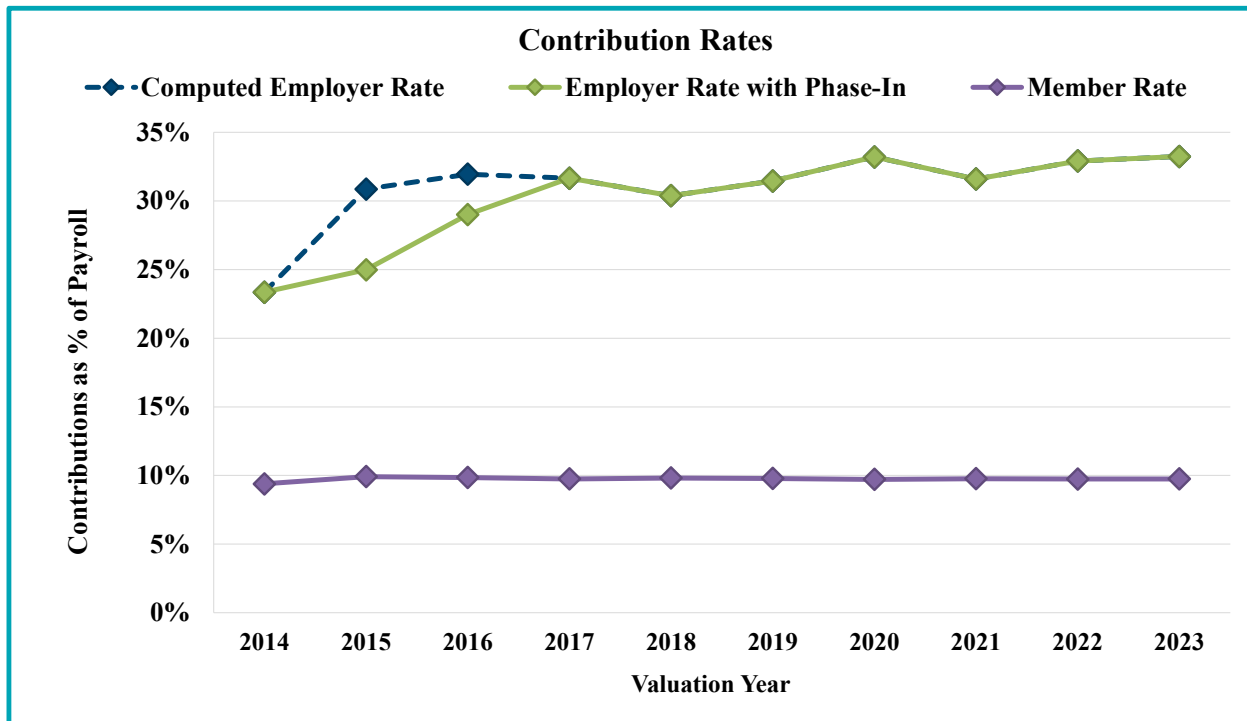


Valuation Year	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Funded Ratio	81.1%	73.7%	72.8%	74.3%	76.4%	75.9%	75.6%	78.8%	77.0%	76.6%
UAL (Billions)	\$ 0.38	\$ 0.63	\$ 0.69	\$ 0.68	\$ 0.65	\$ 0.70	\$ 0.74	\$ 0.67	\$ 0.78	\$ 0.83

## SECTION I – EXECUTIVE SUMMARY

### Contribution Trends

In the chart below, we present the historical trends for the StanCERA contribution rates. The employer contribution rates have risen since 2014, primarily as a result of changes to the actuarial assumptions and methods. The average employee contribution rates have also increased as the Plan's economic and demographic assumptions have changed. The phase-ins shown from 2014-2016 recognized significant changes in the computed employer rate over a set period to help manage the financial impact for the Plan sponsors. The employer contribution rate increased this year due to investment and liability experience losses.



## SECTION I – EXECUTIVE SUMMARY

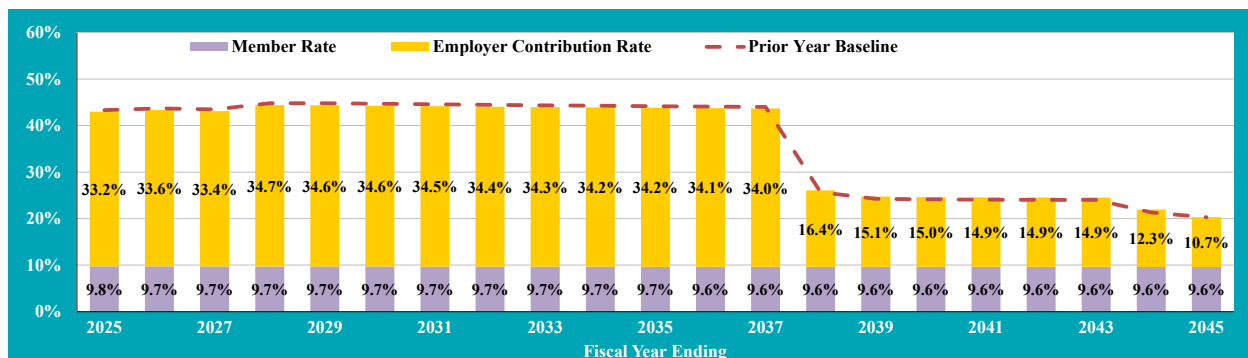
### D. Future Expected Financial Trends

The analysis of projected financial trends is an important component of this valuation. In this Section, we present our assessment of the implications of the June 30, 2023 valuation results in terms of benefit security (assets compared to liabilities). All the projections in this section are based on the current actuarial assumptions, including the investment return assumption of 6.75%. We assume future total payroll increases of 2.75% per year. While the assumptions individually are reasonable for the underlying valuation that supports the projections, specifically for projection purposes, they are also considered reasonable in aggregate. Future outcomes become increasingly uncertain over time, and therefore the general trends and not the absolute values should be considered in the review of these projections.

The graph below shows the expected employer and employee contribution rates based on achieving the 6.75% assumption **each year** for the next 20 years. This scenario is highly unlikely: even if the Plan does achieve an **average** return of 6.75% over this period, the returns in each given year will certainly vary. The expected total contribution rates based on the prior year valuation as of June 30, 2022 are shown (in the dashed line) for comparison. The prior year's expected rates are very similar to those from the current projection.

The contribution rate graph shows that employer contribution rates are expected to increase gradually over the next three years as deferred investment losses are recognized in the actuarially smoothed assets and then stay relatively stable until the initial amortization base established in 2021, covering the bulk of the unfunded liability, has been paid down.

#### Projection of Contributions, 6.75% Return Each Year



The total contribution rate (employer plus employee) is approximately 43% of member payroll for the June 30, 2023 valuation. It is expected to gradually increase to approximately 44% through FYE 2028 if all actuarial assumptions are met, as market value asset losses from prior years are recognized in the actuarially smoothed assets. The total contribution rate is expected to gradually decline after FYE 2028 as PEPRA members replace legacy members, lowering the average normal cost of the Plan.

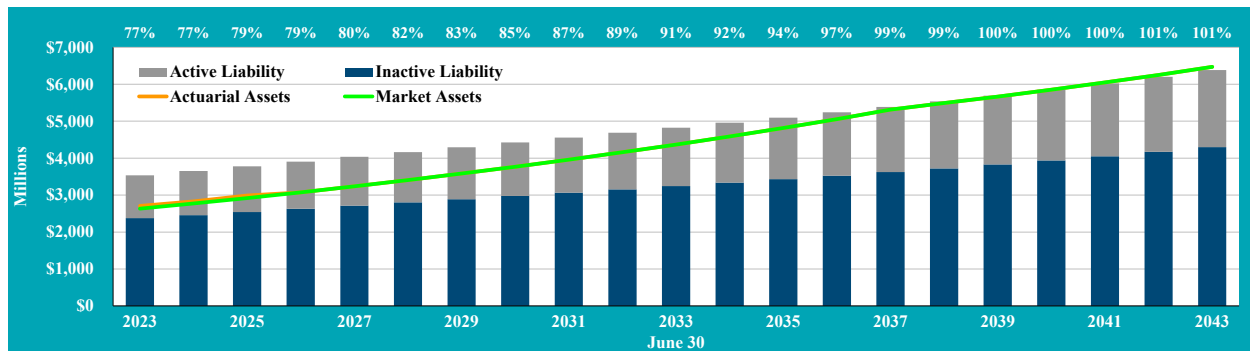
## SECTION I – EXECUTIVE SUMMARY

After 13 years, the total contribution rate is expected to drop due to the end of the amortization period for the initial 2021 amortization base. Thereafter, the total contribution rate mostly represents expected normal cost plus administrative expenses, along with UAL amortization payments for any gains and losses that occurred after July 1, 2021. The ends of the amortization periods only affect the employer contribution rate; they have no impact on the employee contribution rate.

### Asset and Liability Projections:

The following graph shows the projection of assets and liabilities assuming that assets will earn the 6.75% assumption each year during the projection period. The funded ratio shown is based on the Actuarial Value of Assets. The Actuarial Value of Assets is more than the Market Value of Assets as of June 30, 2023; under the five-year smoothing policy, the two are assumed to be equal past 2026 if there are no additional asset gains/losses.

### Projection of Assets and Liabilities, 6.75% Return Each Year (\$ millions)



The graph above shows that the projected funded status remains relatively level for several years before increasing more steadily. The funded ratio approaches 100% after 14 years, as can be expected based on the amortization policy and the one-year contribution lag, assuming the actuarial assumptions are achieved.

However, it is the **actual** return on Plan assets that will determine the future funded status and contribution rate to the Fund.

We note that the funded ratio is expected to gradually climb above 100%; this is because under the PEPRA legislation, the employer contribution is not allowed to fall below the level of the Normal Cost unless the Plan reaches at least 120% funded (and other conditions are met).

Actuarial valuations are based on a set of assumptions about future economic and demographic experience. These assumptions represent a reasonable estimate of future experience, but actual future experience will undoubtedly be different and may vary significantly.

## SECTION II – DISCLOSURES RELATED TO RISK

Actuarial Standard of Practice (ASOP 51) requires actuaries to identify and assess risks that “may reasonably be anticipated to significantly affect the plan’s future financial condition.” This section of the report is intended to identify the primary risks to the Plan, provide some background information about those risks, and provide an assessment of those risks.

### Identification of Risks

A fundamental risk to a pension plan is that the contributions needed to pay the benefits become unaffordable. Even in the case that the Plan remains affordable, the contributions needed to support the Plan may differ significantly from expectations. While there are a number of factors that could lead to contribution amounts deviating from expectations, we believe the primary risks are:

- Investment risk,
- Assumption change risk, and
- Contribution risk.

Other risks that we have not identified may also turn out to be important.

*Investment Risk* is the potential for investment returns to be different than expected. Lower investment returns than anticipated will increase the unfunded actuarial liability necessitating higher contributions in the future unless there are other gains that offset these investment losses. The potential volatility of future investment returns is determined by the Plan’s asset allocation and the affordability of the investment risk is determined by the amount of assets invested relative to the size of the plan sponsors or other contribution base.

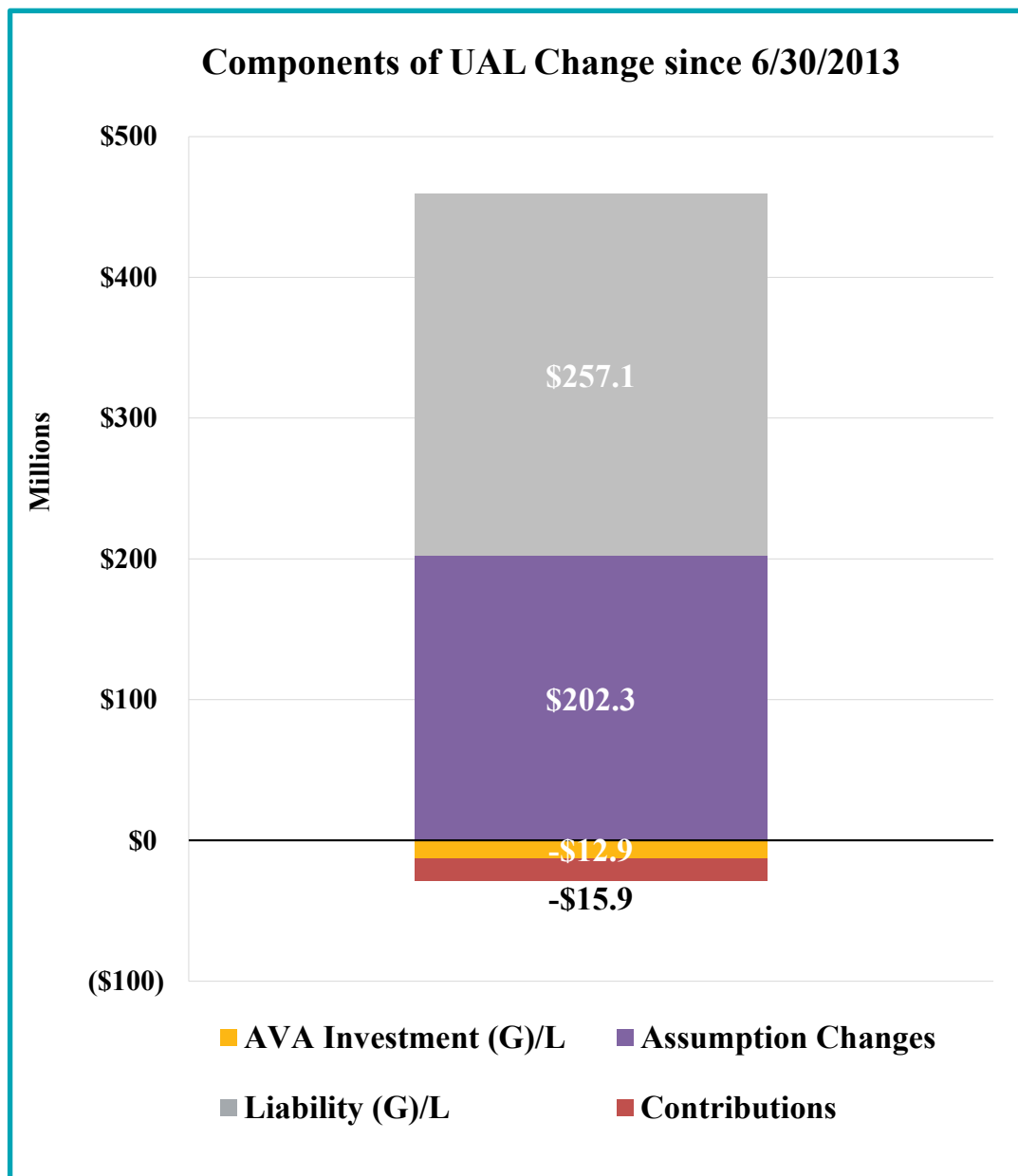
*Assumption change risk* is the potential for the environment to change such that future valuation assumptions are different than the current assumptions. For example, declines in interest rates over the last three decades (which have recently reversed) resulted in higher investment returns for fixed income investments but lower expected future returns, necessitating either a change in investment policy, a reduction in discount rate, or some combination of the two. Assumption change risk is an extension of the other risks identified, but rather than capturing the risk as it is experienced, it captures the cost of recognizing a change in environment when the current assumption is no longer reasonable.

*Contribution risk* is the potential for actual future contributions to deviate from expected future contributions. There are different sources of contribution risk such as the sponsor failing to make contributions in accordance with the funding policy or the contribution requirement becoming such a financial strain on the sponsor as a result of material changes in the contribution base (e.g., covered employees, covered payroll) that it affects the amount of contributions the Plan can collect.

## SECTION II – DISCLOSURES RELATED TO RISK

The chart below shows the aggregated components contributing to the change in Unfunded Actuarial Liability (UAL) from June 30, 2013 through June 30, 2023. Over the last 10 years, the UAL has increased by approximately \$430.6 million. The net liability losses (gray bar) of \$257.1 million and assumption changes (purple bar) of \$202.3 million are the primary sources of the UAL growth, resulting in a total UAL increase of \$459.4 million. The contributions have been slightly above the “tread water” level (described later in this section, shown in the red bar), resulting in a decrease of \$15.9 million in the UAL. Investment gains (gold bar) of \$12.9 million have also decreased the UAL since June 30, 2013.

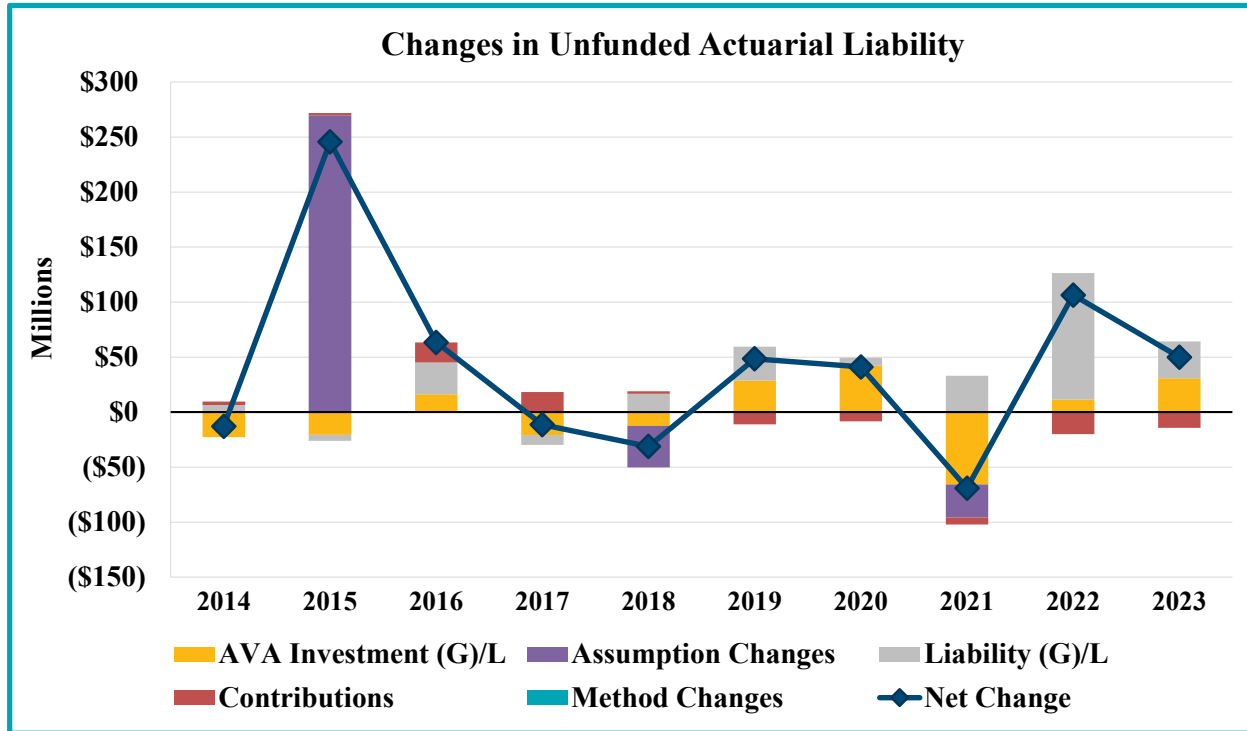
Chart II-1



## SECTION II – DISCLOSURES RELATED TO RISK

Chart II-2 below details the annual sources of the UAL change (colored bars) for the plan years ending June 30. The net UAL change for each year is represented by the blue diamonds.

Chart II-2



Liability losses are the largest contributor to the increase in the UAL over the 10-year period, with a large portion of those losses occurring in the past three years when inflation was high. Triennial experience studies are performed in an effort to identify emerging trends and avoid consistent liability gains or losses.

On a market value basis, the average annual geometric return over the 10-year period has been 7.0% with investment gains on the AVA in five of those years decreasing the UAL, but investment losses in the other five years of the last decade. As of June 30, 2023, there are approximately \$74.0 million of deferred losses that will be recognized over the next four years, with the large loss from 2021-2022 contributing most of the deferred losses.

Over the same time period, the assumed rate of return decreased from 7.75% to 6.75%. It is important to note that these changes simply reflect a downward revision of the estimate of future investment earnings and ultimately costs will be determined by actual investment earnings.

The impact of all assumption changes is represented by the purple bars and also includes decreases in mortality rates projected in the future. The assumption changes effective with the June 30, 2021 valuation included a change in the expected rate of return from 7.00% to 6.75%, but also contained demographic assumption changes, which reduced the UAL.

## SECTION II – DISCLOSURES RELATED TO RISK

Each year the UAL is expected to increase for benefits earned in the current year (the normal cost), administrative expenses, and interest on the UAL. This expected increase is referred to as the tread water level. If contributions are greater than the tread water level, the UAL is expected to decrease. Conversely, if contributions are less than the tread water level, the UAL is expected to increase. The amortization policy (as well as the contribution-timing lag) can impact whether or not the contributions exceed the tread water level. For example, a long amortization period can result in contributions below the tread water cost. The contribution shortfalls in 2016 and 2017 were due to the phase-in of the 2015 assumption change impact.

Contributions did not meet the tread water level in the first five of the last 10 years, resulting in \$44.0 million of increases to the UAL over that period. However, the amortization period has declined such that positive contributions to reduce the UAL principal have been made in each of the last five years, bringing the overall impact from contributions to a net \$15.9 million decrease. The current funding policy amortizes unexpected changes in the UAL over closed periods of 20 years or less, which will likely continue the trend of contributions that reduce the UAL.

Table II-1 below numerically summarizes the changes in the UAL for each year by source over the last 10 years.

**Table II-1**

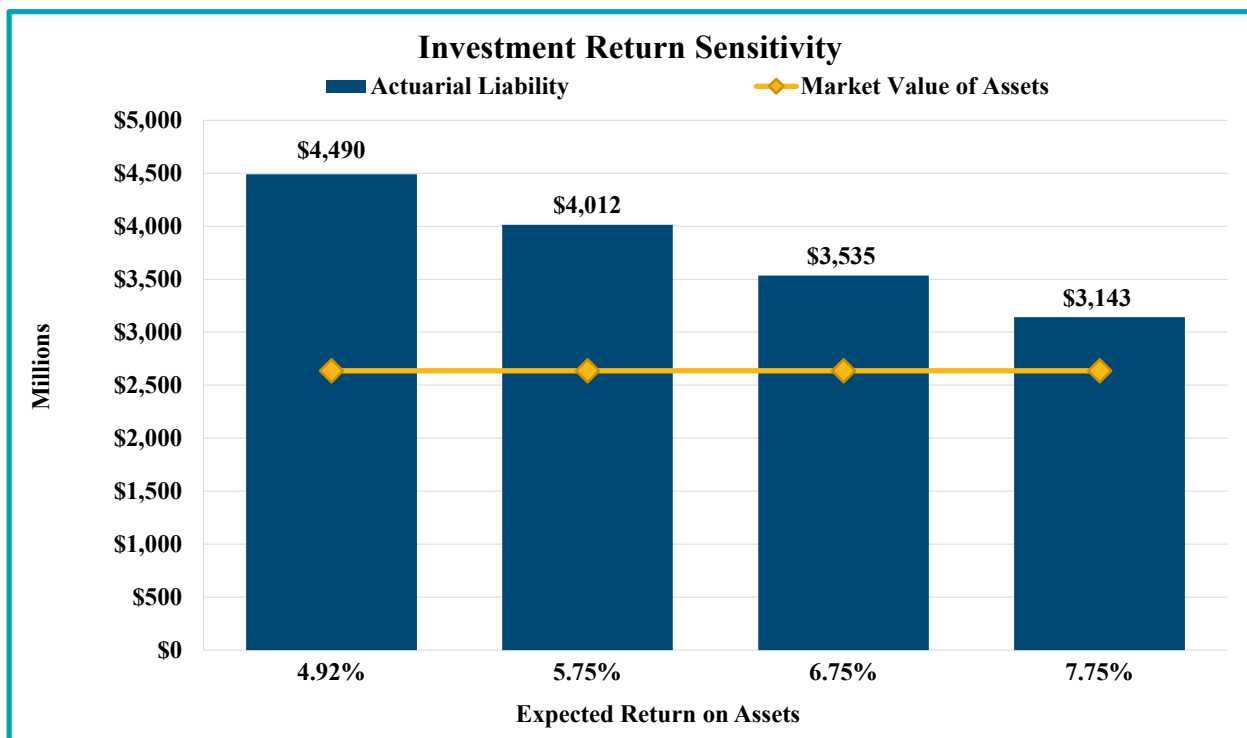
Table II-1 Unfunded Actuarial Liability (UAL) Change by Source						
June 30,	Investment Experience	Liability Experience	Assumption Changes	Method Changes	Contributions	Total UAL Change
<b>2014</b>	(\$22,600,000)	\$6,100,000	\$400,000	\$0	\$3,243,000	(\$12,857,000)
<b>2015</b>	(20,600,000)	(5,600,000)	269,800,000	0	1,999,000	245,599,000
<b>2016</b>	16,300,000	28,900,000	0	0	18,210,000	63,410,000
<b>2017</b>	(20,800,000)	(8,900,000)	0	0	18,328,000	(11,372,000)
<b>2018</b>	(12,400,000)	16,800,000	(37,800,000)	0	2,260,000	(31,140,000)
<b>2019</b>	28,700,000	30,800,000	0	0	(11,023,000)	48,477,000
<b>2020</b>	42,100,000	7,400,000	0	0	(8,407,000)	41,093,000
<b>2021</b>	(65,700,000)	33,000,000	(30,100,000)	0	(6,240,000)	(69,040,000)
<b>2022</b>	11,400,000	115,100,000	0	0	(20,029,000)	106,471,000
<b>2023</b>	30,700,000	33,500,000	0	0	(14,238,000)	49,962,000
<b>Total</b>	<b>(\$12,900,000)</b>	<b>\$257,100,000</b>	<b>\$202,300,000</b>	<b>\$0</b>	<b>(\$15,897,000)</b>	<b>\$430,603,000</b>

## SECTION II – DISCLOSURES RELATED TO RISK

### Assessing Costs and Risks

#### Sensitivity to Investment Returns

The chart below compares the Market Value of Assets (line) to the Actuarial Liabilities (bars) discounted at the current expected rate of return and at discount rates 100 basis points above and below the expected rate of return. In addition, we have added an additional measurement, the Low-Default-Risk Obligation Measure (LDROM), which is the Actuarial Liability using a discount rate derived from low-default-risk fixed income securities that approximately match the benefit payments of the plan.



If investments return 6.75% annually, the Plan will need approximately \$3.5 billion in assets today to pay the benefits associated with service earned to date, compared to current assets of \$2.6 billion. If investment returns are only 5.75%, the Plan would need approximately \$4.0 billion in assets today, and if investment returns are 7.75%, the Plan would need approximately \$3.1 billion in assets today.

StanCERA invests in a diversified portfolio to achieve the best possible returns at an acceptable level of risk. StanCERA's average return over the last 25 years is 6.1%. Please refer to Table III-4 for the asset returns by year since 1997.

The low-risk portfolio for a pension plan would be composed entirely of low-default-risk fixed income securities whose cash flows approximately match the benefit cash flows of the plan.

## SECTION II – DISCLOSURES RELATED TO RISK

However, such a portfolio would have a lower expected rate of return (4.92% as of June 30, 2023) than the diversified portfolio (6.75%). The LDROM represents what the Actuarial Liability would be if StanCERA's assets were invested in such a portfolio. As of June 30, 2023, the LDROM is \$4.49 billion<sup>1</sup> compared to the Actuarial Liability of \$3.54 billion for StanCERA. The \$0.95 billion difference can be viewed as the expected savings from taking on the investment risk of the diversified portfolio. Alternatively, it can be viewed as the potential cost of minimizing the investment risk.

If StanCERA were to invest in the LDROM portfolio and not a diversified portfolio, the funded status would be lower, and the expected contribution requirements would increase. The security of StanCERA's pension benefits relies on current assets, future investment earnings, and the ability and willingness of employers to make future contributions. If StanCERA were to invest in the LDROM portfolio, it would not change current assets, but it could potentially reduce future investment earnings, potentially changing the level of reliance on future employer contributions. However, investing in an LDROM portfolio would generate more predictable future investment earnings and future contributions.

