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February 24, 2022

Mr. Eric Stern
Chief Executive Officer
Sacramento County Employees' Retirement System
980 9th Street, Suite 1900
Sacramento, CA 95814-2738

**Re: Sacramento County Employees' Retirement System (SCERS)
Seven-Year Projection of Employer Contribution Rates**

Dear Eric:

As requested, we have prepared a seven-year projection of estimated employer contribution rates for SCERS. This projection is generally derived from the June 30, 2021 actuarial valuation report. Other key assumptions and methods are detailed below. **It is important to understand that these results are entirely dependent on those assumptions. Actual results as determined in future actuarial valuations will differ from these results. In particular, actual investment returns, actual salary levels for actives and actual cost-of-living-adjustments (especially for Tier 1 retirees and beneficiaries¹) different than assumed can have a significant impact on future contribution rates.**

Results

In the next several years, assuming the above highlighted conditions were to come true, SCERS is likely to become fully funded, with 100% funded ratio and no Unfunded Actuarial Accrued Liability (UAAL). At that time the employer UAAL contribution rates would be reduced to 0% of payroll. However, the timing of when that is expected to take place varies between the Miscellaneous and Safety cost groups based on the current level of funding and the expected annual UAAL contributions for each cost group as of the most recent valuation. The Miscellaneous cost group is projected to become fully funded at the time of the June 30, 2027 valuation, while the Safety cost group is projected to become fully funded after the period of this projection (i.e., beyond the June 30, 2028 valuation).

The estimated contribution rate changes shown on page three apply to the average employer contribution rate for all of SCERS' employers in the aggregate. For purposes of this projection, the rate changes that are reflected are due to:

¹ All Miscellaneous and Safety Tier 1 retirees and beneficiaries are entitled to a maximum cost-of-living-adjustment of up to 4% per year.

- 1) recognition of deferred investment gains and losses under the actuarial asset smoothing methodology;²
- 2) losses due to investment income not earned on the excess of the Actuarial Value of Assets (AVA) over the Market Value of Assets (MVA) (and gains when the opposite situation occurs, i.e., when the AVA is less than the MVA);
- 3) contribution gains and losses which occur from the scheduled delay in the implementation of new rates until 12 months after the actuarial valuation date;
- 4) anticipated contribution changes that apply to County Safety associated with the cessation of member contributions after 30 years of service;
- 5) contribution losses which occur from the two-year phase-in of the impact of the new actuarial assumptions on the employer Unfunded Actuarial Accrued Liability (UAAL) contribution rates starting with the June 30, 2020 actuarial valuation; and
- 6) the reduction in UAAL rate due to the Miscellaneous cost group reaching full funding. All outstanding UAAL layers of the cost group would be fully amortized and there would be no UAAL payments in accordance with SCERS' Actuarial Funding Policy. However, certain district employers would still pay the Additional District Rate shown in Section 4, Exhibit 4 of the June 30, 2021 actuarial valuation report.

In preparing the above rate changes for the next several years, we have neither taken into account on an employer-by-employer basis nor on a System-wide basis the gradual savings in Normal Cost that would become available as active members in the legacy tiers are replaced by new members in the CalPEPRA tiers.³ Also, we have not taken into account any impact the recent California Supreme Court ruling in the Alameda Decision (see additional discussion in the Other Considerations section of this letter) may have on the System.

Employer Rate Changes for Total Plan

The following table provides the year-to-year rate changes from each of the above components and the cumulative rate change over the seven-year projection period. Again, due to the scheduled delay in implementing new rates, these rate changes will become effective 12 months following the actuarial valuation date shown in the table. To obtain the estimated average employer contribution rate at each successive valuation date (such as those provided for the "Total Plan" projection in Exhibit B4), these cumulative rate changes should be added to the average employer rate as found in our June 30, 2021 actuarial valuation report.

The rate changes shown on the next page represent the changes in average rate for the total plan.

² As of June 30, 2021, there were \$1,634.6 million in net deferred investment gains.

³ The gradual savings in Normal Cost on a System-wide basis that would become available as active members in the legacy tiers are replaced by new members in the CalPEPRA tiers will be included in the upcoming Risk Report as of June 30, 2021.