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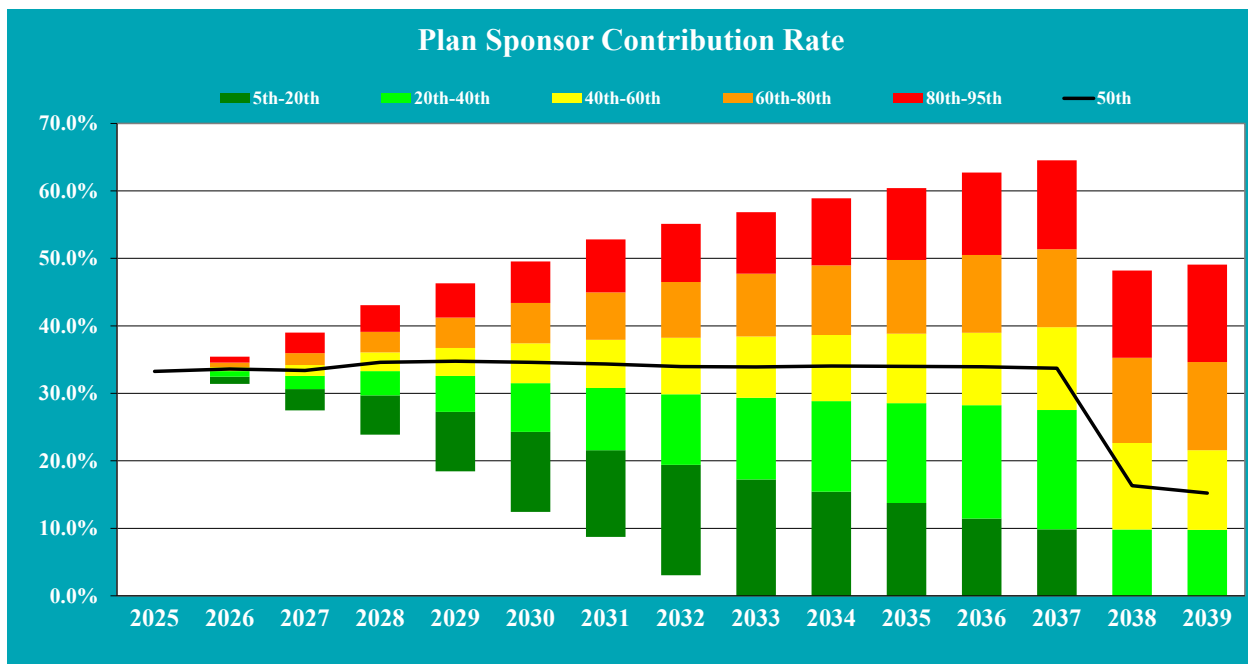
<sup>1</sup> Based on a discount rate equal to the June 30, 2023 FTSE Pension Liability Index of 4.92%, and all other assumptions and methods as used to calculate the Actuarial Liability.

## SECTION II – DISCLOSURES RELATED TO RISK

### Sensitivity to Investment Returns - Stochastic Projections

Stochastic projections serve to show the range of probable outcomes of various measurements. The graphs below and on the following page show the projected range of the employer contribution rate and of the funded ratio on an Actuarial Value of Assets basis. The range in both scenarios is driven by the volatility of investment returns (assumed to be based on a 12% standard deviation of annual returns, as indicated in NEPC's June 30, 2023 capital market assumptions). The stochastic projections of investment returns are based on an assumption that each future year's investment return is independent from all other years and is identically distributed according to a lognormal distribution. This assumption may result in an unrealistically wide range of compound investment returns over longer periods.

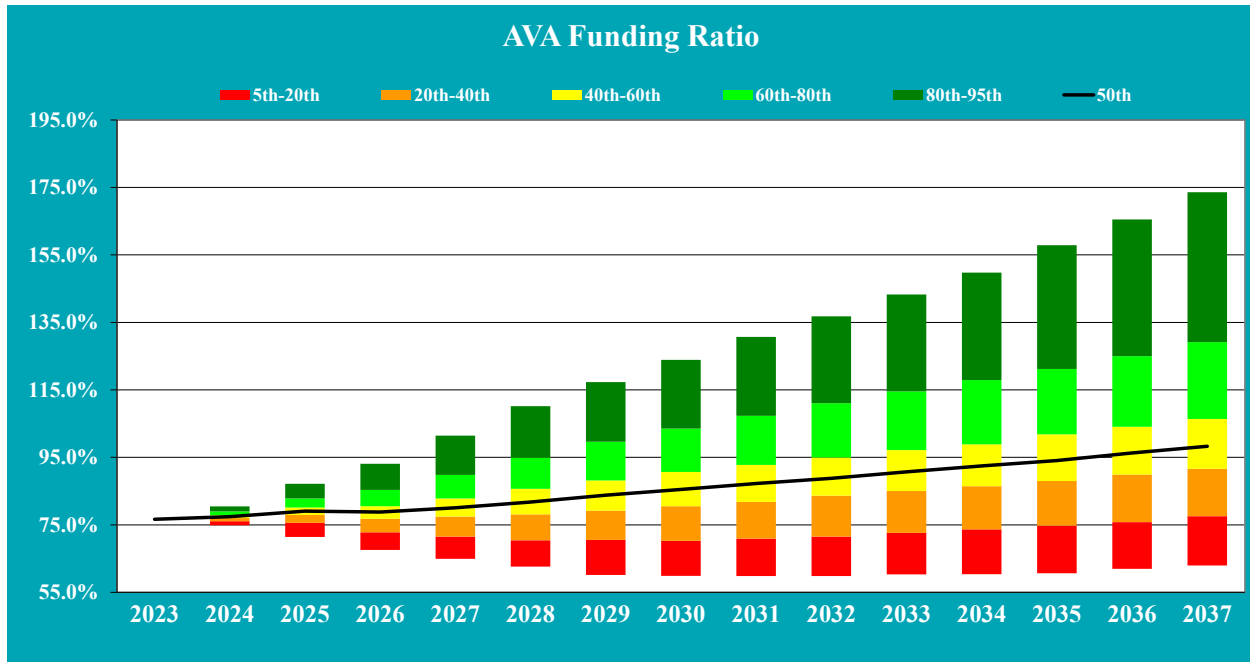
#### Stochastic Projection of Employer Contributions as a Percent of Pay



The stochastic projection of employer contributions as a percentage of pay shows the probable range of future contribution rates. The baseline contribution rate (black line), which is based on the median of the simulations using an average return of 6.75%, aligns closely with the projections discussed in subsection D. of the Executive Summary of this report. In the most pessimistic scenario shown, the 95<sup>th</sup> percentile, the projected employer contribution rate approaches 65% of pay by 2037. Conversely, the most optimistic scenario shown, the 5<sup>th</sup> percentile, the projected employer contribution rate declines to 0% by 2033. These projections allow the employer contribution to drop below the normal cost only if the Plan becomes extremely over-funded (above 120%), as required under PEPRA.

## SECTION II – DISCLOSURES RELATED TO RISK

### Stochastic Projection of Funded Ratio on an Actuarial Value of Assets Basis



The graph above shows the projection of the funded ratio based on the Actuarial Value of Assets, under the current layered amortization policy. While the baseline-funded ratio (black line) is projected to approach 100% at the end of the 15-year period shown here, there is a wide range of potential outcomes. Good investment returns have the likelihood of bringing the funded ratio well over 100%.

Due to the current funding policy of the Plan, even in scenarios with unfavorable investment returns, the Plan is projected to remain over 60% funded on an Actuarial Value of Assets basis, as long as the actuarially determined contributions continue to be made.

### Sensitivity to Investment Returns – Projected FYE 2026 Employer Contribution Rate

The following graph focuses on the short-term, showing the impact that different FYE 2024 investment returns will have on the FYE 2026 Employer Contribution Rate.

The x-axis covers a range of potential FYE 2024 investment returns. The actual FYE 2024 investment return may fall outside of this range. The y-axis is the employer contribution rate.

The blue line shows the FYE 2025 employer contribution rate of 33.2%. The line is flat because the FYE 2025 rate is based on the June 30, 2023 valuation. It will not be impacted by the FYE 2024 investment return.

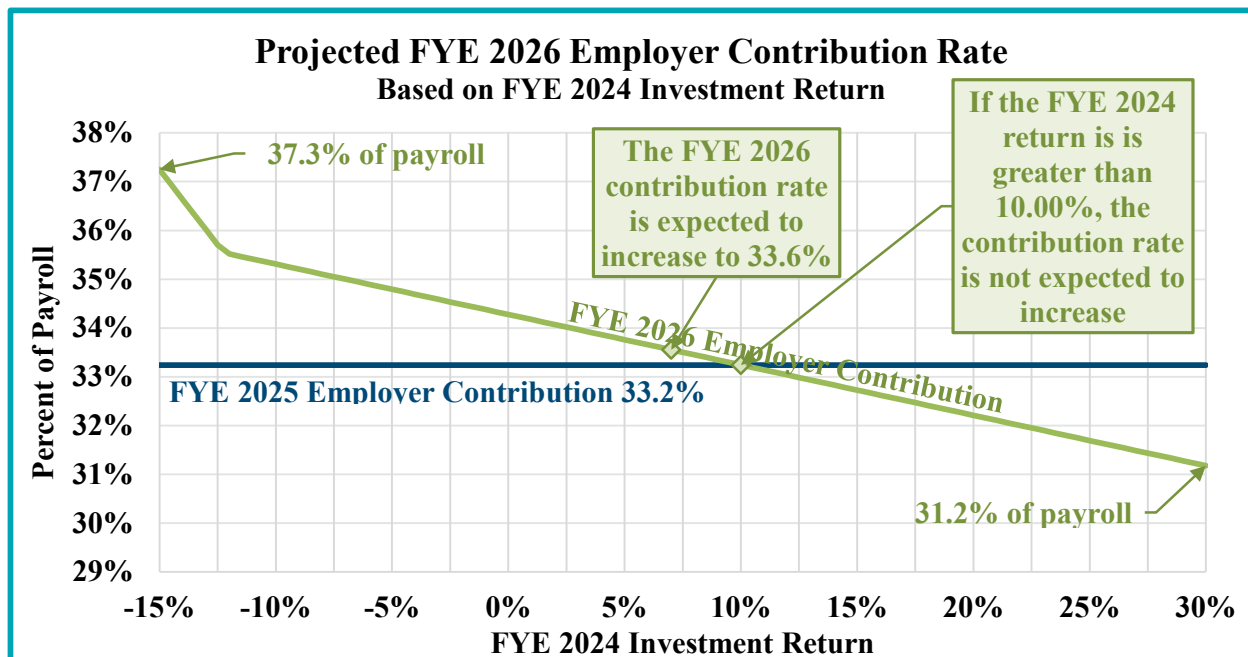
The FYE 2024 investment return will first impact the FYE 2026 contribution rate. The green line shows how that rate will vary for different investment returns. For example, a FYE 2024 return

## SECTION II – DISCLOSURES RELATED TO RISK

of 30% results in an employer contribution rate of 31.2% of payroll. The FYE 2026 contribution rate is expected to be 33.6%, based on the investment return assumption of 6.75%.

The range of the projected FYE 2026 employer contribution rate is relatively narrow due to asset “smoothing”. The rate is calculated using the Actuarial Value of Assets, which recognizes market value investment gains and losses over five years. In other words, only 20% of the FYE 2024 investment gain or loss will be reflected when calculating the FYE 2026 contribution rate.

The slope of the green line increases when returns drop below about -12%. This is caused by the 20% corridor included in the Actuarial Value of Assets calculation. The 20% corridor limits the Actuarial Value to no less than 80% and no more than 120% of the market value. Thus, investment losses beyond a certain level (-12%, in this case) are reflected in the Actuarial Value immediately, instead of gradually over five years. The Actuarial Value does not reach the bottom end of the corridor for this range of returns because the Market Value of Assets is currently less than Actuarial Value of Assets (i.e., the Actuarial Value starts closer to the top end of the corridor).



## SECTION II – DISCLOSURES RELATED TO RISK

### Contribution Risk

While investment returns are typically the dominant factor in volatility, contribution rates can also be sensitive to future salary increases and the hiring of new members. When member payroll growth stagnates or even declines, the dollar level of contributions made to the Plan also stagnates or declines since contributions are based on payroll levels, though this will generally only present a funding issue if there is an extended period of payroll reductions.

There is also a risk of the contribution rate increasing even higher when payroll decreases since the Plan's funding policy amortizes the UAL as a level percentage of pay. This means that the UAL payments increase at the assumed payroll growth rate of 2.75%, so that the payment is expected to remain constant as a percentage of payroll. If payroll growth is less than the expected 2.75% or there is a decline in payroll, the UAL payments are spread over a smaller payroll base and the contribution rate as a percentage of pay increases, potentially making the Plan less affordable for those sponsors with declining payroll and/or revenue bases.

For example, the UAL Amortization rate as of June 30, 2023 for the FYE 2024 is 21.54%. If the projected payroll for FYE 2024 were 2.75% lower, all else being equal, the UAL Amortization rate would increase to 22.15%.

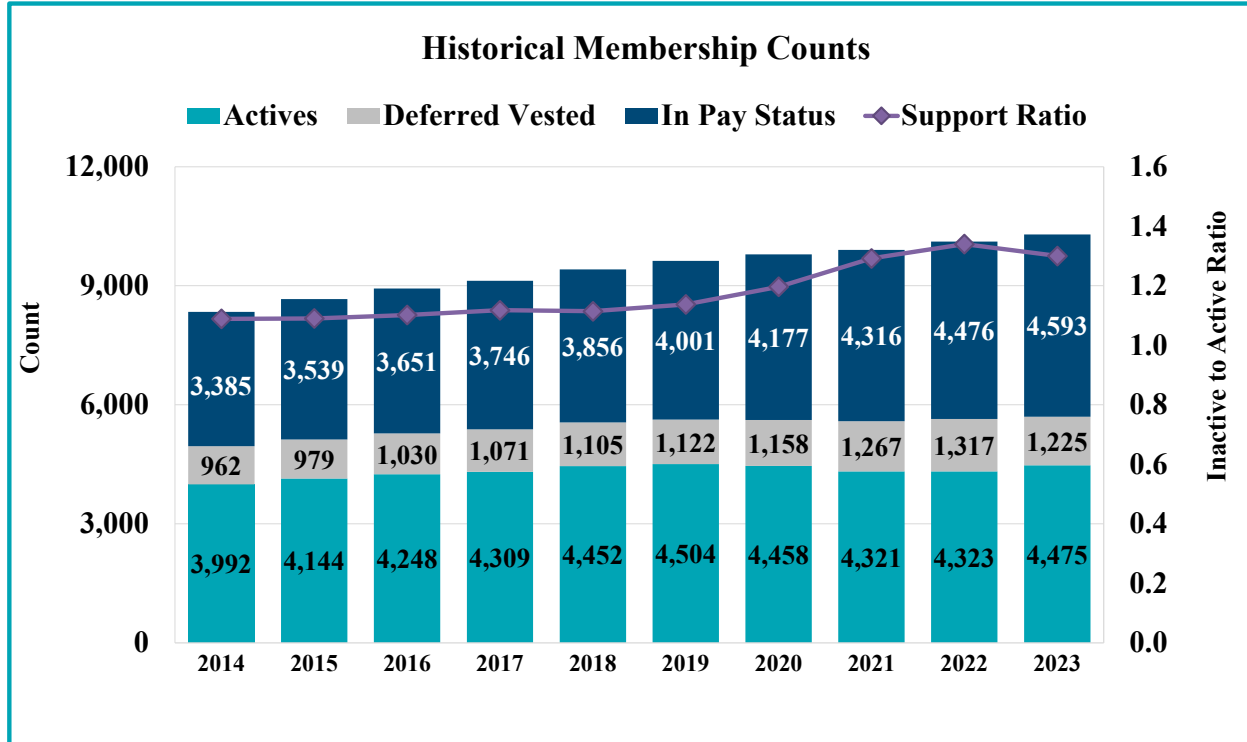
### Plan Maturity Measures

The future financial condition of a mature pension plan is more sensitive to each of the risks identified above than a less mature plan. It is important to understand how the maturity has changed over time. Plan maturity can be measured in a variety of ways, but they all get at one basic dynamic – the larger the plan is compared to the contribution or revenue base that supports it, the more sensitive the plan will be to risk. The measures below have been selected as the most important in understanding the primary risks identified for the Plan.

## SECTION II – DISCLOSURES RELATED TO RISK

### Inactives per Active (Support Ratio)

One simple measure of plan maturity is the ratio of the number of inactive members to the number of active members. The Support Ratio is expected to increase gradually as a plan matures. The chart below shows the growth in the Support Ratio from 2014 to 2023 as the number of active members generally increased more slowly than the number of retirees and deferred members. Most of the increase occurred between 2019 and 2022.

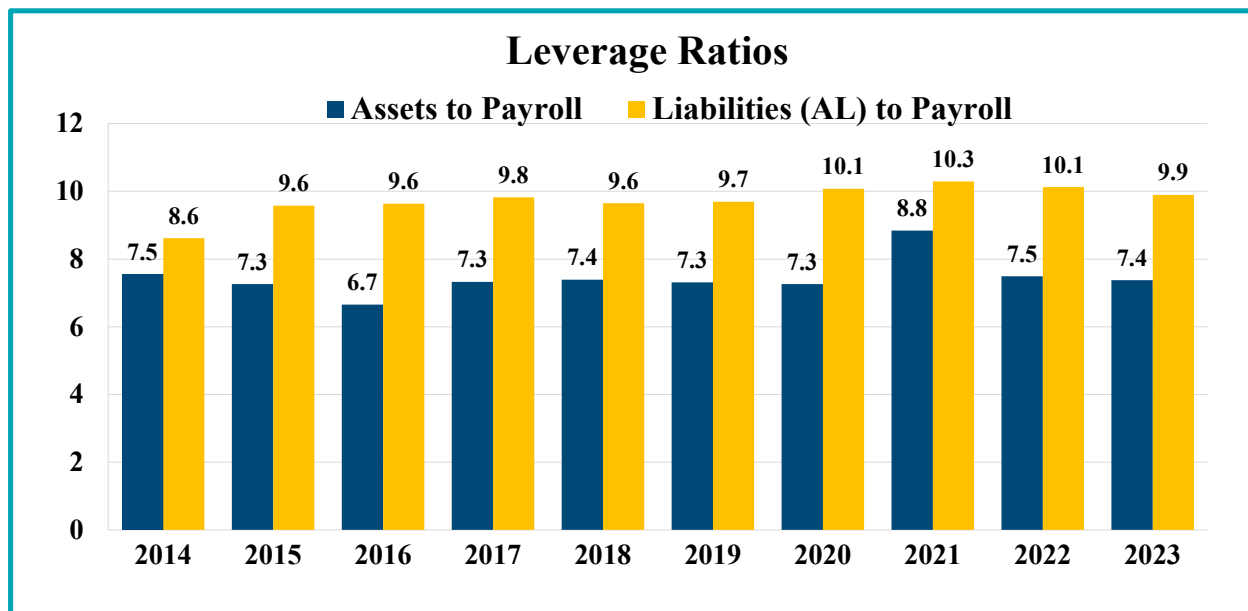


## SECTION II – DISCLOSURES RELATED TO RISK

### Leverage Ratios

Leverage or volatility ratios measure the size of the plan compared to its revenue base more directly. The asset leverage ratio is simply the market value of assets to active member payroll and indicates the sensitivity of the Plan to investment returns. The liability leverage ratio is the plan's actuarial liability to active member payroll and indicates the sensitivity of the Plan to assumption changes or liability experience.

The chart below shows the historical leverage ratios of the Plan. The liabilities to payroll ratio has remained at approximately 10.0 for the last nine years, and the asset to payroll ratio has remained at or above 7.0 – assets are seven times member payroll – for all but one of the last ten years.

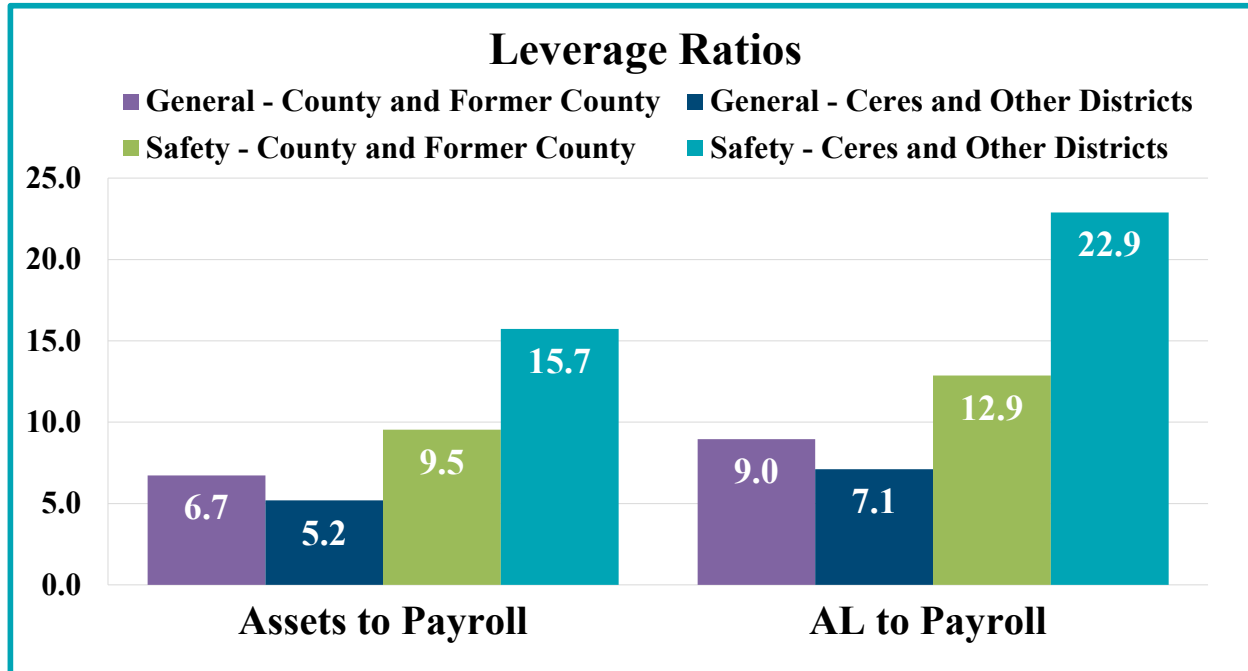


To appreciate the impact of the ratio of assets to payroll on plan cost, consider the situation for a new plan with almost no assets. Even if the assets suffer a bad year of investment returns, the impact on the plan cost is nil, because the asset level is so small.

As the Plan becomes better funded, the asset leverage ratio will increase, and if it were 100% funded, the asset leverage ratio would be about 10 times payroll, or the Actuarial Liability (AL) leverage ratio.

We note that the ratio of both assets and liabilities to payroll, and therefore the sensitivity to investment returns, is higher for the Safety members compared to the General members, because of the higher benefit amounts and the earlier average retirement ages for Safety. The ratios can also differ significantly for employer subgroups.

## SECTION II – DISCLOSURES RELATED TO RISK



We first discuss the County and Former County employer subgroup. The General asset leverage ratio of 6.7 means that if the Plan's assets lose 10% of their value, which is a 16.75% actuarial loss compared to the expected return of 6.75%, the loss would be equivalent to 112% of payroll (16.75% times 6.7). The same investment loss for the Safety group with an asset ratio of 9.5 would be equivalent to approximately 159% of payroll. There is only one source of funding to make up for these investment losses: contributions. Consequently, barring future offsetting investment gains, the employer has to make up the asset loss in additional future contributions. In this example of a one-year loss of 10%, the shortfall will eventually require an additional annual amortization payment of approximately 8% and 12% of payroll for General and Safety, respectively, if amortized over 20 years. Contribution rates for the Safety members will generally be more volatile compared to General members.

If the Plan were fully funded, the 10% loss discussed above would translate to a loss of 150% of payroll for General and 216% of payroll for Safety. When amortized over 20 years, employer contributions would increase approximately 11% and 16% of payroll, respectively. Therefore, the Plan may become more sensitive to market variations in the future than it is today.

The disparity between the leverage ratios for Ceres and Other Districts is even greater. For this employer subgroup, the 10% asset loss would be the equivalent of 87% of payroll for General and 263% of payroll for Safety. When amortized over 20 years, employer contributions would increase approximately 6% and 19% of payroll, respectively.

## **SECTION II – DISCLOSURES RELATED TO RISK**

### **More Detailed Assessment**

While a more detailed assessment is always valuable to enhance the understanding of the risks identified above, we believe the scenarios illustrated above cover the primary risks facing the Plan at this time. We would be happy to provide the Board with a more in-depth analysis at their request.

### SECTION III – ASSETS

Pension Plan assets play a key role in the financial operation of the Plan and in the decisions the Board may make with respect to future deployment of those assets. The level of assets, the allocation of assets among asset classes, and the methodology used to measure assets will likely impact benefit levels, employer contributions, and the ultimate security of participants' benefits.

In this section, we present detailed information on Plan assets including:

- **Disclosure** of Plan assets as of June 30, 2022 and June 30, 2023,
- Statement of the **changes** in market values during the year,
- Development of the **Actuarial Value of Assets**,
- An assessment of historical **investment performance versus inflation**, and
- An allocation of the Actuarial Value of Assets between the **cost-sharing groups**.

#### Disclosure

There are two types of asset values disclosed in the valuation, the Market Value of Assets and the Actuarial Value of Assets. The market value represents “snap-shot” or “cash-out” values, which provide the principal basis for measuring financial performance from one year to the next. Market values, however, can fluctuate widely with corresponding swings in the marketplace. As a result, market values are usually not as suitable for long-range planning as are the Actuarial Value of Assets, which reflects smoothing of annual investment returns.

Table III-1 on the next page discloses and compares each asset class as of June 30, 2022 and June 30, 2023.

STANISLAUS COUNTY EMPLOYEES' RETIREMENT ASSOCIATION  
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2023

**SECTION III – ASSETS**

Table III-1 Statement of Assets at Market Value		
	Fiscal Year ending June 30, 2022	Fiscal Year ending June 30, 2023
<b>Cash and Cash Equivalents</b>		
Total Cash and Cash Equivalents	\$ 68,001,805	\$ 67,646,035
<b>Receivables</b>		
Interest and Dividends	\$ 5,126,501	\$ 6,477,394
Contributions	4,757,769	5,595,454
Securities Transactions	432,933	1,197,146
Total Receivables	\$ 10,317,203	\$ 13,269,994
<b>Fixed Assets</b>		
Capitalized Software	\$ 0	\$ 0
Real Estate Occupied	1,573,614	1,554,638
Real Estate Leased	1,049,794	1,037,141
Other	7,238,023	7,604,700
Total Fixed Assets	\$ 9,861,431	\$ 10,196,479
<b>Investments at Market Value</b>		
Fixed Income	\$ 268,798,688	\$ 333,115,283
Equities	968,222,097	1,063,686,197
Collateral on Loaned Securities	81,116,101	83,174,371
Other	1,217,916,435	1,190,614,647
Total Investments	\$ 2,536,053,321	\$ 2,670,590,498
<b>Liabilities</b>		
Accounts Payable	\$ (15,309,238)	\$ (15,253,090)
Security Transactions Payable	(988,077)	(1,038,000)
Collateral Held for Loaned Securities	(81,116,101)	(83,174,371)
Other	(395,000)	(395,000)
Total Liabilities	\$ (97,808,416)	\$ (99,860,461)
<b>Market Value of Assets</b>	<b>\$ 2,526,425,344</b>	<b>\$ 2,661,842,545</b>

### **SECTION III – ASSETS**

#### **Changes in Market Value**

The components of asset change are:

- Contributions (employers and employee)
- Benefit payments
- Expenses (investment and administrative)
- Investment income (realized and unrealized)

Table III-2 on the next page shows the components of change in the Market Value of Assets during the fiscal years ending June 30, 2022 and June 30, 2023.

STANISLAUS COUNTY EMPLOYEES' RETIREMENT ASSOCIATION  
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2023

**SECTION III – ASSETS**

Table III-2 Changes in Market Values		
<u>Additions</u>	Fiscal Year ending <u>June 30, 2022</u>	Fiscal Year ending <u>June 30, 2023</u>
Contributions		
Employer's Contribution	\$ 100,768,249	\$ 105,089,934
Members' Contributions	29,998,079	33,052,850
Total Contributions	<u>\$ 130,766,328</u>	<u>\$ 138,142,784</u>
Net Investment Income		
Net Appreciation/(Depreciation) in		
Fair Value of Investments	\$ (191,378,355)	\$ 134,076,331
Interest and Dividends	49,088,179	55,969,574
Commission Recapture	32,929	14,491
Other Investment Income	699,924	2,741,855
Total Investment Income	<u>\$ (141,557,323)</u>	<u>\$ 192,802,251</u>
Investment Expense	(27,898,500)	(19,763,497)
Net Investment Income	<u>\$ (169,455,823)</u>	<u>\$ 173,038,754</u>
Securities Lending Activities		
Securities Lending Income	\$ 432,050	\$ 540,693
Expenses from Securities Lending Activities	(130,119)	(160,790)
Net Securities Lending Income	<u>301,931</u>	<u>379,903</u>
Total Net Investment Income	<u>\$ (169,153,892)</u>	<u>\$ 173,418,657</u>
<b>Total Additions</b>	<b>\$ (38,387,564)</b>	<b>\$ 311,561,441</b>
<u>Deductions</u>		
Benefits	\$ 158,258,447	\$ 168,768,709
Refunds	4,050,751	3,013,593
Administrative Costs	3,475,764	4,361,938
<b>Total Deductions</b>	<u><b>\$ 165,784,962</b></u>	<u><b>\$ 176,144,240</b></u>
<b>Net Increase/(Decrease)</b>	<b>\$ (204,172,526)</b>	<b>\$ 135,417,201</b>
Net Assets Beginning of Year	<b>\$ 2,730,597,870</b>	<b>\$ 2,526,425,344</b>
Net Assets End of Year	<b>\$ 2,526,425,344</b>	<b>\$ 2,661,842,545</b>
Approximate Return	<b>-6.23%</b>	<b>6.92%</b>

### SECTION III – ASSETS

#### **Actuarial Value of Assets (AVA)**

The Actuarial Value of Assets represents a “smoothed” value developed by the actuary to reduce the volatile results that could develop due to short-term fluctuations in the Market Value of Assets. For this Plan, the Actuarial Value of Assets is calculated on a modified market-related value. The Market Value of Assets is adjusted to recognize, over a five-year period, investment earnings which are greater than (or less than) the assumed investment return. However, in no event will the Actuarial Value of Assets be less than 80% or more than 120% of market value on the valuation date.

The Valuation Assets are the portion of the Actuarial Assets dedicated to funding the basic pension benefits. The Valuation Assets exclude the value of any non-valuation reserves, such as reserves established for legal contingencies. The Valuation Assets also exclude the value of any non-valuation contingency reserves, which have been established according to the Board's funding policy. In valuations prior to the June 30, 2014 valuation, a reserve associated with the Burial Allowance was excluded from the Valuation Assets; both the assets and liabilities associated with this benefit are included in this valuation.

The table on the following page shows the development of the actuarial asset and valuation assets values.

STANISLAUS COUNTY EMPLOYEES' RETIREMENT ASSOCIATION  
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**SECTION III – ASSETS**

Table III-3 Development of Actuarial Value of Assets for 6/30/2023	
Item	Total
1. Market Value as of 6/30/2022	\$ 2,526,425,344
2. Non-Investment Cash Flow for 2022-2023	(38,001,456)
3. Expected Return in 2022-2023	169,272,104
4. Expected Market Value as of 6/30/2023: (1 + 2 + 3)	\$ 2,657,695,992
5. Actual Return in 2022-2023	173,418,657
6. Actual Return Above Expected in 2022-2023: (5 - 3)	4,146,553
7. Market Value as of 6/30/2023	\$ 2,661,842,545
8. Deferred Recognition of Returns Above Expected	
A. 2022-2023 (80% of \$4,146,553)	3,317,242
B. 2021-2022 (60% of -\$352,306,668)	(211,384,001)
C. 2020-2021 (40% of \$402,867,628)	161,147,051
D. 2019-2020 (20% of -\$135,361,964)	(27,072,393)
E. Total	\$ (73,992,101)
9. Preliminary Actuarial Value of Assets: (7 - 8E)	\$ 2,735,834,646
10. Corridor Limit	
A. 80% of Net Market Value	2,129,474,036
B. 120% of Net Market Value	3,194,211,054
11. Actuarial Value after Corridor as of 6/30/2023	\$ 2,735,834,646
12. Rate of Return on Actuarial Value of Assets	5.49%
13. Ratio of Actuarial Value to Market Value: (11 ÷ 7)	102.8%
14. Special (Non Valuation) Reserves:	
A. Health Insurance Reserves	0
B. Special COL Reserve	0
C. Legal Contingency Reserve	1,253,788
D. Tier 3 Disability Reserve	1,837
E. Contingency Reserve	25,007,665
F. Total Special Reserves (Market Value)	\$ 26,263,290
15. Adjusted Total Special Reserves (102.8% of Market, Except Contingency)	\$ 26,298,193
16. Pension Reserves at Actuarial Value (Valuation Assets): (11 - 15)	\$ 2,709,536,453

## SECTION III – ASSETS

### Historical Investment Performance

The table shows the historical annual asset returns on a market value, actuarial value, and valuation asset basis, as well as the increase in the Consumer Price Index (CPI) since 1997. Note that the returns prior to 2013 are expressed net of investment and administrative expenses; the returns for 2013 and all following years are expressed net of investment expenses only.

Table III-4 Net Return on Assets vs. Increase in Consumer Price Index				
Year Ended June 30	Net Return at Market Value	Net Return at Actuarial Value	Net Return at Valuation Assets	Increase in Consumer Price Index <sup>1</sup>
1997	20.4%			2.3%
1998	13.4%			1.7%
1999	10.6%			2.0%
2000	6.3%			3.7%
2001	7.0%			3.2%
2002	-4.5%			1.1%
2003	5.2%		4.9%	2.1%
2004	6.1%		6.3%	3.3%
2005	8.2%		5.5%	2.5%
2006	9.9%		10.8%	4.3%
2007	16.0%	10.8%	0.6%	2.7%
2008	-8.5%	8.0%	16.7%	5.0%
2009	-17.2%	-9.6%	-9.4%	-1.4%
2010	15.6%	13.0%	14.7%	1.1%
2011	22.1%	3.5%	4.2%	3.6%
2012	0.1%	6.4%	6.5%	1.7%
2013	13.9%	7.0%	7.2%	1.8%
2014	18.0%	9.4%	9.5%	2.1%
2015	3.9%	9.1%	9.0%	0.1%
2016	-1.7%	6.3%	6.3%	1.0%
2017	14.4%	8.3%	8.4%	1.6%
2018	7.8%	7.9%	7.9%	2.9%
2019	4.7%	5.6%	5.6%	1.6%
2020	0.8%	5.0%	5.1%	0.6%
2021	25.4%	9.8%	9.9%	5.4%
2022	-6.2%	6.4%	6.3%	9.1%
2023	6.9%	5.5%	5.6%	3.0%
<b>25-Year Compound Average</b>	<b>6.1%</b>	<b>N/A</b>	<b>N/A</b>	<b>2.5%</b>
<b>20-Year Compound Average</b>	<b>6.5%</b>	<b>N/A</b>	<b>6.7%</b>	<b>2.6%</b>
<b>15-Year Compound Average</b>	<b>6.6%</b>	<b>6.1%</b>	<b>6.3%</b>	<b>2.3%</b>
<b>10-Year Compound Average</b>	<b>7.0%</b>	<b>7.3%</b>	<b>7.3%</b>	<b>2.7%</b>
<b>5-Year Compound Average</b>	<b>5.8%</b>	<b>6.4%</b>	<b>6.5%</b>	<b>3.9%</b>

<sup>1</sup> Based on All Urban Consumers - U.S. City Average, June indices.

STANISLAUS COUNTY EMPLOYEES' RETIREMENT ASSOCIATION  
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2023

**SECTION III – ASSETS**

**Allocation of Actuarial Value of Assets by Cost-Sharing Group**

The following table shows the allocation of the Actuarial Value of Assets between the four cost-sharing groups, which covers the employer subgroups (County / Former County Members and City of Ceres / Special District Members) as well as the valuation subgroups (General and Safety). First, the actuarial asset value from the prior year for each cost-sharing group is increased by employee and employer contributions and decreased by benefit payments and expenses. Expected returns are added to get an expected asset value. A final adjustment is applied for the actual (smoothed) investment returns, proportionate to each groups' share of the expected assets, such that the sum of the valuation assets allocated to each group equals the total of the valuation assets for StanCERA. These AVA values are used to calculate each group's UAL and the associated amortization payment.

For the year ending in 2023, the non-investment cash flow includes transfers related to data corrections. Retirees previously reported under the County/Former County subgroup were correctly reported under the City of Ceres/Special District subgroup for the first time. The associated transfers between cost-sharing groups are consistent with the previous valuation asset allocation methodology, which fully funded the liability associated with the retired members

<p style="text-align: center;"><b>Table III-5</b> <b>Allocation of June 30, 2023 Actuarial Value of Assets</b> (in thousands)</p>						
	<b>General</b>		<b>Safety</b>		<b>Total</b>	
	<b>County and Former County</b>	<b>Ceres and Other Districts</b>	<b>County and Former County</b>	<b>Ceres and Other Districts</b>		
1. Actuarial Value of Assets					\$	2,709,536
2. Allocated Actuarial Value of Assets as of 6/30/2022	\$ 1,797,334	\$ 57,307	\$ 672,542	\$ 76,579	\$	2,603,763
3. Contributions for 2022-2023	89,806	3,348	40,089	4,900		138,143
4. Benefit Payments for 2022-2023	(124,431)	(3,753)	(39,622)	(3,976)		(171,782)
5. Allocated Administrative Expenses for 2022-2023	(2,850)	(110)	(1,250)	(151)		(4,362)
6. Transfers related to Data Corrections for 2022-2023	0	0	(3,582)	3,582		0
7. Non-Investment Cash Flow for 2022-2023 [3 + 4 + 5 + 6]	\$ (37,476)	\$ (514)	\$ (4,365)	\$ 4,354	\$	(38,001)
8. Expected Return in 2022-2023	120,076	3,851	45,371	5,195		174,492
9. <b>Expected Assets as of 6/30/2023 [2 + 7 + 8]</b>	<b>\$ 1,879,934</b>	<b>\$ 60,644</b>	<b>\$ 713,548</b>	<b>\$ 86,128</b>	<b>\$</b>	<b>2,740,254</b>
10. <b>Net Assets for Distribution [1 - 9]</b>					<b>\$</b>	<b>(30,717)</b>
11. Allocation of Net Assets	68.60%	2.21%	26.04%	3.14%		100.00%
12. Remaining Assets	(21,073)	(680)	(7,999)	(965)		(30,717)
13. <b>Actuarial Value of Assets [9 + 12]</b>	<b>\$ 1,858,861</b>	<b>\$ 59,964</b>	<b>\$ 705,549</b>	<b>\$ 85,162</b>	<b>\$</b>	<b>2,709,536</b>

## SECTION IV – LIABILITIES

In this section, we present detailed information on Plan liabilities including:

- **Disclosure** of Plan liabilities on June 30, 2022 and June 30, 2023,
- Statement of **changes** in these liabilities during the year.

### Disclosure

Several types of liabilities are calculated and presented in this report. Each type is distinguished by the people ultimately using the figures and the purpose for which they are using them. Note that these liabilities are not applicable for settlement purposes, including the purchase of annuities and the payment of lump sums.

- **Present Value of Future Benefits:** Used for measuring all future Plan obligations, represents the amount of money needed today to fully fund all benefits of the Plan both earned as of the valuation date and those to be earned in the future by current Plan participants, under the current Plan provisions.
- **Actuarial Liability:** Used for funding calculations, this liability is calculated taking the Present Value of Future Benefits and subtracting the present value of future Member Contributions and future Employer Normal Costs under an acceptable actuarial funding method. The method used for this Plan is called the **Entry Age Normal** (EAN) funding method.
- **Unfunded Actuarial Liability:** The excess of the Actuarial Liability over the Actuarial Value of Assets.

Table IV-1 on the following page discloses each of these liabilities for the current and prior valuations. With respect to each disclosure, a subtraction of the appropriate value of Plan assets yields, for each respective type, a **net surplus**, or an **Unfunded Actuarial Liability**.

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**SECTION IV – LIABILITIES**

<b>Table IV-1</b> <b>Present Value of Future Benefits and Actuarial Liability</b> (in thousands)						
	<b>General</b>		<b>Safety</b>		<b>June 30, 2023</b>	<b>June 30, 2022</b>
	<b>County and Former County</b>	<b>Ceres and Other Districts</b>	<b>County and Former County</b>	<b>Ceres and Other Districts</b>	<b>Total</b>	<b>Total</b>
<b>Present Value of Future Benefits</b>						
Actives	\$ 1,183,381	\$ 41,600	\$ 487,866	\$ 39,683	\$ 1,752,530	\$ 1,661,005
Terminated Vested	133,305	7,307	45,872	21,699	208,184	217,084
Retirees	1,351,500	43,285	449,693	53,522	1,898,000	1,792,823
Disabled	47,028	2,842	85,264	15,332	150,465	145,770
Beneficiaries	80,227	2,379	35,650	4,247	122,502	119,493
<b>Total StanCERA</b>	<b>\$ 2,795,441</b>	<b>\$ 97,413</b>	<b>\$ 1,104,344</b>	<b>\$ 134,482</b>	<b>\$ 4,131,681</b>	<b>\$ 3,936,175</b>
<b>Actuarial Liability</b>						
Total Present Value of Benefits	\$ 2,795,441	\$ 97,413	\$ 1,104,344	\$ 134,482	\$ 4,131,681	\$ 3,936,175
Present Value of Future Normal Costs						
Employer Portion	206,605	9,783	93,992	7,897	318,277	299,117
Employee Portion	180,158	7,712	84,236	6,008	278,115	257,504
<b>Actuarial Liability</b>	<b>\$ 2,408,678</b>	<b>\$ 79,918</b>	<b>\$ 926,116</b>	<b>\$ 120,577</b>	<b>\$ 3,535,289</b>	<b>\$ 3,379,554</b>
Actuarial Value of Assets	\$ 1,858,861	\$ 59,964	\$ 705,549	\$ 85,162	\$ 2,709,536	\$ 2,603,763
AVA Funded Ratio	77.2%	75.0%	76.2%	70.6%	76.6%	77.0%
<b>Unfunded Actuarial Liability/(Surplus)</b>	<b>\$ 549,817</b>	<b>\$ 19,954</b>	<b>\$ 220,567</b>	<b>\$ 35,415</b>	<b>\$ 825,753</b>	<b>\$ 775,791</b>

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**SECTION IV – LIABILITIES**

The table shows the Actuarial Liabilities for each of the valuation cost-sharing groups, split by members' status.

<b>Table IV-2</b> <b>Liabilities by Group as of June 30, 2023</b> (in thousands)					
	<b>General</b>		<b>Safety</b>		<b>Total</b>
	<b>County and Former County</b>	<b>Ceres and Other Districts</b>	<b>County and Former County</b>	<b>Ceres and Other Districts</b>	
<b>Actuarial Liability</b>					
Actives	\$ 796,618	\$ 24,106	\$ 309,637	\$ 25,778	\$ 1,156,138
Terminated Vested	133,305	7,307	45,872	21,699	208,184
Retirees	1,351,500	43,285	449,693	53,522	1,898,000
Disabled	47,028	2,842	85,264	15,332	150,465
Beneficiaries	80,227	2,379	35,650	4,247	122,502
<b>Total</b>	<b>\$ 2,408,678</b>	<b>\$ 79,918</b>	<b>\$ 926,116</b>	<b>\$ 120,577</b>	<b>\$ 3,535,289</b>

## SECTION IV – LIABILITIES

### Changes in Liabilities

Each of the Liabilities disclosed in the prior tables are expected to change at each valuation. The components of that change, depending upon which liability is analyzed, can include:

- New hires since the last valuation
- Benefits accrued since the last valuation
- Plan amendments increasing benefits
- Passage of time which adds interest to the prior liability
- Benefits paid to retirees since the last valuation
- Participants retiring, terminating, or dying at rates different than expected
- A change in actuarial or investment assumptions
- A change in the actuarial funding method

Unfunded liabilities will change because of all of the above, and also due to changes in Plan assets resulting from:

- Employer contributions different than expected
- Investment earnings different than expected
- A change in the method used to measure Plan assets

<b>Table IV-3</b> <b>Development of 2023 Experience Gain/(Loss)</b> (in millions)	
<b>Item</b>	<b>Cost</b>
1. Unfunded Actuarial Liability at June 30, 2022	\$ 775.8
2. Middle of year actuarial liability payment	(69.9)
3. Interest to end of year on 1 and 2	<u>50.0</u>
4. Expected Unfunded Actuarial Liability at June 30, 2023 (1+2+3)	\$ 755.9
5. Actual Unfunded Liability at June 30, 2023	<u>825.8</u>
6. Experience Loss: (4 - 5)	\$ (69.9)
7. Portion of experience loss due to:	
A. Investment experience	\$ (30.7)
B. Contribution (shortfall)/excess	(5.6)
C. Other experience	<u>(33.5)</u>
D. Total	(69.9)

## SECTION V – CONTRIBUTIONS

In the process of evaluating the financial condition of any pension plan, the actuary analyzes the assets and liabilities to determine what level of contributions is needed to properly maintain the funding status of the Plan. Typically, the actuarial process will use a funding technique that will result in a pattern of contributions that are both stable and predictable.

For this Plan, the actuarial funding method used to determine the Normal Cost and the Unfunded Actuarial Liability is the **Entry Age Normal (EAN)** cost method. There are three components to the total contribution: the **Normal Cost rate** (employee and employer), the **Unfunded Actuarial Liability rate** (UAL rate), and the **Administrative Expense** contribution.

The Normal Cost rate is determined in the following steps. First, an individual Normal Cost rate is determined by taking the value, as of entry age into the Plan, of each member's projected future benefits. This value is then divided by the value, also at entry age, of the member's expected future salary producing a Normal Cost rate that should remain relatively constant over a member's career.

The total normal cost is computed by adding the expected dollar amount of each active member's normal cost for the current year – known as the Individual Entry Age Method. The total normal cost is adjusted with interest to the middle of the year, to reflect the fact that the normal cost contributions are paid throughout the year as member payroll payments are made. Finally, the total Normal Cost rate is reduced by the member contribution rate to produce the employer Normal Cost rate. The member contribution rate for each subgroup is determined by adding the expected contributions for each member and dividing by the projected pay for each subgroup.

The EAN Actuarial Liability is calculated by subtracting the present value of future total normal cost from the Present Value of Future Benefits (as described at the beginning of Section IV).

The Unfunded Actuarial Liability (UAL) is the difference between the EAN Actuarial Liability and the Actuarial Value of Assets. The UAL payment is determined using the following pieces, and then divided by the projected payroll to calculate a UAL rate:

- The initial UAL as of June 30, 2021 is amortized over a period of 15 years (13 years remaining as of June 30, 2023) as level percentage of payroll, and
- Any subsequent unexpected changes in the UAL from actuarial gains or losses or assumptions changes are amortized over a period of 20 years as a level percentage of payroll, with new amortization layers established each year, and
- Any subsequent changes in the UAL due to plan amendments or other plan provision changes are amortized over a shorter period, based on the lesser of 15 years or the average future working lifetime for changes affecting active members, or the lesser of 10 years or the average remaining life expectancy for changes affecting inactive members.

Administrative expenses are assumed to be \$3.3 million per year as of June 30, 2023, increasing 2.50% per annum. All administrative expenses are included with the employer's required contribution.

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**SECTION V – CONTRIBUTIONS**

The table below presents the calculation of the contribution rates for the Plan for this valuation and compares the total contribution rate with the prior year rate. The tables on the following pages contain more details on the calculation of the UAL amortization payments, as well as details on the calculation of the contribution rates for each group and tier.

**Table V-1**  
**Development of the Net Employer Contribution Rate as of June 30, 2023 for FYE 2025**

	General		June 30, 2023 Safety		COMPOSITE	June 30, 2022 COMPOSITE
	County and Former County	Ceres and Other Districts	County and Former County	Ceres and Other Districts		
1. Total Normal Cost Rate	17.91%	20.45%	29.43%	33.02%	<b>20.54%</b>	<b>20.74%</b>
2. Member Contribution Rate	<u>8.64%</u>	<u>9.28%</u>	<u>13.63%</u>	<u>14.36%</u>	<b>9.75%</b>	<b>9.74%</b>
3. Employer Normal Cost Rate (1-2)	9.27%	11.17%	15.80%	18.66%	<b>10.79%</b>	<b>11.00%</b>
4. UAL Amortization	19.01%	16.46%	28.84%	61.33%	<b>21.54%</b>	<b>20.96%</b>
5. Administrative Expense Rate	<u>0.80%</u>	<u>0.78%</u>	<u>1.26%</u>	<u>2.26%</u>	<b>0.91%</b>	<b>0.95%</b>
6. Net Employer Contribution Rate (3+4+5)	29.08%	28.41%	45.90%	82.25%	<b>33.24%</b>	<b>32.91%</b>

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**SECTION V – CONTRIBUTIONS**

Table V-2 summarizes the UAL rates for the Plan and its cost-sharing groups. The single equivalent amortization period (i.e., the length of time required to amortize the overall UAL as a level percentage of payroll based on the total current amortization payment) is approximately 14 years for StanCERA.

Table V-2						
Development of UAL Amortization Rates						
	General		Safety		TOTAL	
	County and Former County	Ceres and Other Districts	County and Former County	Ceres and Other Districts		
Projected Payroll	\$ 268,753,157	\$ 11,240,921	\$ 71,974,096	\$ 5,267,133	\$ 357,235,307	
Unfunded Actuarial Liability (AVA)	\$ 549,817,116	\$ 19,954,185	\$ 220,566,844	\$ 35,414,515	\$ 825,752,660	
UAL Amortization Payment	\$ 51,095,908	\$ 1,850,337	\$ 20,757,799	\$ 3,230,309	\$ 76,934,353	
UAL Amortization Rate	19.01%	16.46%	28.84%	61.33%	21.54%	

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**SECTION V – CONTRIBUTIONS**

Tables V-3 through V-6 show the calculation of the UAL amortization payments for each cost-sharing group.

<b>TABLE V-3</b> <b>Development of UAL Amortization Payment</b> <b>General - County and Former County</b>						
<b>Type of Base</b>	<b>Date</b> <b>Established</b>	<b>Initial</b> <b>Amount</b>	<b>Initial</b> <b>Amortization</b> <b>Years</b>	<b>6/30/2023</b> <b>Outstanding</b> <b>Balance</b>	<b>Remaining</b> <b>Amortization</b> <b>Years</b>	<b>Amortization</b> <b>Amount</b>
<b>Charges/(Credits)</b>						
1. 6/30/2021 Initial UAL	6/30/2021	\$ 440,505,361	15	\$ 417,332,321	13	\$ 41,287,065
2. 6/30/2022 Loss	6/30/2022	81,388,465	20	80,786,982	19	6,061,584
3. 6/30/2023 Loss	6/30/2023	51,697,812	20	<u>51,697,812</u>	20	<u>3,747,258</u>
				\$ 549,817,116	14 <sup>1</sup>	\$ 51,095,908

<sup>1</sup> Single equivalent amortization period (i.e., the length of time required to amortize the overall UAL as a level percentage of payroll based on the total current amortization period).

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**SECTION V – CONTRIBUTIONS**

**TABLE V-4**  
**Development of UAL Amortization Payment**  
**General - Ceres and Other Districts**

Type of Base	Date Established	Initial Amount	Initial Amortization Years	6/30/2023 Outstanding Balance	Remaining Amortization Years	Amortization Amount
<b>Charges/(Credits)</b>						
1. 6/30/2021 Initial UAL	6/30/2021	\$ 15,981,192	15	\$ 15,140,492	13	\$ 1,497,863
2. 6/30/2022 Loss	6/30/2022	1,407,528	20	1,397,126	19	104,829
3. 6/30/2023 Loss	6/30/2023	3,416,567	20	<u>3,416,567</u>	20	<u>247,646</u>
				\$ 19,954,185	14 <sup>1</sup>	\$ 1,850,337

<sup>1</sup> Single equivalent amortization period (i.e., the length of time required to amortize the overall UAL as a level percentage of payroll based on the total current amortization period).

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**SECTION V – CONTRIBUTIONS**

**TABLE V-5**  
**Development of UAL Amortization Payment**  
**Safety - County and Former County**

Type of Base	Date Established	Initial Amount	Initial Amortization Years	6/30/2023 Outstanding Balance	Remaining Amortization Years	Amortization Amount
<b>Charges/(Credits)</b>						
1. 6/30/2021 Initial UAL	6/30/2021	\$ 186,775,197	15	\$ 176,949,780	13	\$ 17,505,802
2. 6/30/2022 Loss	6/30/2022	35,770,373	20	35,506,020	19	2,664,077
3. 6/30/2023 Loss	6/30/2023	8,111,044	20	<u>8,111,044</u>	20	<u>587,920</u>
				\$ 220,566,844	14 <sup>1</sup>	\$ 20,757,799

<sup>1</sup> Single equivalent amortization period (i.e., the length of time required to amortize the overall UAL as a level percentage of payroll based on the total current amortization period).

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**SECTION V – CONTRIBUTIONS**

**TABLE V-6**  
**Development of UAL Amortization Payment**  
**Safety - Ceres and Other Districts**

Type of Base	Date Established	Initial Amount	Initial Amortization Years	6/30/2023 Outstanding Balance	Remaining Amortization Years	Amortization Amount
<b>Charges/(Credits)</b>						
1. 6/30/2021 Initial UAL	6/30/2021	\$ 26,058,366	15	\$ 24,687,551	13	\$ 2,442,362
2. 6/30/2022 Loss	6/30/2022	4,118,217	20	4,087,783	19	306,713
3. 6/30/2023 Loss	6/30/2023	6,639,182	20	<u>6,639,182</u>	20	<u>481,234</u>
				\$ 35,414,515	14 <sup>1</sup>	\$ 3,230,309

<sup>1</sup> Single equivalent amortization period (i.e., the length of time required to amortize the overall UAL as a level percentage of payroll based on the total current amortization period).

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**SECTION V – CONTRIBUTIONS**

Tables V-7 and V-8 contain the calculations of the employer contribution rates for each group and tier.

Table V-7 Development of the General Member Contribution Rate as of June 30, 2023 for FYE 2025						
	Tier 2	Tier 3	Tier 4	Tier 5	PEPRA	TOTAL
<b><u>County and Former County</u></b>						
A. Total Normal Cost Rate	19.09%	2.93%	22.87%	19.18%	17.07%	<b>17.91%</b>
B. Member Contribution Rate	<u>8.19%</u>	<u>0.00%</u>	<u>7.90%</u>	<u>8.95%</u>	<u>8.53%</u>	<b><u>8.64%</u></b>
C. Employer Normal Cost Rate (A-B)	10.90%	2.93%	14.97%	10.23%	8.54%	<b>9.27%</b>
D. UAL Amortization Rate	19.01%	19.01%	19.01%	19.01%	19.01%	<b>19.01%</b>
E. Administrative Expense Rate	<u>0.84%</u>	<u>0.62%</u>	<u>0.96%</u>	<u>0.82%</u>	<u>0.78%</u>	<b><u>0.80%</u></b>
<b>F. Net June 30, 2023 Contribution Rate (C+D+E)</b>	<b>30.75%</b>	<b>22.56%</b>	<b>34.94%</b>	<b>30.06%</b>	<b>28.33%</b>	<b>29.08%</b>
<b><u>Ceres and Other Districts</u></b>						
A. Total Normal Cost Rate	17.13%			23.40%	18.63%	<b>20.45%</b>
B. Member Contribution Rate	<u>8.26%</u>			<u>9.28%</u>	<u>9.31%</u>	<b><u>9.28%</u></b>
C. Employer Normal Cost Rate (A-B)	8.87%			14.12%	9.32%	<b>11.17%</b>
D. UAL Amortization Rate	16.46%			16.46%	16.46%	<b>16.46%</b>
E. Administrative Expense Rate	<u>0.71%</u>			<u>0.86%</u>	<u>0.73%</u>	<b><u>0.78%</u></b>
<b>F. Net June 30, 2023 Contribution Rate (C+D+E)</b>	<b>26.04%</b>			<b>31.44%</b>	<b>26.51%</b>	<b>28.41%</b>

Administrative expenses allocated based on projected Employer Normal Cost and UAL Amortization contributions. See Table V-9.