Table One

Rate Change Component	Valuation Date (6/30)						
	2022	2023	2024	2025	2026	2027	2028
(1) Investment (Gains)/Losses	-1.56%	-2.11%	-1.65%	-1.41%	-1.35%	-1.63%	0.00%
(2) (Gain)/Loss of Investment Income on Difference Between MVA and AVA	-0.71%	-0.58%	-0.43%	-0.31%	-0.20%	-0.11%	0.00%
(3) 12-Month Rate Delay	0.01%	-0.16%	-0.20%	-0.16%	-0.13%	-0.12%	-0.04%
(4) County Safety Item	-0.01%	0.01%	0.03%	0.02%	0.01%	0.02%	0.02%
(5) Contribution Loss due to Two-year Phase-in	0.05%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
(6) Full Funding of Miscellaneous Cost Group	<u>0.00%</u>	<u>0.00%</u>	<u>0.00%</u>	<u>0.00%</u>	<u>0.00%</u>	<u>-2.19%⁴</u>	<u>0.00%</u>
Incremental Rate Change	-2.22%	-2.84%	-2.25%	-1.86%	-1.67%	-4.03%	-0.02%
Cumulative Rate Change	-2.22%	-5.06%	-7.31%	-9.17%	-10.84%	-14.87%	-14.89%

Employer Rate Changes for Each of the Cost Groups

The rate changes for each of the Miscellaneous and Safety cost groups will vary depending primarily on the size of each group's assets and liabilities relative to its payroll. The ratio of each group's assets to payroll is sometimes referred to as the Asset Volatility Index (AVI). A higher AVI results in more volatile contributions and can result from the following factors:

- More generous benefits
- More retirees
- Older workforce
- Shorter careers
- Higher funded ratio

Exhibit A shows the AVI for SCERS' cost groups along with the "relative AVI" which is the AVI for that specific cost group divided by the average AVI for the total plan. Using these ratios we have estimated the rate change due to these generally investment related gains and losses as provided in items (1), (2) and (3) of Table One on this page for each individual cost group by multiplying the rate changes in Table One for the total plan by the relative AVI for each cost

⁴ This represents the residual between the total UAAL contribution rate determined in the June 30, 2021 valuation for the Miscellaneous cost group minus the reduction in that UAAL contribution rate as a result of items (1) through (3) through the June 30, 2027 valuation as shown in the table above.

group.⁵ The rate change for item (4) of Table One was allocated entirely to County Safety. After accounting for items (1), (2), (3) and (4), we estimated the rate changes related to the two-year phase-in provided in item (5) of Table One by allocating to the cost groups the actual contribution rate impact of the phase-in amount for each of those cost groups. The rate change for item (6) of Table One was calculated for the Miscellaneous cost group only as described earlier. These estimated rate changes for each cost group are shown in Exhibit A. Finally, the cumulative rate impact of the changes for each of the cost groups are provided in Exhibits B1 through B3.

In developing the rates for the Miscellaneous cost group in Exhibits A and B, we have expanded the rates for that cost group to delineate between the different rates paid by the County, Superior Court and other District employers as those rates are presented in the June 30, 2021 valuation. Rio Linda Elverta Recreation and Parks District is not responsible for paying any changes in UAAL contribution rates due to deferred investment gains/losses and assumption changes identified in the June 30, 2017 valuation (i.e., a portion of item (1)). However, they are responsible for paying any actuarial gains/losses from all causes after that valuation (i.e., items (2), (3) and (5)).

Key Assumptions and Methods

The projection is based upon the following assumptions and methods:

- June 30, 2021 non-economic assumptions remain unchanged.
- June 30, 2021 retirement benefit formulas remain unchanged.
- June 30, 2021 1937 Act and CalPEPRA statutes remain unchanged.
- UAAL amortization method remains unchanged (i.e., 20-year layers, level percent of pay).
- June 30, 2021 economic assumptions remain unchanged, including the 6.75% investment earnings assumption.
- We have assumed that returns of 6.75% are actually earned on a market value basis for each of the next seven plan years beginning July 1, 2021.
- Active payroll grows at 3.00% per annum.
- Deferred investment gains and losses are recognized per the asset smoothing schedule shown on page 21 of the June 30, 2021 actuarial valuation report. Deferred investment gains and losses established before July 1, 2017 are funded as a level percentage of the System's total active payroll excluding the active payroll from Rio Linda Elverta Recreation and Parks District. Deferred investment gains and losses established after

⁵ Note that because we have estimated the allocation of the rate changes across the cost groups, the actual rate changes by group may differ from those shown in the exhibit, even if the plan-wide average rate changes are close to those shown above.

June 30, 2017 are funded as a level percentage of the System's total active payroll (including the active payroll from Rio Linda Elverta Recreation and Parks District).