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**SECTION V – CONTRIBUTIONS**

Table V-8 Development of the Safety Member Contribution Rate as of June 30, 2023 for FYE 2025				
	Tier 2	Tier 5	PEPRA	TOTAL
<b><u>County and Former County</u></b>				
A. Total Normal Cost Rate	28.11%	34.45%	26.60%	<b>29.43%</b>
B. Member Contribution Rate	<u>12.81%</u>	<u>14.32%</u>	<u>13.30%</u>	<b><u>13.63%</u></b>
C. Employer Normal Cost Rate (A-B)	15.30%	20.13%	13.30%	<b>15.80%</b>
D. UAL Amortization Rate	28.84%	28.84%	28.84%	<b>28.84%</b>
E. Administrative Expense Rate	<u>1.24%</u>	<u>1.38%</u>	<u>1.19%</u>	<b><u>1.26%</u></b>
<b>F. Net June 30, 2023 Contribution Rate (C+D+E)</b>	<b>45.38%</b>	<b>50.35%</b>	<b>43.33%</b>	<b>45.90%</b>
<b><u>Ceres and Other Districts</u></b>				
A. Total Normal Cost Rate		35.54%	29.47%	<b>33.02%</b>
B. Member Contribution Rate		<u>14.10%</u>	<u>14.73%</u>	<b><u>14.36%</u></b>
C. Employer Normal Cost Rate (A-B)		21.44%	14.74%	<b>18.66%</b>
D. UAL Amortization Rate		61.33%	61.33%	<b>61.33%</b>
E. Administrative Expense Rate		<u>2.33%</u>	<u>2.15%</u>	<b><u>2.26%</u></b>
<b>F. Net June 30, 2023 Contribution Rate (C+D+E)</b>		<b>85.10%</b>	<b>78.22%</b>	<b>82.25%</b>

Administrative expenses allocated based on projected Employer Normal Cost and UAL Amortization contributions. See Table V-10.

Tables V-9 and V-10 show the allocation of the administrative expense for each group and tier. The administrative expense is allocated to each group and tier based on its share of the projected employer contributions prior to inclusion of the administrative expense.

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**SECTION V – CONTRIBUTIONS**

Table V-9 Development of the General Member Administrative Expense Rate as of June 30, 2023 for FYE 2025						
	Tier 2	Tier 3	Tier 4	Tier 5	PEPRA	TOTAL
<b>County and Former County</b>						
A. Projected Payroll for FYE 2024	\$ 17,470,565	\$ 492,122	\$ 70,255	\$ 93,538,916	\$ 157,181,299	\$ 268,753,157
B. Employer Normal Cost Rate	10.90%	2.93%	14.97%	10.23%	8.54%	
C. UAL Amortization Rate	<u>19.01%</u>	<u>19.01%</u>	<u>19.01%</u>	<u>19.01%</u>	<u>19.01%</u>	
D. Employer Contribution Rate Prior to Administrative Expense (B+C)	29.91%	21.94%	33.98%	29.24%	27.55%	
E. Projected Employer Contribution for FYE 2024 Prior to Administrative Expense						
1. Normal Cost (A*B)	\$ 1,904,292	\$ 14,420	\$ 10,518	\$ 9,569,031	\$ 13,423,283	\$ 24,921,544
2. UAL Amortization (A*C)	<u>3,321,154</u>	<u>93,552</u>	<u>13,355</u>	<u>17,781,748</u>	<u>29,880,165</u>	<u>51,089,974</u>
3. Total Prior to Administrative Expense (A*D)	\$ 5,225,446	\$ 107,972	\$ 23,873	\$ 27,350,779	\$ 43,303,448	\$ 76,011,518
F. Allocated Administrative Expense	\$ 147,356	\$ 3,045	\$ 673	\$ 771,284	\$ 1,221,145	\$ 2,143,504
<b>G. Administrative Expense Rate (F÷A)</b>	<b>0.84%</b>	<b>0.62%</b>	<b>0.96%</b>	<b>0.82%</b>	<b>0.78%</b>	
H. Projected Employer Contribution for FYE 2024 Due to Administrative Expense (A*G)	\$ 146,753	\$ 3,051	\$ 674	\$ 767,019	\$ 1,226,014	\$ 2,143,511
<b>Ceres and Other Districts</b>						
A. Projected Payroll for FYE 2024	\$ 224,776			\$ 4,336,696	\$ 6,679,449	\$ 11,240,921
B. Employer Normal Cost Rate	8.87%			14.12%	9.32%	
C. UAL Amortization Rate	<u>16.46%</u>			<u>16.46%</u>	<u>16.46%</u>	
D. Employer Contribution Rate Prior to Administrative Expense (B+C)	25.33%			30.58%	25.78%	
E. Projected Employer Contribution for FYE 2024 Prior to Administrative Expense						
1. Normal Cost (A*B)	\$ 19,938			\$ 612,342	\$ 622,525	\$ 1,254,805
2. UAL Amortization (A*C)	<u>36,998</u>			<u>713,820</u>	<u>1,099,437</u>	<u>1,850,255</u>
3. Total Prior to Administrative Expense (A*D)	\$ 56,936			\$ 1,326,162	\$ 1,721,962	\$ 3,105,060
F. Allocated Administrative Expense	\$ 1,606			\$ 37,397	\$ 48,559	\$ 87,562
<b>G. Administrative Expense Rate (F÷A)</b>	<b>0.71%</b>			<b>0.86%</b>	<b>0.73%</b>	
H. Projected Employer Contribution for FYE 2024 Due to Administrative Expense (A*G)	\$ 1,596			\$ 37,296	\$ 48,760	\$ 87,652

STANISLAUS COUNTY EMPLOYEES' RETIREMENT ASSOCIATION  
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**SECTION V – CONTRIBUTIONS**

Table V-10 Development of the Safety Member Administrative Expense Rate as of June 30, 2023 for FYE 2025				
	Tier 2	Tier 5	PEPRA	TOTAL
<b><u>County and Former County</u></b>				
A. Projected Payroll for FYE 2024	\$ 3,676,482	\$ 25,798,227	\$ 42,499,387	\$ 71,974,096
B. Employer Normal Cost Rate	15.30%	20.13%	13.30%	
C. UAL Amortization Rate	<u>28.84%</u>	<u>28.84%</u>	<u>28.84%</u>	
D. Employer Contribution Rate Prior to Administrative Expense (B+C)	44.14%	48.97%	42.14%	
E. Projected Employer Contribution for FYE 2024 Prior to Administrative Expense				
1. Normal Cost (A*B)	\$ 562,502	\$ 5,193,183	\$ 5,652,419	\$ 11,408,104
2. UAL Amortization (A*C)	<u>1,060,297</u>	<u>7,440,209</u>	<u>12,256,823</u>	<u>20,757,329</u>
3. Total Prior to Administrative Expense (A*D)	\$ 1,622,799	\$ 12,633,392	\$ 17,909,242	\$ 32,165,433
F. Allocated Administrative Expense	\$ 45,762	\$ 356,258	\$ 505,036	\$ 907,056
<b>G. Administrative Expense Rate (F÷A)</b>	<b>1.24%</b>	<b>1.38%</b>	<b>1.19%</b>	
H. Projected Employer Contribution for FYE 2024 Due to Administrative Expense (A*G)	\$ 45,588	\$ 356,016	\$ 505,743	\$ 907,347
<b><u>Ceres and Other Districts</u></b>				
A. Projected Payroll for FYE 2024		\$ 3,084,283	\$ 2,182,850	\$ 5,267,133
B. Employer Normal Cost Rate		21.44%	14.74%	
C. UAL Amortization Rate		<u>61.33%</u>	<u>61.33%</u>	
D. Employer Contribution Rate Prior to Administrative Expense (B+C)		82.77%	76.07%	
E. Projected Employer Contribution for FYE 2024 Prior to Administrative Expense				
1. Normal Cost (A*B)		\$ 661,270	\$ 321,752	\$ 983,022
2. UAL Amortization (A*C)		<u>1,891,591</u>	<u>1,338,742</u>	<u>3,230,333</u>
3. Total Prior to Administrative Expense (A*D)		\$ 2,552,861	\$ 1,660,494	\$ 4,213,355
F. Allocated Administrative Expense		\$ 71,990	\$ 46,825	\$ 118,815
<b>G. Administrative Expense Rate (F÷A)</b>		<b>2.33%</b>	<b>2.15%</b>	
H. Projected Employer Contribution for FYE 2024 Due to Administrative Expense (A*G)		\$ 71,864	\$ 46,931	\$ 118,795

## SECTION VI – REQUIRED ACFR EXHIBITS

The GASB adopted Statement Nos. 67 and 68, which replaced GASB Statement Nos. 25 and 27. The disclosures needed to satisfy GASB requirements can be found in the StanCERA GASB 67/68 Report as of June 30, 2023.

In accordance with Government Finance Officers Association (GFOA) and their recommended checklist for Annual Comprehensive Financial Reports (ACFRs), we continue to prepare several schedules for the Plan that are not included in the GASB report.

The Schedule of Funded Liabilities by Type (Table VI-1, formerly referred to as the Solvency Test) shows the portion of actuarial liabilities for active member contributions, inactive members, and the employer-financed portion of the active members covered by the Actuarial Value of Assets. The Actuarial Liability is determined assuming that the Plan is ongoing and participants continue to terminate employment, retire, etc., in accordance with the actuarial assumptions, including a 6.75% discount rate for the most recent valuation.

The information needed to prepare the Actuarial Gain/Loss exhibit can now be found in Table II-1 (Unfunded Actuarial Liability Change by Source) in the Disclosures Related to Risk section. Each year there will be a gain or loss due to both assets and liabilities. In addition, there can be gains or losses due to changes in plan provisions or due to the adoption of new assumptions or methods. Finally, the unfunded liability will change based on whether the contributions exceed the interest on the unfunded liability plus the normal cost. A negative number in this column (“Contributions”) indicates that the contributions in the given year are greater than the interest on the unfunded liability plus the normal cost, and thus reduce the unfunded liability.

We have also included a Schedule of Funding Progress (Table VI-2), showing the historical assets, liabilities, and funded ratios for the Plan, along with the covered payroll and the Unfunded Actuarial Liability as a percentage of payroll.

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**SECTION VI – REQUIRED ACFR EXHIBITS**

<p style="text-align: center;"><b>Table VI-1</b> <b>SCHEDULE OF FUNDED LIABILITIES BY TYPE</b> (dollars in thousands)</p>									
Valuation Date June 30,	(1) Active Member Contributions	(2) Retirees And Beneficiaries	(3) Active And Terminated Members	Actuarial Accrued Liabilities <sup>4</sup>	Valuation Assets	Portion of Actuarial Liabilities Covered by Reported Assets			
						(1)	(2)	(3)	
2003	\$ 176,622	\$ 455,784	\$ 325,689	\$ 958,095	\$ 928,022	100%	100%	91%	
2004	166,806	518,922	349,617	1,035,345	993,180	100%	100%	88%	
2005	205,556	551,810	358,994	1,116,310	1,049,691	100%	100%	81%	
2006 <sup>1</sup>	219,907	619,109	355,888	1,194,904	1,154,048	100%	100%	89%	
2008 <sup>2</sup>	272,657	739,838	536,329	1,548,824	1,317,167	100%	100%	57%	
2009	298,342	781,082	574,292	1,653,716	1,171,767	100%	100%	16%	
2010	323,940	829,323	584,561	1,737,824	1,325,801	100%	100%	30%	
2011	337,201	897,384	523,133	1,757,718	1,372,046	100%	100%	26%	
2012	351,569	987,546	549,598	1,888,713	1,451,764	100%	100%	20%	
2013 <sup>3</sup>	191,968	1,065,792	661,466	1,919,227	1,524,076	100%	100%	40%	
2014	193,301	1,144,734	688,335	2,026,371	1,644,077	100%	100%	44%	
2015	196,074	1,337,781	857,667	2,391,522	1,763,629	100%	100%	27%	
2016	200,960	1,427,166	908,941	2,537,067	1,845,764	100%	100%	24%	
2017	206,386	1,510,151	931,625	2,648,162	1,968,231	100%	100%	27%	
2018	213,223	1,590,078	945,767	2,749,068	2,100,278	100%	100%	31%	
2019	219,369	1,695,484	982,369	2,897,223	2,199,956	100%	100%	29%	
2020	222,390	1,833,388	972,868	3,028,647	2,290,287	100%	100%	24%	
2021	224,594	1,903,558	1,024,880	3,153,032	2,483,712	100%	100%	35%	
2022	224,213	2,058,086	1,097,255	3,379,554	2,603,763	100%	100%	29%	
2023	236,225	2,170,967	1,128,097	3,535,289	2,709,536	100%	100%	27%	

<sup>1</sup> Results recalculated, reflecting Level 1 assumption changes (new retirement, termination and withdrawal decrements) & new EFI EAN methodology.

<sup>2</sup> Reflects transfer as of June 30, 2008 of \$50 million from Non-Valuation to Valuation Reserves.

<sup>3</sup> Reflects change to include only refundable contribution balance.

<sup>4</sup> The GFOA checklist uses the term Actuarial Accrued Liability, which is the same as the Actuarial Liability used elsewhere in this report.

STANISLAUS COUNTY EMPLOYEES' RETIREMENT ASSOCIATION  
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2023

**SECTION VI – REQUIRED ACFR EXHIBITS**

Table VI-2 Schedule of Funding Progress							
Actuarial Valuation Date <sup>1</sup>	Valuation Assets	Actuarial Accrued Liability (AAL) <sup>3</sup>	Unfunded AAL	Funded Ratio	Covered Payroll	Unfunded AAL as a % of Covered Payroll	
2008 <sup>2</sup>	\$ 1,317,167,000	\$ 1,548,824,000	\$ 231,657,000	85.0%	\$ 275,580,000	84.1%	
2009	1,171,767,000	1,653,716,000	481,949,000	70.9%	248,316,000	194.1%	
2010	1,325,801,000	1,737,824,000	412,023,000	76.3%	248,830,473	165.6%	
2011	1,372,046,000	1,757,718,000	385,672,000	78.1%	226,706,796	170.1%	
2012	1,451,764,000	1,888,713,000	436,949,000	76.9%	220,918,009	197.8%	
2013	1,524,076,000	1,919,227,000	395,151,000	79.4%	219,028,318	180.4%	
2014	1,644,077,000	2,026,371,000	382,294,000	81.1%	223,028,288	171.4%	
2015	1,763,629,000	2,391,522,000	627,893,000	73.7%	237,717,727	264.1%	
2016	1,845,764,000	2,537,067,000	691,303,000	72.8%	250,447,580	276.0%	
2017	1,968,231,000	2,648,162,000	679,931,000	74.3%	256,143,684	265.4%	
2018	2,100,278,000	2,749,068,000	648,790,000	76.4%	270,755,220	239.6%	
2019	2,199,956,000	2,897,223,000	697,267,000	75.9%	284,008,303	245.5%	
2020	2,290,287,000	3,028,647,000	738,360,000	75.6%	285,326,282	258.8%	
2021	2,483,712,000	3,153,032,000	669,320,000	78.8%	291,650,438	229.5%	
2022	2,603,763,000	3,379,554,000	775,791,000	77.0%	303,594,687	255.5%	
2023	2,709,536,000	3,535,289,000	825,753,000	76.6%	340,333,581	242.6%	

<sup>1</sup> Excludes value of Non-Valuation Reserves.

<sup>2</sup> Includes \$50 million transferred from Non-Valuation Reserves as of June 30, 2008.

<sup>3</sup> The GFOA checklist uses the term Actuarial Accrued Liability, which is the same as the Actuarial Liability used elsewhere in this report.

STANISLAUS COUNTY EMPLOYEES' RETIREMENT ASSOCIATION  
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2023

**APPENDIX A – MEMBERSHIP INFORMATION**

The data for this valuation was provided by StanCERA as of June 30, 2023. Cheiron did not audit any of the data. However, we performed an informal examination of the obvious characteristics of the data for reasonableness and consistency in accordance with Actuarial Standard of Practice No. 23, Data Quality.

Effective with the June 30, 2023 valuation, the multiple records for individual members within an employer group (County/Former County or Ceres/Special Districts) were combined into a single record for valuation purposes. This mainly impacted records with a status of Transfer.

STANISLAUS COUNTY EMPLOYEES' RETIREMENT ASSOCIATION  
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2023

**APPENDIX A – MEMBERSHIP INFORMATION**

**Active, Vested, and In Payment Member Data as of June 30, 2023**

	<u>General Members</u>		<u>Safety Members</u>		<u>Total</u>	
	7/1/2022	7/1/2023	7/1/2022	7/1/2023	7/1/2022	7/1/2023
<b>Active Participants</b>						
Number	3,566	3,692	757	783	4,323	4,475
Average Age	44.50	44.50	37.31	37.22	43.24	43.23
Average Service	10.13	10.01	10.16	9.96	10.14	10.00
Average Pay	\$ 66,539	\$ 72,264	\$ 87,603	\$ 93,913	\$ 70,228	\$ 76,052
<b>Service Retired</b>						
Number	3,094	3,168	526	552	3,620	3,720
Average Age	70.78	71.05	64.14	64.21	69.82	70.03
Average Annual Total Benefit	\$ 35,084	\$ 36,205	\$ 61,891	\$ 63,950	\$ 38,979	\$ 40,322
<b>Beneficiaries</b>						
Number	422	434	126	129	548	563
Average Age	73.03	73.11	67.79	66.72	71.82	71.64
Average Annual Total Benefit	\$ 21,792	\$ 22,006	\$ 32,252	\$ 32,680	\$ 24,197	\$ 24,452
<b>Duty Disabled</b>						
Number	86	87	141	146	227	233
Average Age	69.55	69.83	60.30	60.97	63.80	64.27
Average Annual Total Benefit	\$ 27,948	\$ 28,680	\$ 42,171	\$ 42,984	\$ 36,782	\$ 37,643
<b>Ordinary Disabled</b>						
Number	74	70	7	7	81	77
Average Age	66.32	66.44	64.00	65.00	66.12	66.31
Average Annual Total Benefit	\$ 20,365	\$ 21,368	\$ 27,478	\$ 28,303	\$ 20,980	\$ 21,999
<b>Total In Pay</b>						
Number	3,676	3,759	800	834	4,476	4,593
Average Age	70.92	71.17	64.04	64.04	69.69	69.88
Average Annual Total Benefit	\$ 33,095	\$ 34,116	\$ 53,446	\$ 55,144	\$ 36,733	\$ 37,934
<b>Terminated Vested</b>						
Number	521	546	84	87	605	633
Average Age	48.00	47.85	42.36	41.84	47.21	47.02
Average Service	10.75	10.64	9.87	9.64	10.63	10.50
<b>Transfers</b>						
Number	508	422	204	170	712	592
Average Age	47.17	48.07	41.93	43.01	45.67	46.61
Average Service	8.19	6.88	8.40	7.79	8.25	7.14
<b>Total Deferred</b>						
Number	1,029	968	288	257	1,317	1,225
Average Age	47.59	47.94	42.05	42.61	46.38	46.82
Average Service	9.49	9.00	8.83	8.42	9.35	8.88

STANISLAUS COUNTY EMPLOYEES' RETIREMENT ASSOCIATION  
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2023

**APPENDIX A – MEMBERSHIP INFORMATION**

**Schedule of Retirees & Beneficiaries Added to and Removed from Retirement Payroll**

Plan Year Ending	Added During Year	Allowance Added	Removed During Year	Allowance Removed	At End of Year	Annual Allowance	% Increase in Retiree Allowance	Average Annual Allowance
2008	369	\$ 9,084,777	(148)	\$ (1,731,738)	2,666	\$ 63,296,000	19.18%	\$ 23,742
2009	156	\$ 2,168,425	(71)	\$ (647,870)	2,751	\$ 66,720,003	5.41%	\$ 24,253
2010	159	\$ 3,349,900	(80)	\$ (751,427)	2,830	\$ 71,464,735	7.11%	\$ 25,334
2011	263	\$ 4,724,416	(78)	\$ (1,194,042)	3,015	\$ 74,826,404	4.70%	\$ 25,732
2012	226	\$ 3,565,634	(99)	\$ (978,729)	3,142	\$ 80,157,222	7.12%	\$ 26,737
2013	198	\$ 6,036,138	(91)	\$ (1,144,584)	3,249	\$ 89,975,736	12.25%	\$ 27,694
2014	222	\$ 6,703,273	(86)	\$ (1,725,066)	3,385	\$ 96,405,454	7.15%	\$ 28,480
2015	237	\$ 7,778,716	(83)	\$ (2,043,313)	3,539	\$ 104,052,097	7.93%	\$ 29,402
2016	211	\$ 7,066,750	(99)	\$ (2,160,689)	3,651	\$ 111,260,240	6.93%	\$ 30,474
2017	202	\$ 6,749,973	(107)	\$ (2,471,229)	3,746	\$ 117,901,627	5.97%	\$ 31,474
2018	233	\$ 7,555,825	(123)	\$ (3,109,178)	3,856	\$ 124,995,337	6.02%	\$ 32,416
2019	242	\$ 8,421,538	(97)	\$ (2,580,158)	4,001	\$ 133,601,799	6.89%	\$ 33,392
2020	283	\$ 11,277,136	(107)	\$ (3,164,436)	4,177	\$ 144,745,530	8.34%	\$ 34,653
2021	273	\$ 9,937,557	(134)	\$ (3,802,836)	4,316	\$ 153,764,029	6.23%	\$ 35,627
2022	279	\$ 9,936,459	(119)	\$ (3,132,862)	4,476	\$ 164,415,041	6.93%	\$ 36,733
2023	239	\$ 9,170,427	(122)	\$ (3,311,874)	4,593	\$ 174,230,373	5.97%	\$ 37,934

STANISLAUS COUNTY EMPLOYEES' RETIREMENT ASSOCIATION  
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**APPENDIX A – MEMBERSHIP INFORMATION**

**Active and Vested Participant Data as of June 30, 2023**

	County and Former County						Ceres and Other Districts						Total County and Former County, Ceres and Other Districts	
	General Members		Safety Members		Total		General Members		Safety Members		Total			
	7/1/2022	7/1/2023	7/1/2022	7/1/2023	7/1/2022	7/1/2023	7/1/2022	7/1/2023	7/1/2022	7/1/2023	7/1/2022	7/1/2023	7/1/2022	7/1/2023
<b>Active Participants</b>														
Number	3,419	3,540	707	736	4,126	4,276	147	152	50	47	197	199	4,323	4,475
Average Age	44.49	44.47	37.08	37.09	43.22	43.20	44.77	45.34	40.64	39.21	43.72	43.89	43.24	43.23
Average Service	10.18	10.06	9.96	9.83	10.14	10.02	9.01	8.89	12.92	11.96	10.01	9.61	10.14	10.00
Average Pay <sup>1</sup>	\$ 66,567	\$ 72,340	\$ 86,643	\$ 93,072	\$ 70,007	\$ 75,909	\$ 65,900	\$ 70,498	\$ 101,174	\$ 107,085	\$ 74,853	\$ 79,139	\$ 70,228	\$ 76,052
<b>Terminated Vested</b>														
Number	499	521	81	84	580	605	22	25	3	3	25	28	605	633
Average Age	47.97	47.85	42.40	41.82	47.19	47.01	48.59	47.84	41.33	42.33	47.72	47.25	47.21	47.02
Average Service	10.60	10.53	9.85	9.61	10.49	10.40	14.33	12.85	10.57	10.57	13.88	12.60	10.63	10.50
<b>Transfers</b>														
Number	464	382	139	109	603	491	44	40	65	61	109	101	712	592
Average Age	47.32	48.40	42.47	43.78	46.20	47.37	45.59	44.93	40.75	41.62	42.71	42.93	45.67	46.61
Average Service	8.16	6.87	7.96	7.08	8.12	6.92	8.48	7.00	9.34	9.07	9.00	8.25	8.25	7.14
<b>Total Deferred</b>														
Number	963	903	220	193	1,183	1,096	66	65	68	64	134	129	1,317	1,225
Average Age	47.66	48.08	42.45	42.93	46.69	47.17	46.59	46.05	40.78	41.66	43.64	43.87	46.38	46.82
Average Service	9.42	8.98	8.66	8.18	9.28	8.84	10.43	9.25	9.40	9.14	9.91	9.19	9.35	8.88

<sup>1</sup> All payroll figures shown are annual.

STANISLAUS COUNTY EMPLOYEES' RETIREMENT ASSOCIATION  
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**APPENDIX A – MEMBERSHIP INFORMATION**

**Active and Vested Participant Data as of June 30, 2023**

**County and Former County Members**

	General Members												Safety Members					
	Tier 1		Tier 2		Tier 3		Tier 4		Tier 5		PEPRA		Tier 2		Tier 5		PEPRA	
	7/1/2022	7/1/2023	7/1/2022	7/1/2023	7/1/2022	7/1/2023	7/1/2022	7/1/2023	7/1/2022	7/1/2023	7/1/2022	7/1/2023	7/1/2022	7/1/2023	7/1/2022	7/1/2023	7/1/2022	7/1/2023
<b>Active Participants</b>																		
Number	0	0	192	191	8	7	2	1	1,160	1,068	2,057	2,273	36	35	239	219	432	482
Average Age	0.00	0.00	46.13	47.06	54.25	53.43	65.00	65.00	52.31	52.79	39.86	40.30	40.08	40.71	45.73	46.19	32.04	32.69
Average Service	0.00	0.00	12.03	13.02	22.42	23.38	33.41	25.70	20.48	21.31	4.11	4.46	11.52	13.06	19.13	19.78	4.80	5.10
Average Pay <sup>1</sup>	\$ 0	\$ 0	\$ 80,618	\$ 88,292	\$ 61,270	\$ 68,081	\$ 57,910	\$ 68,035	\$ 77,611	\$ 84,811	\$ 59,056	\$ 65,155	\$ 93,059	\$ 101,205	\$ 103,495	\$ 113,509	\$ 76,785	\$ 83,195
<b>Terminated Vested</b>																		
Number	2	2	69	80	17	15	0	0	309	283	102	141	10	9	51	48	20	27
Average Age	68.00	72.00	48.61	48.13	62.12	63.87	0.00	0.00	49.52	50.24	40.11	40.84	48.30	47.33	45.08	45.52	32.60	33.41
Average Service	9.29	7.63	8.39	9.24	13.63	13.79	0.00	0.00	12.20	12.48	6.75	7.05	7.18	7.93	11.83	11.62	6.14	6.59
<b>Transfers</b>																		
Number	0	0	109	102	13	1	0	0	227	180	115	99	18	16	90	71	31	22
Average Age	0.00	0.00	48.81	49.90	54.85	49.00	0.00	0.00	49.98	51.76	39.80	40.72	45.00	45.56	45.06	46.11	33.52	34.95
Average Service	0.00	0.00	4.55	4.30	25.92	5.84	0.00	0.00	11.50	10.78	3.00	2.41	4.36	4.14	10.23	9.09	3.47	2.72
<b>Total Deferred</b>																		
Number	2	2	178	182	30	16	0	0	536	463	217	240	28	25	141	119	51	49
Average Age	68.00	72.00	48.73	49.12	58.97	62.94	0.00	0.00	49.71	50.83	39.94	40.79	46.18	46.20	45.06	45.87	33.16	34.10
Average Service	9.29	7.63	6.04	6.47	18.95	13.29	0.00	0.00	11.90	11.82	4.76	5.13	5.37	5.51	10.81	10.11	4.52	4.86

<sup>1</sup> All payroll figures shown are annual.

**CERES and Other District Members**

	General Members												Safety Members					
	Tier 1		Tier 2		Tier 3		Tier 4		Tier 5		PEPRA		Tier 2		Tier 5		PEPRA	
	7/1/2022	7/1/2023	7/1/2022	7/1/2023	7/1/2022	7/1/2023	7/1/2022	7/1/2023	7/1/2022	7/1/2023	7/1/2022	7/1/2023	7/1/2022	7/1/2023	7/1/2022	7/1/2023	7/1/2022	7/1/2023
<b>Active Participants</b>																		
Number	0	0	4	3	0	0	0	0	52	49	91	100	0	0	30	24	20	23
Average Age	0.00	0.00	51.00	53.33	0.00	0.00	0.00	0.00	51.52	52.00	40.64	41.84	0.00	0.00	43.03	41.83	37.05	36.48
Average Service	0.00	0.00	16.54	17.81	0.00	0.00	0.00	0.00	18.36	19.32	3.40	3.53	0.00	0.00	17.44	17.46	6.14	6.28
Average Pay <sup>1</sup>	\$ 0	\$ 0	\$ 65,076	\$ 72,557	\$ 0	\$ 0	\$ 0	\$ 0	\$ 79,756	\$ 85,680	\$ 58,020	\$ 62,997	\$ 0	\$ 0	\$ 114,002	\$ 123,812	\$ 81,932	\$ 89,630
<b>Terminated Vested</b>																		
Number	0	0	4	4	0	0	0	0	15	15	3	6	0	0	2	2	1	1
Average Age	0.00	0.00	55.75	52.50	0.00	0.00	0.00	0.00	48.40	49.60	40.00	40.33	0.00	0.00	45.00	46.00	34.00	35.00
Average Service	0.00	0.00	12.97	12.67	0.00	0.00	0.00	0.00	15.99	15.31	7.84	6.80	0.00	0.00	12.93	12.93	5.83	5.83
<b>Transfers</b>																		
Number	0	0	6	6	0	0	0	0	30	24	8	10	7	7	40	38	18	16
Average Age	0.00	0.00	58.17	59.17	0.00	0.00	0.00	0.00	44.10	43.42	41.75	40.00	50.14	51.14	42.58	43.11	33.06	33.94
Average Service	0.00	0.00	1.80	1.80	0.00	0.00	0.00	0.00	11.11	9.81	3.64	3.37	4.66	4.66	12.79	12.32	3.50	3.26
<b>Total Deferred</b>																		
Number	0	0	10	10	0	0	0	0	45	39	11	16	7	7	42	40	19	17
Average Age	0.00	0.00	57.20	56.50	0.00	0.00	0.00	0.00	45.53	45.79	41.27	40.13	50.14	51.14	42.69	43.25	33.11	34.00
Average Service	0.00	0.00	6.27	6.15	0.00	0.00	0.00	0.00	12.74	11.93	4.78	4.65	4.66	4.66	12.80	12.35	3.62	3.41

<sup>1</sup> All payroll figures shown are annual.

STANISLAUS COUNTY EMPLOYEES' RETIREMENT ASSOCIATION  
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2023

**APPENDIX A – MEMBERSHIP INFORMATION**

**Schedule of Active Member Valuation Data**

Valuation Date	Plan Type	Number	Annual Payroll	Average Annual Salary	Increase in Average Pay
<b>June 30, 2003</b>	General	3,626	\$163,505,000	\$45,092	6.76%
	Safety	637	\$34,159,000	\$53,625	3.98%
	Total	4,263	\$197,664,000	\$46,367	5.23%
<b>June 30, 2004</b>	General	3,618	\$164,462,000	\$45,457	0.81%
	Safety	630	\$35,501,000	\$56,351	5.08%
	Total	4,248	\$199,963,000	\$47,072	1.52%
<b>June 30, 2005</b>	General	3,651	\$173,399,000	\$47,494	4.48%
	Safety	687	\$38,282,000	\$55,723	-1.11%
	Total	4,338	\$211,681,000	\$48,797	3.66%
<b>June 30, 2006</b>	General	3,702	\$179,767,000	\$48,559	2.24%
	Safety	689	\$40,001,000	\$58,057	4.19%
	Total	4,391	\$219,768,000	\$50,050	2.57%
<b>June 30, 2008</b>	General	3,719	\$230,942,000	\$62,098	27.88%
	Safety	731	\$44,638,000	\$61,064	5.18%
	Total	4,450	\$275,580,000	\$61,928	23.73%
<b>June 30, 2009</b>	General	3,627	\$201,144,000	\$55,457	-10.69%
	Safety	739	\$47,172,000	\$63,832	4.53%
	Total	4,366	\$248,316,000	\$56,875	-8.16%
<b>June 30, 2010</b>	General	3,464	\$202,200,198	\$58,372	5.26%
	Safety	685	\$46,630,275	\$68,073	6.64%
	Total	4,149	\$248,830,473	\$59,974	5.45%
<b>June 30, 2011</b>	General	3,232	\$184,906,498	\$57,211	-1.99%
	Safety	637	\$41,800,298	\$65,621	-3.60%
	Total	3,869	\$226,706,796	\$58,596	-2.30%
<b>June 30, 2012</b>	General	3,233	\$179,260,736	\$55,447	-3.08%
	Safety	661	\$41,657,273	\$63,022	-3.96%
	Total	3,894	\$220,918,009	\$56,733	-3.18%
<b>June 30, 2013</b>	General	3,230	\$176,437,755	\$54,625	-1.48%
	Safety	694	\$42,590,563	\$61,370	-2.62%
	Total	3,924	\$219,028,318	\$55,818	-1.61%
<b>June 30, 2014</b>	General	3,303	\$179,606,090	\$54,377	-0.45%
	Safety	689	\$43,422,198	\$63,022	2.69%
	Total	3,992	\$223,028,288	\$55,869	0.09%
<b>June 30, 2015</b>	General	3,421	\$188,550,804	\$55,116	1.36%
	Safety	723	\$49,166,923	\$68,004	7.91%
	Total	4,144	\$237,717,727	\$57,364	2.68%
<b>June 30, 2016</b>	General	3,521	\$198,457,059	\$56,364	2.26%
	Safety	727	\$52,020,521	\$71,555	5.22%
	Total	4,248	\$250,477,580	\$58,964	2.79%
<b>June 30, 2017</b>	General	3,552	\$201,758,423	\$56,801	0.78%
	Safety	757	\$54,385,261	\$71,843	0.40%
	Total	4,309	\$256,143,684	\$59,444	0.81%
<b>June 30, 2018</b>	General	3,658	\$211,919,963	\$57,933	1.99%
	Safety	794	\$58,835,257	\$74,100	3.14%
	Total	4,452	\$270,755,220	\$60,817	2.31%
<b>June 30, 2019</b>	General	3,690	\$220,393,008	\$59,727	3.10%
	Safety	814	\$63,615,295	\$78,151	5.47%
	Total	4,504	\$284,008,303	\$63,057	3.68%
<b>June 30, 2020</b>	General	3,652	\$221,652,587	\$60,693	1.62%
	Safety	806	\$63,673,695	\$79,000	1.09%
	Total	4,458	\$285,326,282	\$64,003	1.50%
<b>June 30, 2021</b>	General	3,555	\$228,145,063	\$64,176	5.74%
	Safety	766	\$63,505,375	\$82,905	4.94%
	Total	4,321	\$291,650,438	\$67,496	5.46%
<b>June 30, 2022</b>	General	3,566	\$237,279,320	\$66,539	3.68%
	Safety	757	\$66,315,366	\$87,603	5.67%
	Total	4,323	\$303,594,687	\$70,228	4.05%
<b>June 30, 2023</b>	General	3,692	\$266,799,859	\$72,264	8.60%
	Safety	783	\$73,533,722	\$93,913	7.20%
	Total	4,475	\$340,333,581	\$76,052	8.29%

Actuarial valuation was not performed for fiscal year ending June 30, 2007.

STANISLAUS COUNTY EMPLOYEES' RETIREMENT ASSOCIATION  
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2023

**APPENDIX A – MEMBERSHIP INFORMATION**

**StanCERA Membership – Retired Members as of June 30, 2023**

Age	County and Former County				Ceres and Other Districts				Total	
	<u>General Members</u>		<u>Safety Members</u>		<u>General Members</u>		<u>Safety Members</u>		Number	Annual Average Benefit
	Number	Annual Average Benefit	Number	Annual Average Benefit	Number	Annual Average Benefit	Number	Annual Average Benefit		
35-39	0	\$ 0	0	\$ 0	0	\$ 0	0	\$ 0	0	\$ 0
40-44	0	\$ 0	2	\$ 39,272	0	\$ 0	0	\$ 0	2	\$ 39,272
45-49	0	\$ 0	10	\$ 53,128	0	\$ 0	1	\$ 87,654	11	\$ 56,267
50-54	58	\$ 24,146	70	\$ 63,327	4	\$ 10,763	15	\$ 78,713	147	\$ 48,008
55-59	175	\$ 31,467	115	\$ 69,856	9	\$ 39,866	13	\$ 51,847	312	\$ 46,708
60-64	435	\$ 35,961	69	\$ 60,309	10	\$ 37,074	6	\$ 82,417	520	\$ 39,749
65-69	646	\$ 37,694	76	\$ 53,370	31	\$ 34,975	6	\$ 124,468	759	\$ 39,839
70-74	725	\$ 37,916	76	\$ 60,029	21	\$ 26,067	2	\$ 83,149	824	\$ 39,764
75-79	566	\$ 40,324	48	\$ 70,071	14	\$ 36,424	0	\$ 0	628	\$ 42,511
80-84	282	\$ 32,525	30	\$ 59,164	10	\$ 34,384	0	\$ 0	322	\$ 35,065
85-89	107	\$ 28,166	9	\$ 88,634	2	\$ 99,394	0	\$ 0	118	\$ 33,985
90-94	57	\$ 25,003	3	\$ 42,843	0	\$ 0	0	\$ 0	60	\$ 25,895
95+	16	\$ 26,103	1	\$ 29,883	0	\$ 0	0	\$ 0	17	\$ 26,325
All Ages	3,067	\$ 36,271	509	\$ 62,771	101	\$ 34,226	43	\$ 77,906	3,720	\$ 40,322

STANISLAUS COUNTY EMPLOYEES' RETIREMENT ASSOCIATION  
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2023

**APPENDIX A – MEMBERSHIP INFORMATION**

**StanCERA Membership – Service-Connected Disabled Members as of June 30, 2023**

Age	County and Former County				Ceres and Other Districts				Total	
	<u>General Members</u>		<u>Safety Members</u>		<u>General Members</u>		<u>Safety Members</u>		Number	Annual Average Benefit
	Number	Annual Average Benefit	Number	Annual Average Benefit	Number	Annual Average Benefit	Number	Annual Average Benefit		
25-29	0	\$ 0	0	\$ 0	0	\$ 0	0	\$ 0	0	\$ 0
30-34	0	\$ 0	0	\$ 0	0	\$ 0	1	\$ 34,921	1	\$ 34,921
35-39	0	\$ 0	1	\$ 37,305	0	\$ 0	0	\$ 0	1	\$ 37,305
40-44	1	\$ 22,175	10	\$ 28,791	0	\$ 0	3	\$ 26,929	14	\$ 27,920
45-49	2	\$ 21,251	10	\$ 27,268	1	\$ 34,704	2	\$ 31,967	15	\$ 27,588
50-54	4	\$ 22,439	18	\$ 36,964	0	\$ 0	1	\$ 36,548	23	\$ 34,420
55-59	5	\$ 27,077	16	\$ 43,503	0	\$ 0	1	\$ 39,398	22	\$ 39,583
60-64	5	\$ 28,242	17	\$ 36,764	1	\$ 36,143	5	\$ 70,905	28	\$ 41,317
65-69	15	\$ 27,285	22	\$ 45,270	1	\$ 19,835	2	\$ 53,705	40	\$ 38,312
70-74	25	\$ 28,056	15	\$ 56,941	0	\$ 0	3	\$ 48,468	43	\$ 39,556
75-79	13	\$ 31,840	15	\$ 53,252	2	\$ 25,439	0	\$ 0	30	\$ 42,119
80-84	9	\$ 33,275	3	\$ 40,454	1	\$ 30,654	0	\$ 0	13	\$ 34,730
85-89	2	\$ 33,924	1	\$ 58,235	0	\$ 0	0	\$ 0	3	\$ 42,028
90-94	0	\$ 0	0	\$ 0	0	\$ 0	0	\$ 0	0	\$ 0
95+	0	\$ 0	0	\$ 0	0	\$ 0	0	\$ 0	0	\$ 0
All Ages	81	\$ 28,679	128	\$ 42,287	6	\$ 28,703	18	\$ 47,940	233	\$ 37,643

STANISLAUS COUNTY EMPLOYEES' RETIREMENT ASSOCIATION  
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2023

**APPENDIX A – MEMBERSHIP INFORMATION**

**StanCERA Membership – Nonservice-Connected Disabled Members as of June 30, 2023**

County and Former County					Ceres and Other Districts				Total	
<u>General Members</u>			<u>Safety Members</u>		<u>General Members</u>		<u>Safety Members</u>			
	Annual		Annual		Annual		Annual		Annual	
Age	Number	Average Benefit	Number	Average Benefit	Number	Average Benefit	Number	Average Benefit	Number	Average Benefit
35-39	0	\$ 0	0	\$ 0	0	\$ 0	0	\$ 0	0	\$ 0
40-44	1	\$ 28,784	0	\$ 0	1	\$ 26,573	0	\$ 0	2	\$ 27,679
45-49	3	\$ 18,891	0	\$ 0	0	\$ 0	0	\$ 0	3	\$ 18,891
50-54	5	\$ 22,318	1	\$ 27,372	0	\$ 0	1	\$ 43,013	7	\$ 25,996
55-59	14	\$ 18,897	0	\$ 0	0	\$ 0	0	\$ 0	14	\$ 18,897
60-64	6	\$ 26,629	1	\$ 31,224	0	\$ 0	0	\$ 0	7	\$ 27,285
65-69	9	\$ 22,914	2	\$ 27,155	0	\$ 0	0	\$ 0	11	\$ 23,685
70-74	11	\$ 17,322	1	\$ 17,480	0	\$ 0	0	\$ 0	12	\$ 17,335
75-79	13	\$ 26,635	0	\$ 0	0	\$ 0	0	\$ 0	13	\$ 26,635
80-84	5	\$ 15,746	1	\$ 24,720	0	\$ 0	0	\$ 0	6	\$ 17,241
85-89	2	\$ 13,045	0	\$ 0	0	\$ 0	0	\$ 0	2	\$ 13,045
90-94	0	\$ 0	0	\$ 0	0	\$ 0	0	\$ 0	0	\$ 0
95+	0	\$ 0	0	\$ 0	0	\$ 0	0	\$ 0	0	\$ 0
All Ages	69	\$ 21,293	6	\$ 25,851	1	\$ 26,573	1	\$ 43,013	77	\$ 21,999

STANISLAUS COUNTY EMPLOYEES' RETIREMENT ASSOCIATION  
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2023

**APPENDIX A – MEMBERSHIP INFORMATION**

**StanCERA Membership – Beneficiaries as of June 30, 2023**

Age	County and Former County				Ceres and Other Districts				Total	
	<u>General Members</u>		<u>Safety Members</u>		<u>General Members</u>		<u>Safety Members</u>		Number	Annual Average Benefit
	Number	Annual Average Benefit	Number	Annual Average Benefit	Number	Annual Average Benefit	Number	Annual Average Benefit		
0-24	0	\$ 0	3	\$ 28,398	0	\$ 0	0	\$ 0	3	\$ 28,398
25-29	0	\$ 0	0	\$ 0	0	\$ 0	0	\$ 0	0	\$ 0
30-34	0	\$ 0	0	\$ 0	0	\$ 0	0	\$ 0	0	\$ 0
35-39	2	\$ 25,382	0	\$ 0	0	\$ 0	0	\$ 0	2	\$ 25,382
40-44	2	\$ 7,500	3	\$ 28,086	0	\$ 0	0	\$ 0	5	\$ 19,852
45-49	8	\$ 14,762	5	\$ 21,541	1	\$ 5,894	0	\$ 0	14	\$ 16,550
50-54	16	\$ 11,416	19	\$ 17,935	0	\$ 0	0	\$ 0	35	\$ 14,955
55-59	33	\$ 18,166	7	\$ 26,142	1	\$ 26,744	2	\$ 62,954	43	\$ 21,747
60-64	35	\$ 16,426	13	\$ 31,585	0	\$ 0	2	\$ 37,920	50	\$ 21,227
65-69	42	\$ 18,040	11	\$ 30,509	2	\$ 34,783	2	\$ 33,170	57	\$ 21,565
70-74	71	\$ 26,464	20	\$ 32,624	3	\$ 18,918	0	\$ 0	94	\$ 27,534
75-79	97	\$ 22,445	16	\$ 49,981	0	\$ 0	1	\$ 97,866	114	\$ 26,972
80-84	55	\$ 24,822	14	\$ 41,080	2	\$ 30,504	0	\$ 0	71	\$ 28,188
85-89	33	\$ 22,362	6	\$ 29,215	0	\$ 0	0	\$ 0	39	\$ 23,416
90-94	23	\$ 28,124	5	\$ 20,024	0	\$ 0	0	\$ 0	28	\$ 26,677
95+	8	\$ 28,234	0	\$ 0	0	\$ 0	0	\$ 0	8	\$ 28,234
All Ages	425	\$ 21,954	122	\$ 31,556	9	\$ 24,440	7	\$ 52,279	563	\$ 24,452

STANISLAUS COUNTY EMPLOYEES' RETIREMENT ASSOCIATION  
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2023

**APPENDIX A – MEMBERSHIP INFORMATION**

**StanCERA Membership – Benefit Form Elections as of June 30, 2023**

	County and Former County General	Safety	Ceres and Other Districts General	Safety	Total
<b>Service Retired</b>					
Option #0 (Unmodified 60% to Spouse)	2,531	448	73	37	3,089
Option #1 (Cash Refund)	240	15	8	2	265
Option #2 (100% Continuance)	254	39	20	3	316
Option #3 (50% Continuance)	40	5	0	1	46
Option #4 (Other)	2	2	0	0	4
<b>Total Service Retired</b>	<b>3,067</b>	<b>509</b>	<b>101</b>	<b>43</b>	<b>3,720</b>
<b>Ordinary Disability</b>					
Option #0 (Unmodified 60% to Spouse)	62	4	1	1	68
Option #1 (Cash Refund)	5	2	0	0	7
Option #2 (100% Continuance)	2	0	0	0	2
Option #3 (50% Continuance)	0	0	0	0	0
<b>Total Ordinary Disability</b>	<b>69</b>	<b>6</b>	<b>1</b>	<b>1</b>	<b>77</b>
<b>Duty Disability</b>					
Option #0 (Unmodified 100% to Spouse)	70	118	6	15	209
Option #1 (Cash Refund)	2	1	0	0	3
Option #2 (100% Continuance)	6	8	0	2	16
Option #3 (50% Continuance)	3	1	0	1	5
<b>Total Duty Disability</b>	<b>81</b>	<b>128</b>	<b>6</b>	<b>18</b>	<b>233</b>
<b>Total</b>	<b>3,217</b>	<b>643</b>	<b>108</b>	<b>62</b>	<b>4,030</b>

STANISLAUS COUNTY EMPLOYEES' RETIREMENT ASSOCIATION  
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2023

**APPENDIX A – MEMBERSHIP INFORMATION**

**Age & Service Distribution of Active Members by Count and Average Compensation as of June 30, 2023  
General Members (County and Former County)**

**Count**

Age	Years of Service												Total Count
	0	1	2	3	4	5-9	10-14	15-19	20-24	25-29	30-34	35 & Over	
Under 20	0	0	0	0	0	0	0	0	0	0	0	0	0
20-24	29	16	4	0	0	0	0	0	0	0	0	0	49
25-29	102	79	30	29	25	17	0	0	0	0	0	0	282
30-34	91	83	40	36	48	191	2	0	0	0	0	0	491
35-39	82	57	24	30	41	175	46	20	0	0	0	0	475
40-44	40	47	20	36	33	188	60	88	20	0	0	0	532
45-49	29	36	12	12	23	112	39	107	96	8	0	0	474
50-54	34	20	9	15	15	88	32	92	95	45	9	0	454
55-59	17	18	14	7	17	86	29	63	74	57	22	4	408
60-64	13	10	3	12	16	50	24	40	44	37	24	10	283
65-69	2	3	1	2	4	21	5	10	18	6	4	1	77
70 & Over	2	1	0	1	0	3	0	4	2	2	0	0	15
Total Count	441	370	157	180	222	931	237	424	349	155	59	15	3,540

**Compensation (\$)**

Age	Years of Service												Avg. Comp.
	0	1	2	3	4	5-9	10-14	15-19	20-24	25-29	30-34	35 & Over	
Under 20	0	0	0	0	0	0	0	0	0	0	0	0	0
20-24	42,538	45,733	49,852	0	0	0	0	0	0	0	0	0	44,178
25-29	51,541	49,913	61,017	61,419	56,614	60,038	0	0	0	0	0	0	54,071
30-34	53,551	60,876	60,965	63,023	67,264	70,353	63,311	0	0	0	0	0	64,004
35-39	61,152	56,277	65,598	68,706	63,574	71,778	86,402	80,109	0	0	0	0	68,636
40-44	61,763	67,233	70,694	58,715	70,667	73,488	81,404	83,555	75,643	0	0	0	73,413
45-49	64,633	64,292	68,481	72,267	75,272	73,835	78,038	82,228	85,225	75,073	0	0	77,010
50-54	74,900	66,138	72,980	75,908	59,971	72,353	85,663	81,213	89,290	95,461	109,896	0	81,303
55-59	63,813	66,282	82,253	55,298	75,386	73,655	82,674	90,858	81,817	97,374	85,700	127,144	82,237
60-64	106,001	60,933	68,943	65,301	63,822	72,798	77,300	80,257	75,011	72,555	77,912	90,672	75,851
65-69	100,197	43,020	40,998	74,345	78,715	68,717	60,576	64,861	67,078	89,238	115,345	205,585	73,225
70 & Over	93,857	36,514	0	144,788	0	97,627	0	147,522	55,274	76,821	0	0	101,078
Average	59,231	58,650	65,826	64,972	66,806	72,161	81,543	83,486	82,665	89,163	88,233	108,058	72,340

STANISLAUS COUNTY EMPLOYEES' RETIREMENT ASSOCIATION  
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2023

**APPENDIX A – MEMBERSHIP INFORMATION**

**Age & Service Distribution of Active Members by Count and Average Compensation as of June 30, 2023  
General Members (Ceres and Other Districts)**

**Count**

Age	Years of Service												Total Count
	0	1	2	3	4	5-9	10-14	15-19	20-24	25-29	30-34	35 & Over	
Under 20	0	0	0	0	0	0	0	0	0	0	0	0	0
20-24	3	0	0	0	0	0	0	0	0	0	0	0	3
25-29	5	3	2	2	1	1	0	0	0	0	0	0	14
30-34	3	4	1	3	1	6	0	0	0	0	0	0	18
35-39	5	6	0	0	0	1	2	0	0	0	0	0	14
40-44	6	8	1	0	3	4	3	3	0	0	0	0	28
45-49	2	1	1	0	0	4	1	0	4	0	0	0	13
50-54	3	3	0	2	1	2	0	5	3	1	0	0	20
55-59	2	4	1	0	2	1	0	4	3	1	1	0	19
60-64	4	3	0	0	2	2	2	2	1	1	1	0	18
65-69	0	0	0	0	0	1	1	0	1	0	0	0	3
70 & Over	0	1	0	0	0	0	1	0	0	0	0	0	2
Total Count	33	33	6	7	10	22	10	14	12	3	2	0	152

**Compensation (\$)**

Age	Years of Service												Avg. Comp.
	0	1	2	3	4	5-9	10-14	15-19	20-24	25-29	30-34	35 & Over	
Under 20	0	0	0	0	0	0	0	0	0	0	0	0	0
20-24	37,752	0	0	0	0	0	0	0	0	0	0	0	37,752
25-29	47,672	55,344	37,970	63,593	54,451	61,575	0	0	0	0	0	0	51,682
30-34	55,248	63,185	42,900	61,079	55,769	64,028	0	0	0	0	0	0	60,253
35-39	55,392	69,932	0	0	0	90,334	101,821	0	0	0	0	0	70,752
40-44	78,508	66,304	47,178	0	67,095	55,689	78,938	78,744	0	0	0	0	69,491
45-49	58,164	145,338	72,512	0	0	55,015	64,668	0	87,305	0	0	0	74,471
50-54	90,031	100,960	0	56,863	158,763	80,256	0	70,120	60,945	163,722	0	0	85,156
55-59	82,610	81,162	46,532	0	66,692	52,054	0	65,449	66,483	108,170	64,086	0	71,334
60-64	44,749	91,057	0	0	108,498	105,728	74,839	64,290	84,787	90,537	85,726	0	78,885
65-69	0	0	0	0	0	56,388	48,177	0	88,780	0	0	0	64,448
70 & Over	0	155,814	0	0	0	0	62,358	0	0	0	0	0	109,086
Average	60,485	77,898	47,510	60,593	82,065	66,332	76,534	69,800	75,422	120,810	74,906	0	70,498

STANISLAUS COUNTY EMPLOYEES' RETIREMENT ASSOCIATION  
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2023

**APPENDIX A – MEMBERSHIP INFORMATION**

**Age & Service Distribution of Active Members by Count and Average Compensation as of June 30, 2023  
Safety Members (County and Former County)**

**Count**

Age	Years of Service												Total Count
	0	1	2	3	4	5-9	10-14	15-19	20-24	25-29	30-34	35 & Over	
Under 20	0	0	0	0	0	0	0	0	0	0	0	0	0
20-24	15	9	2	1	0	0	0	0	0	0	0	0	27
25-29	31	15	17	14	20	34	0	0	0	0	0	0	131
30-34	10	15	8	13	19	107	11	0	0	0	0	0	183
35-39	10	4	1	6	7	56	24	15	0	0	0	0	123
40-44	3	1	2	2	3	20	17	51	13	0	0	0	112
45-49	1	1	1	0	0	9	4	30	38	6	0	0	90
50-54	3	0	3	1	0	2	1	10	13	11	1	0	45
55-59	1	0	1	1	2	3	1	2	4	2	0	0	17
60-64	0	0	0	0	0	1	1	2	3	0	0	0	7
65-69	0	0	0	0	0	0	0	0	1	0	0	0	1
70 & Over	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Count	74	45	35	38	51	232	59	110	72	19	1	0	736

**Compensation (\$)**

Age	Years of Service												Avg. Comp.
	0	1	2	3	4	5-9	10-14	15-19	20-24	25-29	30-34	35 & Over	
Under 20	0	0	0	0	0	0	0	0	0	0	0	0	0
20-24	65,407	67,636	74,846	89,604	0	0	0	0	0	0	0	0	67,745
25-29	66,890	68,996	73,577	75,275	85,291	88,665	0	0	0	0	0	0	77,356
30-34	72,186	79,483	78,690	79,784	85,041	86,642	97,113	0	0	0	0	0	84,894
35-39	75,242	89,689	81,159	79,953	88,444	89,641	95,760	116,796	0	0	0	0	92,368
40-44	70,283	79,070	105,571	105,588	93,501	94,006	100,329	110,560	110,229	0	0	0	104,018
45-49	104,399	39,615	108,425	0	0	92,486	93,284	108,258	126,704	106,677	0	0	112,894
50-54	114,487	0	101,715	106,549	0	83,577	53,294	120,246	109,067	130,145	125,452	0	114,511
55-59	104,686	0	103,726	140,777	103,726	116,586	82,023	123,219	108,019	114,125	0	0	111,481
60-64	0	0	0	0	0	83,062	114,099	94,562	98,912	0	0	0	97,575
65-69	0	0	0	0	0	0	0	0	99,537	0	0	0	99,537
70 & Over	0	0	0	0	0	0	0	0	0	0	0	0	0
Average	71,519	73,630	81,132	82,076	86,837	88,869	96,519	111,602	117,971	121,048	125,452	0	93,072

STANISLAUS COUNTY EMPLOYEES' RETIREMENT ASSOCIATION  
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2023

**APPENDIX A – MEMBERSHIP INFORMATION**

**Age & Service Distribution of Active Members by Count and Average Compensation as of June 30, 2023  
Safety Members (Ceres and Other Districts)**

**Count**

Age	Years of Service												Total Count
	0	1	2	3	4	5-9	10-14	15-19	20-24	25-29	30-34	35 & Over	
Under 20	0	0	0	0	0	0	0	0	0	0	0	0	0
20-24	0	0	0	0	0	0	0	0	0	0	0	0	0
25-29	3	0	0	0	0	0	0	0	0	0	0	0	3
30-34	2	1	0	1	2	3	0	0	0	0	0	0	9
35-39	0	1	3	0	2	4	4	1	0	0	0	0	15
40-44	0	1	0	1	0	1	0	2	1	0	0	0	6
45-49	1	0	1	1	0	1	0	3	3	1	0	0	11
50-54	0	0	0	0	0	1	0	0	1	1	0	0	3
55-59	0	0	0	0	0	0	0	0	0	0	0	0	0
60-64	0	0	0	0	0	0	0	0	0	0	0	0	0
65-69	0	0	0	0	0	0	0	0	0	0	0	0	0
70 & Over	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Count	6	3	4	3	4	10	4	6	5	2	0	0	47

**Compensation (\$)**

Age	Years of Service												Avg. Comp.
	0	1	2	3	4	5-9	10-14	15-19	20-24	25-29	30-34	35 & Over	
Under 20	0	0	0	0	0	0	0	0	0	0	0	0	0
20-24	0	0	0	0	0	0	0	0	0	0	0	0	0
25-29	75,421	0	0	0	0	0	0	0	0	0	0	0	75,421
30-34	78,905	94,677	0	94,272	91,319	94,475	0	0	0	0	0	0	90,314
35-39	0	107,881	98,696	0	89,769	106,089	116,051	112,402	0	0	0	0	105,631
40-44	0	103,398	0	69,888	0	115,076	0	115,765	109,047	0	0	0	104,823
45-49	82,131	0	95,161	84,502	0	117,776	0	127,177	130,806	178,177	0	0	121,063
50-54	0	0	0	0	0	94,677	0	0	143,976	210,128	0	0	149,593
55-59	0	0	0	0	0	0	0	0	0	0	0	0	0
60-64	0	0	0	0	0	0	0	0	0	0	0	0	0
65-69	0	0	0	0	0	0	0	0	0	0	0	0	0
70 & Over	0	0	0	0	0	0	0	0	0	0	0	0	0
Average	77,701	101,986	97,813	82,887	90,544	103,531	116,051	120,910	129,088	194,152	0	0	107,085

STANISLAUS COUNTY EMPLOYEES' RETIREMENT ASSOCIATION  
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2023

**APPENDIX A – MEMBERSHIP INFORMATION**

**Reconciliation of Plan Membership Since Prior Valuation  
All Members**

**All Members**

	Actives	Transfers	Non Vested Terminations due Refunds	Vested Terminations	Ordinary Disabled	Duty Disabled	Retired	Beneficiaries	Total
<b>July 1, 2022</b>	<b>4,323</b>	<b>712</b>	<b>741</b>	<b>605</b>	<b>81</b>	<b>227</b>	<b>3,620</b>	<b>548</b>	<b>10,857</b>
New Entrants	600	0	0	0	0	0	0	0	600
Rehires	35	1	(21)	(15)	0	0	0	0	0
Duty Disabilities	(4)	(1)	0	(2)	0	7	0	0	0
Ordinary Disabilities	(1)	0	0	0	1	0	0	0	0
Retirements	(121)	(21)	0	(33)	0	0	176	0	1
Retirements from General with Safety Service	0	0	0	0	0	0	6	0	6
Vested Terminations	(89)	(4)	0	93	0	0	0	0	0
Died, With Beneficiaries' Benefit Payable	(2)	0	(1)	0	(2)	(2)	(30)	37	0
Died, Without Beneficiary, and Other Terminations	(171)	(1)	168	0	(3)	(1)	(53)	0	(61)
Transfers	(2)	4	(1)	(1)	0	0	0	0	0
Beneficiary Deaths	0	0	0	0	0	0	0	(29)	(29)
Domestic Relations Orders	0	0	0	0	0	0	0	9	9
Withdrawals Paid	(93)	(1)	(71)	(17)	0	0	0	0	(182)
Member Reclassifications	0	(97)	(23)	3	0	2	1	(2)	(116)
<b>July 1, 2023</b>	<b>4,475</b>	<b>592</b>	<b>792</b>	<b>633</b>	<b>77</b>	<b>233</b>	<b>3,720</b>	<b>563</b>	<b>11,085</b>

STANISLAUS COUNTY EMPLOYEES' RETIREMENT ASSOCIATION  
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2023

**APPENDIX A – MEMBERSHIP INFORMATION**

**Reconciliation of Plan Membership Since Prior Valuation  
General Members (County and Former County)**

	Actives	Transfers	Non Vested Terminations due Refunds	Vested Terminations	Ordinary Disabled	Duty Disabled	Retired	Beneficiaries	Total
<b>July 1, 2022</b>	<b>3,419</b>	<b>464</b>	<b>642</b>	<b>499</b>	<b>73</b>	<b>81</b>	<b>3,002</b>	<b>415</b>	<b>8,595</b>
New Entrants	479	0	0	0	0	0	0	0	479
Rehires	31	2	(21)	(12)	0	0	0	0	0
Duty Disabilities	(1)	0	0	(1)	0	2	0	0	0
Ordinary Disabilities	(1)	0	0	0	1	0	0	0	0
Retirements	(95)	(14)	0	(24)	0	0	134	0	1
Retirements from General with Safety Service	0	0	0	0	0	0	3	0	3
Vested Terminations	(71)	(2)	0	73	0	0	0	0	0
Died, With Beneficiaries' Benefit Payable	(2)	0	(1)	0	(2)	0	(25)	30	0
Died, Without Beneficiary, and Other Terminations	(144)	(1)	142	0	(3)	(1)	(48)	0	(55)
Transfers	1	0	(2)	(1)	0	0	0	0	(2)
Beneficiary Deaths	0	0	0	0	0	0	0	(22)	(22)
Domestic Relations Orders	0	0	0	0	0	0	0	5	5
Withdrawals Paid	(76)	0	(61)	(15)	0	0	0	0	(152)
Member Reclassifications	0	(67)	(20)	2	0	(1)	1	(3)	(88)
<b>July 1, 2023</b>	<b>3,540</b>	<b>382</b>	<b>679</b>	<b>521</b>	<b>69</b>	<b>81</b>	<b>3,067</b>	<b>425</b>	<b>8,764</b>

STANISLAUS COUNTY EMPLOYEES' RETIREMENT ASSOCIATION  
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2023

**APPENDIX A – MEMBERSHIP INFORMATION**

**Reconciliation of Plan Membership Since Prior Valuation  
Safety Members (County and Former County)**

	Actives	Transfers	Non Vested Terminations due Refunds	Vested Terminations	Ordinary Disabled	Duty Disabled	Retired	Beneficiaries	Total
<b>July 1, 2022</b>	<b>707</b>	<b>139</b>	<b>66</b>	<b>81</b>	<b>6</b>	<b>127</b>	<b>491</b>	<b>122</b>	<b>1,739</b>
New Entrants	79	0	0	0	0	0	0	0	79
Rehires	4	(1)	0	(3)	0	0	0	0	0
Duty Disabilities	(1)	(1)	0	0	0	2	0	0	0
Ordinary Disabilities	0	0	0	0	0	0	0	0	0
Retirements	(18)	(2)	0	(7)	0	0	27	0	0
Retirements from General with Safety Service	0	0	0	0	0	0	2	0	2
Vested Terminations	(11)	(1)	0	12	0	0	0	0	0
Died, With Beneficiaries' Benefit Payable	0	0	0	0	0	(1)	(5)	6	0
Died, Without Beneficiary, and Other Terminations	(14)	0	13	0	0	0	(5)	0	(6)
Transfers	(1)	1	1	0	0	0	0	0	1
Beneficiary Deaths	0	0	0	0	0	0	0	(7)	(7)
Domestic Relations Orders	0	0	0	0	0	0	0	4	4
Withdrawals Paid	(9)	0	(7)	0	0	0	0	0	(16)
Member Reclassifications	0	(26)	(3)	1	0	0	(1)	(3)	(32)
<b>July 1, 2023</b>	<b>736</b>	<b>109</b>	<b>70</b>	<b>84</b>	<b>6</b>	<b>128</b>	<b>509</b>	<b>122</b>	<b>1,764</b>

STANISLAUS COUNTY EMPLOYEES' RETIREMENT ASSOCIATION  
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2023

**APPENDIX A – MEMBERSHIP INFORMATION**

**Reconciliation of Plan Membership Since Prior Valuation  
General Members (Ceres and Other Districts)**

	Actives	Transfers	Non Vested Terminations due Refunds	Vested Terminations	Ordinary Disabled	Duty Disabled	Retired	Beneficiaries	Total
<b>July 1, 2022</b>	<b>147</b>	<b>44</b>	<b>27</b>	<b>22</b>	<b>1</b>	<b>5</b>	<b>92</b>	<b>7</b>	<b>345</b>
New Entrants	35	0	0	0	0	0	0	0	35
Rehires	0	0	0	0	0	0	0	0	0
Duty Disabilities	0	0	0	(1)	0	1	0	0	0
Ordinary Disabilities	0	0	0	0	0	0	0	0	0
Retirements	(2)	(3)	0	(2)	0	0	7	0	0
Retirements from General with Safety Service	0	0	0	0	0	0	1	0	1
Vested Terminations	(7)	(1)	0	8	0	0	0	0	0
Died, With Beneficiaries' Benefit Payable	0	0	0	0	0	(1)	0	1	0
Died, Without Beneficiary, and Other Terminations	(11)	0	11	0	0	0	0	0	0
Transfers	(2)	3	0	0	0	0	0	0	1
Beneficiary Deaths	0	0	0	0	0	0	0	0	0
Domestic Relations Orders	0	0	0	0	0	0	0	0	0
Withdrawals Paid	(8)	0	(2)	(2)	0	0	0	0	(12)
Member Reclassifications	0	(3)	0	0	0	1	1	1	0
<b>July 1, 2023</b>	<b>152</b>	<b>40</b>	<b>36</b>	<b>25</b>	<b>1</b>	<b>6</b>	<b>101</b>	<b>9</b>	<b>370</b>

STANISLAUS COUNTY EMPLOYEES' RETIREMENT ASSOCIATION  
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2023

**APPENDIX A – MEMBERSHIP INFORMATION**

**Reconciliation of Plan Membership Since Prior Valuation  
Safety Members (Ceres and Other Districts)**

	Actives	Transfers	Non Vested Terminations due Refunds	Vested Terminations	Ordinary Disabled	Duty Disabled	Retired	Beneficiaries	Total
<b>July 1, 2022</b>	<b>50</b>	<b>65</b>	<b>6</b>	<b>3</b>	<b>1</b>	<b>14</b>	<b>35</b>	<b>4</b>	<b>178</b>
New Entrants	7	0	0	0	0	0	0	0	7
Rehires	0	0	0	0	0	0	0	0	0
Duty Disabilities	(2)	0	0	0	0	2	0	0	0
Ordinary Disabilities	0	0	0	0	0	0	0	0	0
Retirements	(6)	(2)	0	0	0	0	8	0	0
Retirements from General with Safety Service	0	0	0	0	0	0	0	0	0
Vested Terminations	0	0	0	0	0	0	0	0	0
Died, With Beneficiaries' Benefit Payable	0	0	0	0	0	0	0	0	0
Died, Without Beneficiary, and Other Terminations	(2)	0	2	0	0	0	0	0	0
Transfers	0	0	0	0	0	0	0	0	0
Beneficiary Deaths	0	0	0	0	0	0	0	0	0
Domestic Relations Orders	0	0	0	0	0	0	0	0	0
Withdrawals Paid	0	(1)	(1)	0	0	0	0	0	(2)
Member Reclassifications	0	(1)	0	0	0	2	0	3	4
<b>July 1, 2023</b>	<b>47</b>	<b>61</b>	<b>7</b>	<b>3</b>	<b>1</b>	<b>18</b>	<b>43</b>	<b>7</b>	<b>187</b>

## **APPENDIX B – STATEMENT OF CURRENT ACTUARIAL ASSUMPTIONS AND METHODS**

The assumptions and methods used in the actuarial valuation as of June 30, 2023 are:

### **Contribution Allocation Procedure**

The contribution allocation procedure primarily consists of an actuarial cost method, an asset valuation method, and an amortization method as described below. This contribution allocation procedure, combined with reasonable assumptions, produces a Reasonable Actuarially Determined Contribution as defined in Actuarial Standard of Practice No. 4. The contribution allocation procedure was selected to balance benefit security, intergenerational equity, and the stability of actuarially determined contributions. The selection also considered the demographics of plan members, the funding goals and objectives of the Board, and the need to accumulate assets to make benefit payments when due. There were no changes to the contribution allocation procedures from the prior valuation.

#### **1. Actuarial Cost Method**

Annual contributions to the Stanislaus County Employees' Retirement Association (the Plan) are computed under the Entry Age Normal Actuarial Cost Method, computed to the final decrement.

Under this cost method, the normal cost is calculated as the amount necessary to fund Members' benefits as a level percentage of total payroll over their projected working lives. At each valuation date, the Actuarial Liability is equal to the difference between the liability for the Members' total projected benefit and the present value of future normal cost contributions.

The excess of the Actuarial Liability over Plan assets is the Unfunded Actuarial Liability (UAL).

The total Plan cost is the sum of the normal cost (computed on an Individual basis), the amortization of the Unfunded Actuarial Liability, and the expected administrative expenses.

#### **2. Amortization Method**

The UAL for each cost-sharing group is amortized as a level percentage of payroll. The initial UAL as of June 30, 2021 is amortized over a closed 15-year period (13 years remaining as of June 30, 2023). Any subsequent unexpected changes in the UAL after June 30, 2021 from actuarial gains or losses or assumptions changes are amortized over fixed closed periods of 20 years as a level percentage of payroll, with new amortization layers established each year. Any subsequent changes in the UAL after June 30, 2021 due to plan amendments or other plan provision changes are amortized over a shorter period, based on the lesser of 15 years or the average future working lifetime for changes affecting active members, or the lesser of 10 years or the average remaining life expectancy for changes affecting inactive members.

**APPENDIX B – STATEMENT OF CURRENT ACTUARIAL  
ASSUMPTIONS AND METHODS**

**3. Actuarial Value of Plan Assets**

The Actuarial Value of Plan assets is a modified market-related value. The Market Value of Assets is adjusted to recognize, over a five-year period, differences between actual investment earnings and the assumed investment return. The Actuarial Value of Assets is limited to no less than 80% and no more than 120% of the market value.

The detailed calculations of the Actuarial Value of Plan assets are shown in Section III.

**4. Changes in Actuarial Methods**

None.

**APPENDIX B – STATEMENT OF CURRENT ACTUARIAL  
ASSUMPTIONS AND METHODS**

**Actuarial Assumptions**

All actuarial assumptions are based on the Actuarial Experience Study Report for the period covering July 1, 2018 through June 30, 2021 report. The proposed assumptions were summarized and reviewed with the Board at the December 14, 2021 Board meeting, at which the Board provided direction to proceed with the valuation based on those assumptions. Final adoption of the assumptions was effective with the adoption of the June 30, 2021 Report. More details on the rationale for the demographic and economic assumptions can be found in the experience study report. The combined effect of the assumptions is expected to have no significant bias for the purpose of this measurement.

**1. Rate of Return**

The annual rate of return on all Plan assets is assumed to be 6.75%, net of investment expenses.

**2. Cost of Living**

The cost of living as measured by the Consumer Price Index (CPI) will increase at the rate of 2.50% per year.

**3. Administrative Expenses**

An allowance of \$3,256,938 for Plan administrative expenses for the current year has been included in the annual cost calculated. The administrative expense amount has been assumed to increase in future years at the rate of the Cost-of-Living assumption (2.50%).

**4. Interest Credited to Employee Accounts**

The employee accounts are credited with 4.25% interest annually.

**5. Increases in Pay**

Base salary increase: 2.75%

Assumed pay increases for active Members consist of increases due to base salary adjustments (as noted above), plus service-based increases due to longevity and promotion, as shown on the next page.

**APPENDIX B – STATEMENT OF CURRENT ACTUARIAL  
ASSUMPTIONS AND METHODS**

Longevity & Promotion Increases		
Service	General	Safety
0	5.00%	5.00%
1	5.00%	5.00%
2	5.00%	5.00%
3	5.00%	4.50%
4	5.00%	4.50%
5	3.50%	2.00%
6	2.50%	1.75%
7	1.50%	1.50%
8	1.25%	1.50%
9	1.00%	1.25%
10	0.75%	1.00%
11+	0.50%	1.00%

**6. PEPRA Compensation Limit**

The assumption used for increasing the compensation limit that applies to PEPRA members is 2.50%

**7. Post Retirement COLA**

For those with the 3% COLA benefit (i.e., 100% of CPI up to 3% annually with banking), 2.40% annual increases are assumed. Increases are assumed to occur on April 1.

Higher COLA annual increases of 2.60% are assumed for members in pay status. This is used as a proxy to estimate the value of the increases in COLA banks which have occurred since the adoption of the 2.40% assumption based on recent experience.

**8. Social Security Wage Base**

General Plan 3 members have their benefits offset by an assumed Social Security Benefit. For projecting the Social Security Benefit, the annual Social Security Wage Base increase is assumed to be 2.75% per year.

**9. Internal Revenue Code Section 415 Limit**

The Internal Revenue Code (IRC) Section 415 maximum benefit limitations have been applied to the benefits for members currently in pay status, as the limited benefits have been provided by StanCERA for valuation purposes. Future projected benefits for members in active and deferred statuses have not been reduced for potential Section 415 limits in the current valuation, though any actual limitations for these members will result in actuarial gains upon their actual retirement, which will reduce future contributions.

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**10. Internal Revenue Code Section 401(a)(17)**

The IRC Section 401(a)(17) maximum compensation limitation for active members is not reflected in the valuation for funding purposes; limitations are reflected after retirement.

**11. Family Composition**

Percentage married for all active members who retire, become disabled, or die during active service is shown in the following table.

Percentage Married	
Gender	Percentage
Males	80%
Females	60%

Spouses of male members are assumed to be two years younger than the member and spouses of female members are assumed to be two years older than the member.

**12. Accumulated Vacation Time Load**

Active members' service retirement and related benefits are loaded by 3.00% for Safety Members and 3.00% for General Members for cashouts of vacation time. 1/3 of this load applies for members with a 36-month final average service period. No other adjustment is made to the liabilities for anticipated future service purchases.

**13. Rates of Separation**

Rates of termination apply to all active Members who terminate their employment.

Separate rates of termination are assumed among Safety and General Members.

Termination Rates		
Years of Service	General All	Safety All
0	18.0%	16.0%
1	14.0%	8.0%
2	9.0%	7.0%
3	8.0%	6.0%
4	7.0%	6.0%
5	7.0%	6.0%
10	5.0%	5.0%
15	3.0%	2.0%
20	3.0%	0.0%
25	3.0%	0.0%
30+	0.0%	0.0%

Termination rates do not apply once a member is eligible for retirement.

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**14. Withdrawal**

Rates of withdrawal apply to active Members who terminate their employment and withdraw their member contributions, forfeiting entitlement to future Plan benefits. Separate rates of withdrawal are assumed among Safety and General Members and are based on service. The rates do not overlap with the service retirement rates.

45% of all General Member terminations with less than 10 years of service are assumed to take a refund of contributions, as well as 15% of those with 10 or more years of service.

35% of all Safety Member terminations with less than 10 years of service are assumed to take a refund of contributions, and 10% of those with 10 or more years of service.

**15. Vested Termination and Reciprocal Transfers**

Rates of vested termination apply to active Members who terminate their employment after five years of service and leave their member contributions on deposit with the Plan. Alternatively, those who terminate their employment with less than five years of service can leave their member contributions with the Plan and transfer to a reciprocal employer, therefore retaining entitlement to future Plan benefits.

Vested terminated Tier 3 General Members are assumed to begin receiving benefits at age 65 while all other General Members are assumed to begin at age 58, unless they have reciprocity, in which case they are assumed to begin at age 61; terminated Safety Members are assumed to begin receiving benefits at age 51 for Tiers 4 and 5 and at age 54 for the Tiers 1, 2, 3, and 6.

60% of vested terminated General Members with less than 10 years of service are assumed to be reciprocal, as well as 40% of those with 10 or more years of service.

75% of vested terminated Safety Members with less than 10 years of service are assumed to be reciprocal, as well as 70% of those with 10 or more years of service.

Reciprocal members are assumed to receive annual pay increases of 3.25% for General and 3.75% for Safety from the date of transfer to the assumed retirement date.

**16. Form of Benefit**

Upon retirement, 90% of male married members and 95% of female married members are assumed to elect the normal payment form (joint & 50% survivor annuity for Tier 3 and joint & 60% survivor annuity for all other tiers). Non-married members are assumed to elect a single life annuity.

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**17. Rates of Service-Connected Disability**

Separate rates of duty disability are assumed among Safety and General Members; rates for both sexes for Safety Members are combined. Safety members are assumed to follow the 2021 CalPERS State Safety rates. Sample rates are shown below:

Rates of Service-Connected Disability			
Age	General		Safety
	Male	Female	All
20	0.0043%	0.0002%	0.0020%
25	0.0102%	0.0004%	0.0760%
30	0.0211%	0.0008%	0.1700%
35	0.0284%	0.0024%	0.2640%
40	0.0401%	0.0056%	0.3600%
45	0.0613%	0.0101%	0.4570%
50	0.0897%	0.0162%	0.5570%
55	0.1227%	0.0249%	0.6580%
60	0.1637%	0.0349%	0.7620%
65	0.0000%	0.0000%	0.8690%

**18. Rates of Nonservice-Connected Disability**

Separate rates of ordinary disability are assumed among Safety and General Members. Rates of ordinary disability for Safety Members are assumed to follow the 2021 CalPERS Public Agency Police Non-Industrial Disability table; rates of ordinary disability for General Members are assumed to follow the 2021 CalPERS Public Agency Miscellaneous Non-Industrial Disability table. The rates shown are applied after five Years of Service. Sample rates are on the next page.

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Rates of Non Service-Connected Disability General			Rates of Non Service-Connected Disability Safety	
Age	Male	Female	Age	All
20	0.0170%	0.0100%	20	0.0100%
25	0.0170%	0.0100%	25	0.0100%
30	0.0190%	0.0240%	30	0.0200%
35	0.0390%	0.0710%	35	0.0300%
40	0.1020%	0.1350%	40	0.0400%
45	0.1510%	0.1880%	45	0.0500%
50	0.1580%	0.1990%	50	0.0800%
55	0.1580%	0.1490%	55	0.1300%
60	0.1530%	0.1050%	60	0.2000%
65	0.1280%	0.0880%	65+	0.2000%
70	0.1020%	0.0840%		
75+	0.1020%	0.0880%		

**19. Rates of Mortality for Non-Annuitants**

Rates of ordinary death for active General members are specified by the 2021 CalPERS Preretirement Non-Industrial Mortality table, adjusted by 102.2% for males and 110.2% for females. Rates of ordinary death for active Safety members are specified by the 2021 CalPERS Preretirement Non-Industrial Mortality table, adjusted by 102.6% for males and 100.9% for females. Duty related mortality rates are only applicable for Safety Active Members and are based on the 2021 CalPERS Preretirement Industrial Death table, adjusted by 102.6% for males and 100.9% for females. These mortality base tables are all projected generationally from 2017 using 80% of SOA Scale MP-2020.

The table on the following page provides a sample of the base mortality rates including adjustments but prior to any projections for mortality improvements.

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Non-Annuitant Mortality Rates						
Age	Ordinary Death - General Male	Ordinary Death - General Female	Ordinary Death - Safety Male	Ordinary Death - Safety Female	Duty Death - Safety Male	Duty Death - Safety Female
20	0.0399%	0.0154%	0.0390%	0.0141%	0.0041%	0.0020%
25	0.0337%	0.0143%	0.0349%	0.0182%	0.0041%	0.0020%
30	0.0450%	0.0209%	0.0431%	0.0252%	0.0051%	0.0030%
35	0.0593%	0.0320%	0.0492%	0.0343%	0.0051%	0.0040%
40	0.0767%	0.0430%	0.0564%	0.0424%	0.0062%	0.0050%
45	0.0950%	0.0595%	0.0677%	0.0535%	0.0072%	0.0061%
50	0.1369%	0.0893%	0.0944%	0.0737%	0.0103%	0.0081%
55	0.2024%	0.1355%	0.1416%	0.1070%	0.0154%	0.0121%
60	0.2933%	0.1973%	0.2267%	0.1524%	0.0257%	0.0172%
65	0.4119%	0.2755%	0.3550%	0.1957%	0.0390%	0.0222%
70	0.6071%	0.4452%	0.6218%	0.3612%	0.0687%	0.0404%

**20. Rates of Mortality for Nonservice-Connected Disabled Retirees**

Rates of mortality for current nonservice-connected disabled Members are specified by the 2021 CalPERS Non-Industrially Disabled Annuitant Mortality table, no adjustment for males or females, with generational mortality improvements projected from 2017 using 80% of SOA Scale MP-2020.

The table provides a sample of the base mortality rates including adjustments but prior to any projections for mortality improvements.

Nonservice-Connected Disabled Mortality Rates		
Age	Male	Female
45	1.120%	1.019%
50	1.727%	1.439%
55	2.217%	1.734%
60	2.681%	1.962%
65	3.332%	2.276%
70	4.056%	2.910%
75	5.465%	4.160%
80	8.044%	6.112%
85	11.695%	9.385%
90	16.770%	14.3956%

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**21. Rates of Mortality for Service-Connected Disabled Retirees**

Rates of mortality for current service-connected disabled Members are specified by the 2021 CalPERS Industrially Disabled Annuitant Mortality table, no adjustment for males and adjusted by 105% for females, with generational mortality improvements projected from 2017 using 80% of SOA Scale MP-2020.

The table provides a sample of the base mortality rates including adjustments but prior to any projections for mortality improvements.

Service-Connected Disabled Mortality Rates		
Age	Male	Female
45	0.314%	0.238%
50	0.437%	0.326%
55	0.623%	0.577%
60	0.935%	0.911%
65	1.393%	1.250%
70	2.189%	1.951%
75	3.498%	3.291%
80	5.932%	5.442%
85	10.244%	8.447%
90	16.739%	13.0557%

**22. Rates of Mortality for Emerging Disabled Retirees**

Rates of mortality for future General disabled retirees, both nonservice- and service-connected, are specified by mortality tables consisting of blends of the mortality assumptions for current nonservice- and service-connected disabled retirees. The blend for future disabled General retirees is 50% and 50%, respectively. The proportions reflect the expected splits in future disabled retirees between nonservice- and service-connected disablements.

Future disabled Safety retirees are assumed to follow the same rates of mortality as the service-connected disabled retirees indicated in the prior bullet.

**23. Rates of Mortality for Healthy Annuitants**

Rates of mortality for retired Members and their beneficiaries are specified by the 2021 CalPERS Healthy Annuitant table, adjusted by 107.6% for males and 115.3% for females, with generational mortality improvements projected from 2017 using 80% of SOA Scale MP-2020.

The table on the next page provides a sample of the base mortality rates including adjustments but prior to any projections for mortality improvements.

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Healthy Annuitant Mortality Rates		
Age	Male	Female
45	0.101%	0.063%
50	0.291%	0.229%
55	0.421%	0.375%
60	0.618%	0.525%
65	0.922%	0.705%
70	1.442%	1.149%
75	2.582%	2.056%
80	4.713%	3.923%
85	8.902%	7.110%
90	15.644%	12.7820%

**24. Mortality Improvement**

As mentioned above, the mortality assumptions employ a fully generational mortality improvement projection from base year 2017 using 80% of the Society of Actuaries Scale MP-2020.

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**25. Rates of Retirement**

Retirement for members in non-PEPRA Tiers (Tier 6) are assumed to occur among eligible members in accordance with the table below and on the following page:

Rates of Retirement General (Non-PEPRA)			
Age	Years of Service		
	0-9	10-29	30+
40-44	0.00%	0.00%	0.00%
45-49	0.00%	0.00%	10.00%
50-54	0.00%	4.00%	10.00%
55	0.00%	7.00%	10.00%
56	0.00%	7.00%	15.00%
57	0.00%	7.00%	15.00%
58	0.00%	7.00%	15.00%
59	0.00%	12.50%	15.00%
60	0.00%	12.50%	22.50%
61	0.00%	12.50%	30.00%
62	0.00%	20.00%	30.00%
63	0.00%	20.00%	30.00%
64	0.00%	20.00%	30.00%
65	0.00%	40.00%	30.00%
66	0.00%	40.00%	30.00%
67	0.00%	40.00%	30.00%
68	0.00%	25.00%	30.00%
69	0.00%	25.00%	30.00%
70	25.00%	25.00%	30.00%
71	25.00%	25.00%	30.00%
72	25.00%	25.00%	30.00%
73	25.00%	25.00%	30.00%
74	25.00%	25.00%	30.00%
75+	100.00%	100.00%	100.00%

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Rates of Retirement Safety (Non-PEPRA)				
Years of Service				
Age	0-9	10-14	15-19	20+
40-48	0.00%	0.00%	0.00%	5.00%
49	0.00%	0.00%	0.00%	20.00%
50	0.00%	5.00%	25.00%	40.00%
51	0.00%	5.00%	5.00%	25.00%
52	0.00%	5.00%	5.00%	25.00%
53	0.00%	5.00%	5.00%	25.00%
54	0.00%	5.00%	5.00%	25.00%
55	0.00%	5.00%	5.00%	40.00%
56	0.00%	5.00%	5.00%	40.00%
57	0.00%	5.00%	5.00%	40.00%
58	0.00%	5.00%	5.00%	40.00%
59	0.00%	5.00%	5.00%	40.00%
60	0.00%	25.00%	25.00%	100.00%
61	0.00%	25.00%	25.00%	100.00%
62	0.00%	25.00%	25.00%	100.00%
63	0.00%	25.00%	25.00%	100.00%
64	0.00%	25.00%	25.00%	100.00%
65	0.00%	100.00%	100.00%	100.00%
66	0.00%	100.00%	100.00%	100.00%
67	0.00%	100.00%	100.00%	100.00%
68	0.00%	100.00%	100.00%	100.00%
69	0.00%	100.00%	100.00%	100.00%
70+	100.00%	100.00%	100.00%	100.00%

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Retirement for members in PEPRA, Tier 6, are assumed to occur among eligible members in accordance with the sample rates below, from the full tables 2021 CalPERS Public Agency Miscellaneous 2% @ 62 table for General and the 2021 CalPERS Public Agency Safety Police 2.7% @ 57 table for Safety:

Rates of Retirement General (PEPRA) Years of Service				
Age	5	10	25	35
50-51	0.00%	0.00%	0.00%	0.00%
52	0.50%	0.80%	1.90%	3.80%
53	0.70%	1.10%	2.10%	4.80%
54	0.70%	1.10%	2.30%	5.40%
55	1.00%	1.90%	6.10%	15.20%
56	1.40%	2.60%	7.50%	16.70%
57	1.80%	2.90%	7.40%	14.30%
58	2.30%	3.50%	7.30%	13.50%
59	2.50%	3.80%	9.20%	17.50%
60	3.10%	5.10%	11.10%	18.30%
61	3.80%	5.80%	12.10%	23.20%
62	4.40%	7.40%	16.40%	27.10%
63	7.70%	10.50%	19.20%	26.60%
64	7.20%	10.10%	18.70%	27.60%
65	10.80%	14.10%	23.90%	34.80%
66	13.20%	17.20%	29.20%	42.60%
67	13.20%	17.20%	29.20%	40.50%
68	12.00%	15.60%	26.50%	38.70%
69	12.00%	15.60%	26.50%	36.80%
70	12.00%	15.60%	26.50%	38.70%
71	12.00%	15.60%	26.50%	38.70%
72	12.00%	15.60%	26.50%	38.70%
73	12.00%	15.60%	26.50%	38.70%
74	12.00%	15.60%	26.50%	38.70%
75+	100.00%	100.00%	100.00%	100.00%

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Rates of Retirement Safety (PEPRA) Years of Service				
Age	5	10	25	35
50	5.00%	5.00%	5.00%	11.00%
51	4.00%	4.00%	5.75%	13.92%
52	3.80%	3.80%	5.80%	13.21%
53	3.80%	3.80%	7.74%	28.98%
54	3.80%	3.80%	9.31%	33.25%
55	6.84%	6.84%	13.40%	38.76%
56	6.27%	6.27%	12.28%	34.49%
57	6.00%	6.00%	11.75%	32.00%
58	8.00%	8.00%	13.75%	35.00%
59	8.00%	8.00%	14.00%	40.00%
60	15.00%	15.00%	15.00%	35.00%
61	14.40%	14.40%	14.40%	26.40%
62	15.00%	15.00%	15.00%	33.00%
63	15.00%	15.00%	15.00%	40.00%
64	15.00%	15.00%	15.00%	52.50%
65+	100.00%	100.00%	100.00%	100.00%

## 26. Changes in Actuarial Assumptions

There have been no changes in the assumptions since the prior valuation. We have updated the annual interest crediting rate for employee accounts, from 0.25% to 4.25%, based on the Association's Excess Earnings & Interest Posting Policy. However, this assumption is only used to reflect the expected impact of the existing policy and thus does not represent a change in forward-looking assumptions.

## APPENDIX C – SUMMARY OF PLAN PROVISIONS

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

### A. Definitions

**Compensation:** Compensation means the cash remuneration for services paid by the employer. It includes base pay and certain differential, incentive, and special pay allowances defined by the Board of Retirement. Overtime is excluded, with the exception of overtime paid under the Fair Labor Standards Act that is regular and recurring.

For Tier 6 (PEPRA) members, only pensionable compensation up to the PEPRA Compensation Limit will count for computing Plan benefits and employee contributions and employer contributions. For those participating in Social Security, the compensation cap is \$146,042 for calendar year 2023. For those not participating in Social Security, the compensation cap is \$175,250 for calendar year 2023. In addition, it is possible that some sources of compensation, such as any payments deemed to be terminal or special pays, may be excluded from the benefit and contribution computations for PEPRA members.

**Credited Service:** In general, Credited Service is earned for the period during which Member Contributions are paid. Since Tier 3 Members participate in a non-contributory Plan, their Credited Service is calculated based on their date of Membership only.

Temporary service for which the Member was not credited, or service for which the Member withdrew his or her Member Contributions, may be purchased by paying or repaying the Member Contributions with interest. The categories of services that credit may be purchased for are listed below:

- **Prior Part-time Service:** If a Member worked for an employer within the Association on a part-time or 'extra help' basis before his membership in the Retirement Association, the Member may buyback this service.
- **Intermittent Part-time Service**
- **Prior full time Service:** Member may buyback full time service that may have been cashed out upon termination.

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- **Leave of Absence (Including absence with State Disability or Worker's Compensation):** No unpaid leave of absence can be bought back except for absence due to medical reasons of up to one year.
- **Public Service:** Only Tier 1 and 4 Members may buy back this service.
- **Military Time:** Only Tier 1 and 4 Members may buy back this service.
- **Enhance Prior Tier Service:** Applies to certain active and deferred Members with Tier 1, 2, or 3 service.
- **Military "call up"**
- **AB 2766:** Only Safety Employees can buy back this service.

A percentage of credited sick leave may be credited according to the Member's applicable bargaining unit.

### **Final**

**Compensation:** For Members belonging to Tier 2, Tier 3, and Tier 6, Final Compensation means the highest Compensation earned during any 36 consecutive months of the Member's employment. For all others, it is the highest Compensation earned during any twelve months of employment.

**General Member:** Any Member who is not a Safety Member is a General Member.

**Safety Member:** Any sworn Member engaged in law enforcement, probation, or fire suppression is a Safety Member.

## **B. Membership**

**Eligibility:** All full-time, permanent employees of Stanislaus County, City of Ceres, Stanislaus County Superior Court, Salida Sanitary District, East Side Mosquito Abatement, Keyes Community Services, Hills Ferry Cemetery, Stanislaus Council of Governments, and Stanislaus Regional Transit Authority hired on or after October 1, 1988 become Members on their date of appointment. All others hired before October 1, 1988 became Members on the first day of the calendar month following their date of appointment.

Detailed membership eligibility according to Tier and membership date is shown in Table 1 on page 80.

## APPENDIX C – SUMMARY OF PLAN PROVISIONS

### C. Service Retirement

**Eligibility:** New members who meet the requirements to enter a legacy tier under PEPRA will enter Tier 2; all other new members will enter Tier 6.

Tier 3 General Members are eligible to retire at age 55 if they have earned 10 years of Credited Service. Tier 6 (PEPRA) General Members are eligible to retire at age 52 if they have earned five years of Credited Service. All other General Members are eligible to retire at age 50 if they have earned five years of Credited Service and have been an Association member for at least 10 years. Alternatively, General non-PEPRA Members are eligible to retire at any age after having earned 30 years of Credited Service, or upon reaching age 70 with no service requirement.

Safety Members are eligible to retire at age 50 if they have earned five years of Credited Service and have been an Association member for at least 10 years. Alternatively, Safety Members are eligible to retire at any age after having earned 20 years of Credited Service, or upon reaching age 70 with no service requirement. The 20-year Credited Service retirement eligibility is not applicable to Tier 6 (PEPRA) Safety Members, nor is the 10-year Association membership requirement.

**Benefit Amount:** The Service Retirement Benefit payable to the Member is equal to the Member's Final Compensation multiplied by credited service, the benefit factor from Table 1 and the age factor from Table 2 corresponding to the Member's code section. The appropriate code sections for each group are listed in Table 1. For Tier 3 members, the age factors are applied *after* the benefit amount as determined under Table 1 has been offset by the designated fraction of the member's projected age 65 Social Security benefit.

For Tier 3 Members with Credited Service up to 35 years, the percentage of Final Compensation may not exceed 70% and for those with more than 35 years, it may not exceed 80%. For all other non-PEPRA Members, the percentage of Final Compensation may not exceed 100%. For those members integrated with Social Security (other than Tiers 3 and 6), Retirement Benefits based on the first \$350 of monthly Final Average Compensation are reduced by one-third.

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**APPENDIX C – SUMMARY OF PLAN PROVISIONS**

**Table 1: Member Group Descriptions**

Group	Open or Closed	FAP	Max Cola	Code Section	Description	Top Retirement Factor Age	Benefit Factor
General Tier I	Closed	1	3	31676.12	2% at 57	62	2.00%
General Tier II	Open	3	3	31676.1	2% at 62	65	1.67%
General Tier III	Closed	3	0	31499.14	Non-Contributory	65	First 35 Years: 2.0% of FAS less 1/35 <sup>th</sup> of Social Security benefit at age 65. Next 10 Years: 1% of FAS
General Tier IV	Closed	1	3	31676.14	2% at 55	65	1.67%
General Tier V	Closed	1	3	31676.14	2% at 55	65	1.67%
General Tier VI	Open	3	3	7522.2	PEPRA	67	1.00%
Safety Tier II	Open	3	3	31664	2% at 50	50	2.00%
Safety Tier IV	Closed	1	3	31664.1	3% at 50	50	3.00%
Safety Tier V	Closed	1	3	31664.1	3% at 50	50	3.00%
Safety Tier VI	Open	3	3	7522.25 (2)	PEPRA	57	1.00%

**Table 2: Age Factors**

Age	Safety 2% at Age 50 CERL §: 31664	Safety 3% at Age 50 CERL §: 31664.1	Safety PEPRA GC §: 7522.25 Opt2	General 2% at Age 62 CERL §: 31676.1	General 2% at Age 57 CERL §: 31676.12	General 2% at Age 55 CERL §: 31676.14	General 2% at Age 65 CERL §: 31499.14	General PEPRA GC §: 7522.20
41	0.6258	0.6258	N/A	N/A	N/A	N/A	N/A	N/A
42	0.6625	0.6625	N/A	N/A	N/A	N/A	N/A	N/A
43	0.7004	0.7004	N/A	N/A	N/A	N/A	N/A	N/A
44	0.7397	0.7397	N/A	N/A	N/A	N/A	N/A	N/A
45	0.7805	0.7805	N/A	N/A	N/A	N/A	N/A	N/A
46	0.8226	0.8226	N/A	N/A	N/A	N/A	N/A	N/A
47	0.8678	0.8678	N/A	N/A	N/A	N/A	N/A	N/A
48	0.9085	0.9085	N/A	N/A	N/A	N/A	N/A	N/A
49	0.9522	0.9522	N/A	N/A	N/A	N/A	N/A	N/A
50	1.0000	1.0000	2.0000	0.7091	0.6681	0.8850	N/A	N/A
51	1.0516	1.0000	2.1000	0.7457	0.7056	0.9399	N/A	N/A
52	1.1078	1.0000	2.2000	0.7816	0.7454	1.0000	N/A	1.0000
53	1.1692	1.0000	2.3000	0.8181	0.7882	1.0447	N/A	1.1000
54	1.2366	1.0000	2.4000	0.8556	0.8346	1.1048	N/A	1.2000
55	1.3099	1.0000	2.5000	0.8954	0.8850	1.1686	0.3900	1.3000
56	1.3099	1.0000	2.6000	0.9382	0.9399	1.2365	0.4300	1.4000
57	1.3099	1.0000	2.7000	0.9846	1.0000	1.3093	0.4700	1.5000
58	1.3099	1.0000	2.7000	1.0350	1.0447	1.3608	0.5100	1.6000
59	1.3099	1.0000	2.7000	1.0899	1.1048	1.4123	0.5600	1.7000
60	1.3099	1.0000	2.7000	1.1500	1.1686	1.4638	0.6100	1.8000
61	1.3099	1.0000	2.7000	1.1947	1.2365	1.5153	0.6700	1.9000
62	1.3099	1.0000	2.7000	1.2548	1.3093	1.5668	0.7400	2.0000
63	1.3099	1.0000	2.7000	1.3186	1.3093	1.5668	0.8200	2.1000
64	1.3099	1.0000	2.7000	1.3865	1.3093	1.5668	0.9000	2.2000
65	1.3099	1.0000	2.7000	1.4593	1.3093	1.5668	1.0000	2.3000
66	1.3099	1.0000	2.7000	1.4593	1.3093	1.5668	1.0000	2.4000
67	1.3099	1.0000	2.7000	1.4593	1.3093	1.5668	1.0000	2.5000

Form of Benefit: The Service Retirement Benefit will be paid monthly beginning at retirement and for the life of the Member. If the member selects the unmodified benefit form, in the event of the Member's death 60% of the benefit will continue for the life of the Member's spouse or to the age of majority of dependent minor children if there is no spouse. For Tier 3 Members, the benefit payable to beneficiary is limited to 50%. In the event

## APPENDIX C – SUMMARY OF PLAN PROVISIONS

there is no surviving spouse or minor children, any unpaid remainder of the Member's accumulated contributions will be paid to the Member's designated beneficiary.

Actuarially equivalent optional benefit forms are also available.

Annually on April 1, benefits for all retired members other than those in Tier 3 are adjusted to reflect changes in the CPI for the San Francisco Bay Area since the prior year. Benefits may be increased or decreased, but the cumulative changes shall never reduce the benefit below the original monthly allowance. Annual increases may not exceed the COLA figures shown in Table 1, but CPI increases above this figure are "banked" and used for future increases when the CPI increases by less than the figures shown.

In addition, ad hoc cost-of-living adjustments have been granted in the past and may be granted in the future.

A lump sum benefit of \$5,000 will be payable upon the death of a retired member. No death benefit is payable for Tier 3 retired members.

### D. Service-Connected Disability

**Eligibility:** All non-Tier 3 Members are eligible for Service-Connected Disability Retirement benefits at any age if they are permanently disabled as a result of injuries or illness sustained in the line of duty. Tier 3 Members are not eligible to receive disability benefits.

**Benefit Amount:** The Service-Connected Disability Retirement Benefit payable to Members is equal to the greater of 50% of their Final Compensation or – if the Member is eligible at disability for a Service Retirement Benefit – the Service Retirement Benefit accrued on the date of disability.

**Form of Benefit:** The Service-Connected Disability Retirement Benefit will be paid monthly beginning at the effective date of disability retirement and for the life of the Member; in the event of the Member's death, 100% of the benefit will continue for the life of the Member's spouse or to the age of majority of dependent minor children if there is no spouse. In the event there is no surviving spouse or minor children, any unpaid remainder of the Member's accumulated contributions will be paid to the Member's designated beneficiary.

Actuarially equivalent optional benefit forms and COLA adjustments (as described for the Service Retirement benefit) are also available. A lump sum benefit of \$5,000 will be payable upon the death of the member.

## APPENDIX C – SUMMARY OF PLAN PROVISIONS

### E. Nonservice-Connected Disability

**Eligibility:** Tier 3 Members are not eligible to receive disability benefits. All other Members are eligible for Nonservice-Connected Disability Retirement benefits if they are permanently disabled at any age after earning five years of Credited Service.

**Benefit Amount:** The Nonservice-Connected Disability Retirement Benefit payable to Tier 1 General Members is equal to the greatest of:

- 1.8% of Final Compensation at disability multiplied by years of Credited Service at disability;
- 1.8% of Final Compensation at disability multiplied by years of Credited Service projected to age 62, but not to exceed one-third of Final Compensation; or
- If the Member is eligible at disability for a Service Retirement Benefit, the Service Retirement Benefit accrued on the date of disability.

The Nonservice-Connected Disability Retirement Benefit payable to Tiers 2, 4, 5, and 6 General Members is equal to the greatest of:

- 1.5% of Final Compensation at disability multiplied by years of Credited Service at disability;
- 1.5% of Final Compensation at disability multiplied by years of Credited Service projected to age 65, but not to exceed one-third of Final Compensation; or
- If the Member is eligible at disability for a Service Retirement Benefit, the Service Retirement Benefit accrued on the date of disability.

The Nonservice-Connected Disability Retirement Benefit payable to Safety Members is equal to the greatest of:

- 1.8% of Final Compensation at disability multiplied by years of Credited Service at disability;
- 1.8% of Final Compensation at disability multiplied by years of Credited Service projected to age 55, but not to exceed one-third of Final Compensation; or
- If the Member is eligible at disability for a Service Retirement Benefit, the Service Retirement Benefit accrued on the date of disability.

## APPENDIX C – SUMMARY OF PLAN PROVISIONS

**Form of Benefit:** The Nonservice-Connected Disability Retirement Benefit will be paid monthly beginning at the effective date of disability retirement, and for the life of the Member; in the event of the Member's death, 60% of the benefit will continue for the life of the Member's spouse or to the age of majority of dependent minor children if there is no spouse. In the event there is no surviving spouse or minor children, any unpaid remainder of the Member's accumulated contributions will be paid to the Member's designated beneficiary.

Actuarially equivalent optional benefit forms and COLA adjustments (as described for the Service Retirement benefit) are also available. A lump sum benefit of \$5,000 will be payable upon the death of the member.

### F. Death Benefit

**Eligibility:** A Tier 3 Member's survivors are not eligible to receive death benefits. All other Members' survivors are eligible to receive different Death benefits dependent on the Member's cause of death and retirement eligibility.

**Benefit Amount:** In the event the Member's death resulted from injury or illness sustained in connection with the Member's duties, the Death Benefit payable to a surviving spouse, domestic partner, or eligible dependent children will be the greater of 50% of the Member's Final Compensation at the time of death or the Service Retirement Benefit.

In the event the Member's death did not result from injury or illness sustained in connection with the Member's duties and at the time of death and the Member was eligible for Service Retirement or Non-Service Connected Disability (i.e., the employee was employed at least five years), the Death Benefit payable to the spouse, partner or children will be 60% of the survivor benefit based on benefit due on Member's date of death.

In all other cases, the designated beneficiary (not necessarily a spouse/partner/child) will receive a refund of the Member's contributions with interest plus one month of Final Compensation for each year of service to a maximum of six years.

**Form of Benefit:** Annuity death benefits will be paid monthly beginning at the Member's death and for the life of the surviving spouse/partner or to the age of majority of dependent minor children if there is no spouse/partner. Lump sum benefits will be paid as described above.

COLA adjustments (as described for the annuity benefits) are also available.

## APPENDIX C – SUMMARY OF PLAN PROVISIONS

### G. Withdrawal Benefits

- Eligibility:** Tier 3 Members are not eligible to receive withdrawal benefits. All other Members are eligible for a Withdrawal Benefit upon termination of employment, if not eligible to receive or electing to waive a monthly benefit.
- Benefit Amount:** The Withdrawal Benefit is a refund of the Member's accumulated Contributions with interest. Upon receipt of the Withdrawal Benefit, the Member forfeits all Credited Service.
- Form of Benefit:** The Withdrawal Benefit is paid in a lump sum upon election by the Member.

### H. Deferred Vested Benefit

- Eligibility:** A Member is eligible for a Deferred Vested Benefit upon termination of employment after earning five years of Credited Service, including reciprocity service from another system. For Tier 3 Members, the vesting requirement is 10 years of Credited Service.
- The Member must leave his or her Member Contributions with interest on deposit with the Plan. This requirement does not apply to Tier 3 Members since they participate in a non-contributory Plan.
- Benefit Amount:** The Deferred Vested Benefit is computed in the same manner as the Service Retirement Benefit, but it is based on Credited Service and Final Compensation on the date of termination.
- Form of Benefit:** The Deferred Vested Benefit will be paid monthly beginning at retirement and for the life of the Member; in the event of the Member's death, 60% of the benefit will continue for the life of the Member's spouse or to the age of majority of dependent minor children if there is no spouse. For Tier 3 Members, the benefit payable to beneficiary is limited to 50%. In the event there is no surviving spouse or minor children, any unpaid remainder of the Member's accumulated contributions will be paid to the Member's designated beneficiary.
- Actuarially equivalent optional benefit forms and COLA adjustments (as described for the Service Retirement benefit) are also available. A lump sum benefit of \$5,000 will be payable upon the death of the member. No death benefit is payable for Tier 3 retired members.

## APPENDIX C – SUMMARY OF PLAN PROVISIONS

### I. Reciprocal Benefit

**Eligibility:** A Member is eligible for a Reciprocal Benefit upon termination of employment after earning five years of Credited Service and entry, within a specified period of time, into another retirement system recognized as a reciprocal system by the Plan. For Tier 3 Members, the vesting requirement is 10 years of Credited Service.

The Member must leave his or her Member Contributions with interest on deposit with the Plan. This requirement does not apply to Tier 3 Members since they participate in a non-contributory Plan.

**Benefit Amount:** The Reciprocal Benefit is computed in the same manner as the Service Retirement Benefit, but it is based on Credited Service on the date of termination and Final Compensation on the date of retirement; Final Compensation is based on the highest of the Compensation earned under this Plan or the reciprocal plan.

**Form of Benefit:** The Reciprocal Benefit will be paid monthly beginning at retirement and for the life of the Member; in the event of the Member's death, 60% of the benefit will continue for the life of the Member's spouse or to the age of majority of dependent minor children if there is no spouse. For Tier 3 Members, the benefit payable to beneficiary is limited to 50%. In the event there is no surviving spouse or minor children, any unpaid remainder of the Member's accumulated contributions will be paid to the Member's designated beneficiary.

Actuarially equivalent optional benefit forms and COLA adjustments (as described for the Service Retirement benefit) are also available.

A lump sum benefit of \$5,000 will be payable upon the death of the member. No death benefit is payable for Tier 3 retired members.

### J. Optional Benefit Forms

Prior to retirement, a member may elect to convert his retirement allowance into a benefit of equivalent Actuarial Value in accordance with one of the optional forms described below.

1. A reduced retirement allowance payable during his life with the provision that on his death the excess, if any, of his accumulated deductions at the time of retirement over the annuity payments made to him will be paid to his designated beneficiary or estate; or
2. A reduced retirement allowance payable during his life with the provision that after his death the reduced allowance will be continued for life to the beneficiary designated by him at the time of his retirement; or

## **APPENDIX C – SUMMARY OF PLAN PROVISIONS**

3. A reduced retirement allowance payable during his life with the provision that after his death an allowance of one-half of his reduced allowance will be continued for life to the beneficiary designated by him at the time of his retirement.

In addition, a member participating in Social Security may elect to receive an increased monthly allowance before age 62 (earliest possible receipt of Social Security benefits) and then take a reduced monthly allowance at age 62 and after. This option will not affect any monthly payments payable to a beneficiary. This option is not available to those receiving a disability benefit.

### **K. Member Contributions**

Other than Tiers 3 and 6, all Members contribute a percentage of Compensation to the Plan through payroll deduction. The percentage contributed depends on the Member's nearest age upon joining the Plan. Members do not contribute after earning 30 years of Credited Service.

Tier 6 (PEPRA) Members must contribute half of the Normal Cost of the Plan. Contributions for these members will be based on the Normal Cost associated with their benefits, including COLA; General and Safety members will pay different rates. Members will continue to contribute after earnings 30 years of service.

City of Ceres members in Tiers 1 and 4 pay the Tier 2 and 5 rates ("Full" rates), rather than the rates for their respective Tiers ("Half" rates).

Interest is credited semiannually to each Member's accumulated contributions. The crediting rate is set by the Board; the current annual rate is 4.25%.

The employee contribution rates are shown in the Appendix E.

### **L. Changes in Plan Provisions**

No change.

## **APPENDIX D – GLOSSARY**

### **1. Actuarial Assumptions**

Assumptions as to the occurrence of future events affecting pension costs such as mortality, withdrawal, disability, retirement, changes in compensation, and rates of investment return.

### **2. Actuarial Cost Method**

A procedure for determining the actuarial present value of pension plan benefits and expenses and for developing an allocation of such value to each year of service, usually in the form of a normal cost and an Actuarial Liability.

### **3. Actuarial Gain (Loss)**

The difference between actual experience and that expected is based upon a set of actuarial assumptions during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

### **4. Actuarial Liability**

The portion of the actuarial present value of projected benefits that will not be paid by future normal costs. It represents the value of the past normal costs with interest to the valuation date.

### **5. Actuarial Present Value (Present Value)**

The value as of a given date of a future amount or series of payments. The actuarial present value discounts the payments to the given date at the assumed investment return and includes the probability of the payment being made.

### **6. Actuarial Valuation**

The determination, as of a specified date, of the normal cost, Actuarial Liability, Actuarial Value of Assets, and related actuarial present values for a pension plan.

### **7. 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. The purpose of an Actuarial Value of Assets is to smooth out fluctuations in market values.

## **APPENDIX D – GLOSSARY**

### **8. Actuarially Equivalent**

Of equal actuarial present value, determined as of a given date, with each value based on the same set of actuarial assumptions.

### **9. Amortization Payment**

The portion of the pension plan contribution, which is designed to pay interest and principal on the Unfunded Actuarial Liability in order to pay for that liability in a given number of years.

### **10. Entry Age Normal 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 of the individual between entry age and assumed exit ages.

### **11. Funded Ratio**

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

### **12. Normal Cost**

That portion of the actuarial present value of pension plan benefits and expenses that is allocated to a valuation year by the actuarial cost method.

### **13. Projected Benefits**

Those pension plan benefit amounts which are expected to be paid in the future under a particular set of actuarial assumptions, taking into account such items as increases in future compensation and service credits.

### **14. Unfunded Actuarial Liability**

The excess of the Actuarial Liability over the Actuarial Value of Assets. The Unfunded Actuarial Liability is not appropriate for assessing the sufficiency of plan assets to cover the estimated cost of settling StanCERA's benefit obligation in the event of a plan termination or other similar action. However, it is an appropriate measure for assessing the need for or the amount of future contributions.

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**APPENDIX E – MEMBER CONTRIBUTION RATES**

Employee Normal contribution rates vary by benefit formula as defined in the CERL and described in the table below, with the exception that City of Ceres members in Tiers 1 and 4 pay the Tier 2 and 5 rates (“Full” rates), rather than the rates for their respective Tiers (“Half” rates).

Plan/Tier	Code Section	Member Contribution Provides Average Annuity
General Tier 1	31621.5	1/200th of Final Average Salary (FAS) at age 60
General Tier 2	31621	1/120th of Final Average Salary (FAS) at age 60
General Tier 3	NA	NA
General Tier 4	31621.3	1/240th of Final Average Salary (FAS) at age 55
General Tier 5	31621.9	1/120th of Final Average Salary (FAS) at age 55
Safety Tier 2	31639.25	1/100th of Final Average Salary (FAS) at age 50
Safety Tier 4	31639.5	1/200th of Final Average Salary (FAS) at age 50
Safety Tier 5	31639.25	1/100th of Final Average Salary (FAS) at age 50

Employee COLA contribution rates are determined based on 50% of the normal cost associated with the expected COLA benefits, including all forms of decrement and the value of any assumed joint and survivor benefits, determined for each individual entry age. Similar to the benefit formulas, for those members integrated with Social Security (other than Tiers 3 and 6), contributions based on the first \$350 of monthly compensation are reduced by one-third.

The rates were changed following the Experience Study covering the period June 30, 2018 through June 30, 2021. The current employee contribution rates are shown in the following tables and were determined based on the assumptions used in the current actuarial valuation. These assumptions include an interest rate of 6.75% per annum, an average salary increase of 2.75% per year (plus longevity and promotion increases), and the CalPERS mortality tables with adjustment as specified in the Appendix B and projected using 80% of Scale MP-2020 from 2017 to 2042 for General members and to 2043 for Safety members. The projection periods are based upon the duration of liabilities for the respective groups as of June 30, 2021. The rates are blended using a male/female weighting of 25% male / 75% female for General members, and 80% male / 20% female for Safety members.

Basic and COLA rates were determined based on an assumption that members would cease making contributions after 30 years of service. Basic and COLA rates include the value of the accumulated vacation time load, except that the load is not applied when calculating the Basic rates for members with less than three years of service.

Employee contribution rates for Tier 6 (PEPRA) members are determined based on half the Normal Cost (including COLA) for the PEPRA members, computed separately for General and Safety members, and for County and Ceres / Other District members. Due to the passage of SB13, contribution rates for PEPRA members are not rounded, and are recomputed each year.

The member contribution rates shown in this appendix apply only to pensionable compensation (up to the PEPRA Compensation Limits for PEPRA members).

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**APPENDIX E – MEMBER CONTRIBUTION RATES**

Entry Age	General Tier 1							
	Basic First \$350	Basic Over \$350	COL First \$350	COL Over \$350	Total First \$350	Total Over \$350	Prior Total First \$350	Prior Total Over \$350
16	2.39%	3.59%	1.00%	1.50%	3.39%	5.09%	3.46%	5.19%
17	2.39%	3.59%	1.00%	1.50%	3.39%	5.09%	3.46%	5.19%
18	2.39%	3.59%	1.00%	1.50%	3.39%	5.09%	3.46%	5.19%
19	2.39%	3.59%	1.00%	1.50%	3.39%	5.09%	3.46%	5.19%
20	2.39%	3.59%	1.00%	1.50%	3.39%	5.09%	3.46%	5.19%
21	2.41%	3.62%	1.03%	1.54%	3.44%	5.16%	3.51%	5.26%
22	2.43%	3.65%	1.05%	1.58%	3.48%	5.23%	3.55%	5.33%
23	2.45%	3.67%	1.09%	1.63%	3.53%	5.30%	3.59%	5.39%
24	2.46%	3.69%	1.11%	1.67%	3.57%	5.36%	3.64%	5.46%
25	2.47%	3.71%	1.15%	1.72%	3.62%	5.43%	3.68%	5.52%
26	2.48%	3.73%	1.18%	1.77%	3.66%	5.50%	3.71%	5.57%
27	2.49%	3.74%	1.21%	1.82%	3.71%	5.56%	3.76%	5.63%
28	2.50%	3.75%	1.24%	1.86%	3.74%	5.61%	3.79%	5.68%
29	2.50%	3.75%	1.27%	1.91%	3.78%	5.66%	3.82%	5.73%
30	2.50%	3.76%	1.31%	1.96%	3.81%	5.72%	3.85%	5.77%
31	2.56%	3.83%	1.33%	2.00%	3.89%	5.83%	3.92%	5.88%
32	2.61%	3.91%	1.36%	2.04%	3.97%	5.95%	4.01%	6.01%
33	2.66%	3.99%	1.39%	2.08%	4.05%	6.07%	4.08%	6.13%
34	2.72%	4.07%	1.41%	2.12%	4.13%	6.19%	4.17%	6.25%
35	2.77%	4.16%	1.45%	2.17%	4.22%	6.33%	4.26%	6.39%
36	2.83%	4.24%	1.49%	2.24%	4.32%	6.48%	4.36%	6.54%
37	2.89%	4.33%	1.54%	2.31%	4.43%	6.64%	4.46%	6.69%
38	2.95%	4.42%	1.58%	2.37%	4.53%	6.79%	4.56%	6.84%
39	3.01%	4.52%	1.63%	2.44%	4.64%	6.96%	4.66%	7.00%
40	3.07%	4.61%	1.67%	2.51%	4.75%	7.12%	4.77%	7.15%
41	3.14%	4.71%	1.70%	2.55%	4.84%	7.26%	4.86%	7.29%
42	3.21%	4.81%	1.73%	2.60%	4.94%	7.41%	4.96%	7.44%
43	3.28%	4.92%	1.76%	2.64%	5.04%	7.56%	5.06%	7.59%
44	3.35%	5.03%	1.79%	2.68%	5.14%	7.71%	5.16%	7.73%
45	3.43%	5.14%	1.81%	2.72%	5.24%	7.86%	5.26%	7.88%
46	3.51%	5.26%	1.83%	2.75%	5.34%	8.01%	5.37%	8.05%
47	3.59%	5.38%	1.85%	2.78%	5.44%	8.16%	5.47%	8.20%
48	3.68%	5.52%	1.88%	2.82%	5.56%	8.34%	5.58%	8.37%
49	3.77%	5.65%	1.90%	2.85%	5.67%	8.50%	5.68%	8.51%
50	3.85%	5.78%	1.91%	2.86%	5.76%	8.64%	5.77%	8.66%
51	3.94%	5.90%	1.91%	2.86%	5.84%	8.76%	5.85%	8.78%
52	4.02%	6.03%	1.90%	2.85%	5.92%	8.88%	5.91%	8.86%
53	4.08%	6.12%	1.87%	2.80%	5.95%	8.92%	5.91%	8.86%
54	4.11%	6.16%	1.84%	2.76%	5.95%	8.92%	5.90%	8.85%
55	4.09%	6.13%	1.81%	2.71%	5.89%	8.84%	5.84%	8.76%
56	4.06%	6.10%	1.71%	2.57%	5.78%	8.67%	5.74%	8.61%
57	4.04%	6.07%	1.61%	2.42%	5.66%	8.49%	5.59%	8.39%
58	3.91%	5.86%	1.50%	2.25%	5.41%	8.11%	5.49%	8.24%
59+	3.88%	5.83%	1.44%	2.16%	5.32%	7.99%	5.45%	8.17%

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**APPENDIX E – MEMBER CONTRIBUTION RATES**

Entry Age	General Tier 2							
	Basic First \$350	Basic Over \$350	COL First \$350	COL Over \$350	Total First \$350	Total Over \$350	Prior Total First \$350	Prior Total Over \$350
16	3.79%	5.69%	0.81%	1.22%	4.60%	6.91%	4.63%	6.95%
17	3.79%	5.69%	0.81%	1.22%	4.60%	6.91%	4.63%	6.95%
18	3.79%	5.69%	0.81%	1.22%	4.60%	6.91%	4.63%	6.95%
19	3.79%	5.69%	0.81%	1.22%	4.60%	6.91%	4.63%	6.95%
20	3.79%	5.69%	0.81%	1.22%	4.60%	6.91%	4.63%	6.95%
21	3.82%	5.73%	0.83%	1.25%	4.65%	6.98%	4.68%	7.02%
22	3.85%	5.77%	0.85%	1.28%	4.70%	7.05%	4.73%	7.09%
23	3.87%	5.81%	0.87%	1.31%	4.75%	7.12%	4.77%	7.16%
24	3.90%	5.85%	0.89%	1.34%	4.79%	7.19%	4.81%	7.22%
25	3.92%	5.88%	0.92%	1.38%	4.84%	7.26%	4.85%	7.28%
26	3.93%	5.90%	0.95%	1.42%	4.88%	7.32%	4.89%	7.34%
27	3.95%	5.92%	0.97%	1.46%	4.92%	7.38%	4.93%	7.39%
28	3.96%	5.93%	0.99%	1.49%	4.95%	7.42%	4.96%	7.44%
29	3.96%	5.94%	1.02%	1.53%	4.98%	7.47%	4.99%	7.48%
30	3.96%	5.95%	1.05%	1.57%	5.01%	7.52%	5.02%	7.52%
31	4.05%	6.07%	1.07%	1.61%	5.12%	7.68%	5.12%	7.68%
32	4.13%	6.19%	1.10%	1.65%	5.23%	7.84%	5.23%	7.84%
33	4.21%	6.32%	1.12%	1.68%	5.33%	8.00%	5.34%	8.01%
34	4.30%	6.45%	1.15%	1.72%	5.45%	8.17%	5.45%	8.18%
35	4.39%	6.58%	1.17%	1.76%	5.56%	8.34%	5.57%	8.35%
36	4.48%	6.72%	1.21%	1.82%	5.69%	8.54%	5.69%	8.53%
37	4.57%	6.86%	1.25%	1.87%	5.82%	8.73%	5.82%	8.73%
38	4.67%	7.00%	1.29%	1.93%	5.96%	8.93%	5.94%	8.92%
39	4.77%	7.15%	1.33%	1.99%	6.09%	9.14%	6.07%	9.11%
40	4.87%	7.30%	1.36%	2.04%	6.23%	9.34%	6.21%	9.32%
41	4.97%	7.46%	1.39%	2.08%	6.36%	9.54%	6.33%	9.50%
42	5.08%	7.62%	1.41%	2.11%	6.48%	9.73%	6.46%	9.69%
43	5.19%	7.78%	1.43%	2.14%	6.62%	9.92%	6.59%	9.89%
44	5.30%	7.96%	1.45%	2.17%	6.75%	10.13%	6.73%	10.09%
45	5.42%	8.14%	1.47%	2.20%	6.89%	10.34%	6.87%	10.30%
46	5.55%	8.33%	1.49%	2.24%	7.04%	10.57%	7.01%	10.52%
47	5.68%	8.52%	1.51%	2.27%	7.19%	10.79%	7.16%	10.73%
48	5.81%	8.71%	1.53%	2.30%	7.34%	11.01%	7.31%	10.96%
49	5.93%	8.90%	1.55%	2.33%	7.48%	11.23%	7.45%	11.17%
50	6.05%	9.08%	1.57%	2.35%	7.62%	11.43%	7.58%	11.36%
51	6.15%	9.23%	1.58%	2.37%	7.73%	11.60%	7.69%	11.53%
52	6.23%	9.34%	1.59%	2.38%	7.81%	11.72%	7.77%	11.65%
53	6.25%	9.37%	1.59%	2.38%	7.83%	11.75%	7.78%	11.67%
54	6.23%	9.35%	1.57%	2.36%	7.81%	11.71%	7.75%	11.63%
55	6.20%	9.30%	1.55%	2.33%	7.76%	11.63%	7.69%	11.53%
56	6.17%	9.25%	1.48%	2.22%	7.65%	11.47%	7.60%	11.39%
57	6.14%	9.21%	1.40%	2.10%	7.54%	11.31%	7.46%	11.19%
58	6.27%	9.41%	1.31%	1.96%	7.58%	11.37%	7.60%	11.40%
59+	6.47%	9.71%	1.25%	1.88%	7.73%	11.59%	7.78%	11.67%

STANISLAUS COUNTY EMPLOYEES' RETIREMENT ASSOCIATION  
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2023

**APPENDIX E – MEMBER CONTRIBUTION RATES**

Entry Age	General Tier 4							
	Basic First \$350	Basic Over \$350	COL First \$350	COL Over \$350	Total First \$350	Total Over \$350	Prior Total First \$350	Prior Total Over \$350
16	2.19%	3.28%	1.06%	1.59%	3.25%	4.87%	3.32%	4.98%
17	2.19%	3.28%	1.06%	1.59%	3.25%	4.87%	3.32%	4.98%
18	2.19%	3.28%	1.06%	1.59%	3.25%	4.87%	3.32%	4.98%
19	2.19%	3.28%	1.06%	1.59%	3.25%	4.87%	3.32%	4.98%
20	2.19%	3.28%	1.06%	1.59%	3.25%	4.87%	3.32%	4.98%
21	2.20%	3.30%	1.09%	1.63%	3.28%	4.93%	3.36%	5.05%
22	2.21%	3.31%	1.11%	1.67%	3.32%	4.98%	3.40%	5.10%
23	2.21%	3.32%	1.15%	1.72%	3.36%	5.04%	3.43%	5.14%
24	2.21%	3.32%	1.17%	1.76%	3.39%	5.08%	3.46%	5.19%
25	2.21%	3.32%	1.21%	1.81%	3.42%	5.13%	3.49%	5.24%
26	2.26%	3.39%	1.24%	1.86%	3.50%	5.25%	3.56%	5.34%
27	2.31%	3.46%	1.27%	1.91%	3.58%	5.37%	3.63%	5.44%
28	2.35%	3.53%	1.30%	1.95%	3.65%	5.48%	3.70%	5.55%
29	2.40%	3.60%	1.33%	1.99%	3.73%	5.59%	3.77%	5.66%
30	2.45%	3.68%	1.36%	2.04%	3.81%	5.72%	3.85%	5.77%
31	2.50%	3.75%	1.39%	2.09%	3.90%	5.84%	3.92%	5.88%
32	2.56%	3.83%	1.41%	2.12%	3.97%	5.95%	4.00%	6.00%
33	2.61%	3.91%	1.44%	2.16%	4.05%	6.07%	4.08%	6.12%
34	2.66%	3.99%	1.47%	2.21%	4.14%	6.20%	4.17%	6.26%
35	2.72%	4.08%	1.50%	2.25%	4.22%	6.33%	4.27%	6.40%
36	2.78%	4.17%	1.55%	2.33%	4.33%	6.50%	4.36%	6.54%
37	2.84%	4.26%	1.60%	2.40%	4.44%	6.66%	4.46%	6.70%
38	2.90%	4.35%	1.65%	2.47%	4.55%	6.82%	4.56%	6.84%
39	2.96%	4.45%	1.69%	2.54%	4.66%	6.99%	4.67%	7.01%
40	3.03%	4.55%	1.73%	2.60%	4.76%	7.15%	4.78%	7.17%
41	3.10%	4.65%	1.76%	2.64%	4.86%	7.29%	4.88%	7.31%
42	3.18%	4.76%	1.79%	2.68%	4.96%	7.44%	4.97%	7.46%
43	3.25%	4.88%	1.81%	2.72%	5.07%	7.60%	5.08%	7.62%
44	3.33%	5.00%	1.83%	2.75%	5.17%	7.75%	5.17%	7.76%
45	3.41%	5.11%	1.86%	2.79%	5.27%	7.90%	5.27%	7.91%
46	3.48%	5.22%	1.87%	2.81%	5.36%	8.03%	5.36%	8.05%
47	3.56%	5.34%	1.89%	2.84%	5.45%	8.18%	5.46%	8.18%
48	3.61%	5.41%	1.91%	2.86%	5.51%	8.27%	5.52%	8.28%
49	3.63%	5.45%	1.92%	2.88%	5.55%	8.33%	5.55%	8.32%
50	3.61%	5.42%	1.92%	2.88%	5.53%	8.30%	5.53%	8.29%
51	3.60%	5.39%	1.91%	2.87%	5.51%	8.26%	5.51%	8.27%
52	3.58%	5.37%	1.91%	2.86%	5.48%	8.23%	5.46%	8.19%
53	3.45%	5.18%	1.87%	2.81%	5.33%	7.99%	5.36%	8.03%
54+	3.44%	5.15%	1.84%	2.76%	5.28%	7.91%	5.30%	7.96%

STANISLAUS COUNTY EMPLOYEES' RETIREMENT ASSOCIATION  
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2023

**APPENDIX E – MEMBER CONTRIBUTION RATES**

General Tier 5								
Entry	Basic	Basic	COL	COL	Total	Total	Prior Total	Prior Total
Age	First \$350	Over \$350	First \$350	Over \$350	First \$350	Over \$350	First \$350	Over \$350
16	4.38%	6.57%	1.06%	1.59%	5.44%	8.16%	5.41%	8.11%
17	4.38%	6.57%	1.06%	1.59%	5.44%	8.16%	5.41%	8.11%
18	4.38%	6.57%	1.06%	1.59%	5.44%	8.16%	5.41%	8.11%
19	4.38%	6.57%	1.06%	1.59%	5.44%	8.16%	5.41%	8.11%
20	4.38%	6.57%	1.06%	1.59%	5.44%	8.16%	5.41%	8.11%
21	4.40%	6.59%	1.09%	1.63%	5.48%	8.22%	5.46%	8.19%
22	4.41%	6.62%	1.11%	1.67%	5.52%	8.29%	5.50%	8.25%
23	4.42%	6.63%	1.15%	1.72%	5.57%	8.35%	5.54%	8.31%
24	4.43%	6.64%	1.17%	1.76%	5.60%	8.40%	5.57%	8.35%
25	4.43%	6.64%	1.21%	1.81%	5.64%	8.45%	5.60%	8.41%
26	4.52%	6.78%	1.24%	1.86%	5.76%	8.64%	5.72%	8.58%
27	4.61%	6.92%	1.27%	1.91%	5.89%	8.83%	5.83%	8.74%
28	4.71%	7.06%	1.30%	1.95%	6.01%	9.01%	5.94%	8.92%
29	4.81%	7.21%	1.33%	1.99%	6.13%	9.20%	6.06%	9.09%
30	4.90%	7.36%	1.36%	2.04%	6.26%	9.40%	6.18%	9.28%
31	5.01%	7.51%	1.39%	2.09%	6.40%	9.60%	6.31%	9.46%
32	5.11%	7.67%	1.41%	2.12%	6.52%	9.79%	6.44%	9.66%
33	5.22%	7.83%	1.44%	2.16%	6.66%	9.99%	6.57%	9.85%
34	5.33%	7.99%	1.47%	2.21%	6.80%	10.20%	6.71%	10.07%
35	5.44%	8.16%	1.50%	2.25%	6.94%	10.41%	6.86%	10.29%
36	5.55%	8.33%	1.55%	2.33%	7.11%	10.66%	7.01%	10.51%
37	5.67%	8.51%	1.60%	2.40%	7.27%	10.91%	7.17%	10.75%
38	5.80%	8.70%	1.65%	2.47%	7.44%	11.17%	7.33%	10.99%
39	5.93%	8.89%	1.69%	2.54%	7.62%	11.43%	7.50%	11.24%
40	6.06%	9.09%	1.73%	2.60%	7.79%	11.69%	7.67%	11.50%
41	6.20%	9.30%	1.76%	2.64%	7.96%	11.94%	7.83%	11.75%
42	6.35%	9.53%	1.79%	2.68%	8.14%	12.21%	8.00%	12.00%
43	6.51%	9.76%	1.81%	2.72%	8.32%	12.48%	8.18%	12.27%
44	6.66%	10.00%	1.83%	2.75%	8.50%	12.75%	8.35%	12.52%
45	6.82%	10.22%	1.86%	2.79%	8.68%	13.01%	8.52%	12.78%
46	6.96%	10.45%	1.87%	2.81%	8.84%	13.26%	8.68%	13.02%
47	7.11%	10.67%	1.89%	2.84%	9.01%	13.51%	8.84%	13.27%
48	7.22%	10.82%	1.91%	2.86%	9.12%	13.68%	8.95%	13.43%
49	7.27%	10.90%	1.92%	2.88%	9.19%	13.78%	9.01%	13.51%
50	7.23%	10.84%	1.92%	2.88%	9.15%	13.72%	8.97%	13.46%
51	7.19%	10.79%	1.91%	2.87%	9.10%	13.66%	8.94%	13.40%
52	7.15%	10.73%	1.91%	2.86%	9.06%	13.59%	8.87%	13.30%
53	6.91%	10.36%	1.87%	2.81%	8.78%	13.17%	8.71%	13.07%
54+	6.87%	10.31%	1.84%	2.76%	8.71%	13.07%	8.64%	12.96%

STANISLAUS COUNTY EMPLOYEES' RETIREMENT ASSOCIATION  
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2023

**APPENDIX E – MEMBER CONTRIBUTION RATES**

Entry Age	Safety Tier 2							
	Basic First \$350	Basic Over \$350	COL First \$350	COL Over \$350	Total First \$350	Total Over \$350	Prior Total First \$350	Prior Total Over \$350
18	5.55%	8.32%	2.05%	3.08%	7.60%	11.40%	6.65%	9.98%
19	5.55%	8.32%	2.05%	3.08%	7.60%	11.40%	6.65%	9.98%
20	5.55%	8.32%	2.05%	3.08%	7.60%	11.40%	6.65%	9.98%
21	5.64%	8.46%	2.12%	3.18%	7.76%	11.64%	6.83%	10.24%
22	5.74%	8.61%	2.15%	3.23%	7.89%	11.84%	6.98%	10.47%
23	5.83%	8.75%	2.19%	3.29%	8.03%	12.04%	7.14%	10.70%
24	5.93%	8.90%	2.23%	3.34%	8.16%	12.24%	7.30%	10.94%
25	6.03%	9.05%	2.25%	3.38%	8.29%	12.43%	7.46%	11.19%
26	6.14%	9.21%	2.28%	3.42%	8.42%	12.63%	7.62%	11.42%
27	6.24%	9.36%	2.30%	3.45%	8.54%	12.81%	7.78%	11.67%
28	6.35%	9.52%	2.32%	3.48%	8.67%	13.00%	7.96%	11.94%
29	6.46%	9.68%	2.33%	3.50%	8.79%	13.18%	8.13%	12.20%
30	6.57%	9.85%	2.37%	3.56%	8.94%	13.41%	8.31%	12.46%
31	6.68%	10.02%	2.41%	3.62%	9.09%	13.64%	8.50%	12.75%
32	6.80%	10.20%	2.46%	3.69%	9.26%	13.89%	8.69%	13.03%
33	6.92%	10.38%	2.50%	3.75%	9.42%	14.13%	8.88%	13.32%
34	7.04%	10.56%	2.53%	3.80%	9.58%	14.36%	9.07%	13.61%
35	7.17%	10.75%	2.55%	3.82%	9.72%	14.57%	9.27%	13.91%
36	7.30%	10.95%	2.56%	3.84%	9.86%	14.79%	9.46%	14.19%
37	7.44%	11.16%	2.56%	3.84%	10.00%	15.00%	9.64%	14.47%
38	7.58%	11.37%	2.55%	3.83%	10.13%	15.20%	9.84%	14.76%
39	7.72%	11.58%	2.55%	3.83%	10.27%	15.41%	10.03%	15.04%
40	7.85%	11.78%	2.55%	3.83%	10.40%	15.61%	10.21%	15.32%
41	7.98%	11.98%	2.53%	3.79%	10.51%	15.77%	10.34%	15.52%
42	8.12%	12.17%	2.51%	3.77%	10.63%	15.94%	10.46%	15.69%
43	8.19%	12.29%	2.50%	3.75%	10.69%	16.04%	10.55%	15.83%
44	8.21%	12.32%	2.49%	3.74%	10.71%	16.06%	10.61%	15.91%
45	8.19%	12.28%	2.49%	3.74%	10.68%	16.02%	10.61%	15.91%
46	8.15%	12.22%	2.51%	3.77%	10.66%	15.99%	10.58%	15.86%
47	8.11%	12.16%	2.53%	3.79%	10.63%	15.95%	10.49%	15.73%
48	8.28%	12.42%	2.55%	3.82%	10.83%	16.24%	10.70%	16.06%
49+	8.55%	12.83%	2.56%	3.84%	11.11%	16.67%	10.97%	16.45%

STANISLAUS COUNTY EMPLOYEES' RETIREMENT ASSOCIATION  
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2023

**APPENDIX E – MEMBER CONTRIBUTION RATES**

Entry Age	Safety Tier 5							
	Basic First \$350	Basic Over \$350	COL First \$350	COL Over \$350	Total First \$350	Total Over \$350	Prior Total First \$350	Prior Total Over \$350
18	5.87%	8.80%	2.97%	4.46%	8.84%	13.26%	7.54%	11.31%
19	5.87%	8.80%	2.97%	4.46%	8.84%	13.26%	7.54%	11.31%
20	5.87%	8.80%	2.97%	4.46%	8.84%	13.26%	7.54%	11.31%
21	5.97%	8.95%	3.07%	4.60%	9.04%	13.55%	7.74%	11.61%
22	6.07%	9.10%	3.11%	4.67%	9.18%	13.77%	7.91%	11.87%
23	6.17%	9.26%	3.16%	4.74%	9.33%	14.00%	8.08%	12.12%
24	6.28%	9.42%	3.20%	4.80%	9.48%	14.22%	8.25%	12.38%
25	6.38%	9.58%	3.23%	4.84%	9.61%	14.42%	8.43%	12.64%
26	6.49%	9.74%	3.25%	4.88%	9.75%	14.62%	8.60%	12.91%
27	6.60%	9.90%	3.27%	4.91%	9.88%	14.81%	8.78%	13.17%
28	6.71%	10.07%	3.29%	4.93%	10.00%	15.00%	8.97%	13.45%
29	6.83%	10.24%	3.29%	4.93%	10.12%	15.17%	9.14%	13.71%
30	6.95%	10.42%	3.29%	4.93%	10.23%	15.35%	9.29%	13.94%
31	7.07%	10.60%	3.29%	4.94%	10.36%	15.54%	9.44%	14.15%
32	7.19%	10.79%	3.31%	4.96%	10.50%	15.75%	9.62%	14.44%
33	7.32%	10.98%	3.31%	4.97%	10.63%	15.95%	9.82%	14.73%
34	7.45%	11.17%	3.33%	4.99%	10.78%	16.16%	10.02%	15.02%
35	7.58%	11.38%	3.34%	5.01%	10.92%	16.39%	10.22%	15.34%
36	7.73%	11.59%	3.25%	4.87%	10.97%	16.46%	10.42%	15.63%
37	7.87%	11.81%	3.24%	4.86%	11.11%	16.67%	10.63%	15.95%
38	8.03%	12.04%	3.23%	4.84%	11.25%	16.88%	10.86%	16.29%
39	8.19%	12.29%	3.21%	4.81%	11.40%	17.10%	11.08%	16.62%
40	8.35%	12.52%	3.19%	4.78%	11.53%	17.30%	11.30%	16.95%
41	8.49%	12.74%	3.14%	4.71%	11.63%	17.45%	11.41%	17.11%
42	8.65%	12.98%	3.10%	4.65%	11.75%	17.63%	11.51%	17.27%
43	8.81%	13.22%	3.07%	4.61%	11.89%	17.83%	11.62%	17.43%
44	8.98%	13.47%	3.05%	4.57%	12.03%	18.04%	11.74%	17.61%
45	8.96%	13.44%	3.03%	4.54%	11.99%	17.98%	11.80%	17.71%
46	8.95%	13.42%	3.03%	4.55%	11.98%	17.97%	11.83%	17.75%
47	8.90%	13.35%	3.04%	4.56%	11.94%	17.91%	11.81%	17.72%
48	8.60%	12.90%	3.05%	4.57%	11.64%	17.47%	11.60%	17.40%
49+	8.55%	12.83%	3.05%	4.58%	11.60%	17.41%	11.48%	17.21%

STANISLAUS COUNTY EMPLOYEES' RETIREMENT ASSOCIATION  
ACTUARIAL VALUATION REPORT AS OF JUNE 30, 2023

**APPENDIX E – MEMBER CONTRIBUTION RATES**

	PEPRA Rates			
	General		Safety	
	County and Former County	Ceres and Other Districts	County and Former County	Ceres and Other Districts
Current	8.53%	9.31%	13.30%	14.73%
Prior	8.45%	9.14%	13.15%	14.77%
Assumptions:				
Interest:	6.75%			
Salary:	2021 Valuation Scale (Service based, includes wage inflation at 2.75%)			
Mortality:	Because the PEPRA contributions rates are based on 50% of the actual Normal Cost, the mortality rates are the same as those used in the Actuarial Valuation (CalPERS mortality tables with adjustments based on StanCERA experience projected generationally from 2017 using 80% of Scale MP-2020)			



*Classic Values, Innovative Advice*