- The amount in the Contingency Reserves remains unchanged (i.e., the Contingency Reserve will not be restored to 3% nor will it be used to offset any future actuarial losses).
- The Asset Volatility Index (AVI) used for these projections is based on the June 30, 2021 actuarial valuation report and is assumed to stay constant during the projection period.
- All other actuarial assumptions used in the June 30, 2021 actuarial valuation report are realized.
- The projections do not reflect any changes in the employer contribution rates that could result due to future changes in the demographics of SCERS' active members or decreases in the employer contribution rates that might be due to new hires going into CalPEPRA tiers as applicable.

Other Considerations

It is important to note that the projection is based on plan assets as of June 30, 2021. Due to the COVID-19 pandemic, market conditions have changed significantly since the onset of the Public Health Emergency. The System's funded status does not reflect short-term fluctuations of the market, but rather is based on the market values on the last day of the plan year. While it is impossible to determine how the pandemic will continue to affect market conditions in future valuations, Segal is available to prepare projections of potential outcomes upon request.

On July 30, 2020, the California Supreme Court issued a decision in the Alameda County Deputy Sheriffs' Assn. et al. v. Alameda County Employees' Retirement Assn. litigation that clarified what should be considered compensation earnable for legacy members and pensionable compensation for CalPEPRA members. It should be noted that neither the June 30, 2021 assets provided by SCERS nor the liabilities we calculated using the membership data provided by SCERS reflect the financial impact of the Supreme Court decision. This is based on our understanding that as of August 2021, when the membership and other information was provided to us for the June 30, 2021 valuation, SCERS had not finalized any adjustments as of June 30, 2021.

Finally, we emphasize that projections, by their nature, are not a guarantee of future results. The modeling projections are intended to serve as illustrations of future financial outcomes that are based on the information available to us at the time the modeling is undertaken and completed, and the agreed-upon assumptions and methodologies described herein. Emerging results may differ significantly if the actual experience proves to be different from these assumptions or if alternative methodologies are used. Actual experience may differ due to such variables as demographic experience, the economy, stock market performance and the regulatory environment.

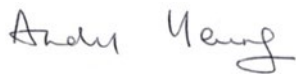
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Unless otherwise noted, all of the above calculations are based on the June 30, 2021 actuarial valuation results including the participant data and actuarial assumptions on which that valuation was based. That valuation and these projections were completed under the supervision of Andy Yeung, ASA, MAAA, Enrolled Actuary.

I am a member of the American Academy of Actuaries and I meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion herein.

Please let us know if you have any questions.

Sincerely,



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

ST/bbf
Enclosures

cc: Margo Allen

Sacramento County Employees' Retirement System
Estimated Employer Contribution Rate Changes by Cost Group (CG)
based on June 30, 2021 Valuation (\$ in '000s)

	Miscellaneous				Safety County	Total Plan
	County	Court	Districts	Total		
Market Value of Assets (MVA)				\$8,132,543	\$4,431,606	\$12,564,149
Projected Payroll for 2021/2022	\$755,391	\$49,887	\$35,897	\$841,175	\$240,786	\$1,081,961
Asset Volatility Index (AVI) = MVA/Payroll	9.67	9.67	9.67	9.67	18.40	11.61
Relative Asset Volatility Index (AVI) = CG AVI / Total Plan AVI	0.83	0.83	0.83	0.83	1.58	1.00
Rate Change due to (1), (2), (3) and (6) as shown in Table One						
Estimated Incremental Rate Change as of 6/30/2022	-1.88%	-1.88%	-1.88%	-1.88%	-3.59%	-2.26%
Estimated Incremental Rate Change as of 6/30/2023	-2.38%	-2.38%	-2.35%	-2.38%	-4.52%	-2.85%
Estimated Incremental Rate Change as of 6/30/2024	-1.90%	-1.90%	-1.87%	-1.90%	-3.62%	-2.28%
Estimated Incremental Rate Change as of 6/30/2025	-1.56%	-1.56%	-1.54%	-1.56%	-2.97%	-1.88%
Estimated Incremental Rate Change as of 6/30/2026	-1.40%	-1.40%	-1.38%	-1.40%	-2.67%	-1.68%
Estimated Incremental Rate Change as of 6/30/2027	-4.35%	-4.31%	-4.62%	-4.36%	-2.94%	-4.05%
Estimated Incremental Rate Change as of 6/30/2028	0.00%	0.00%	0.00%	0.00%	-0.20%	-0.04%
Rate Change due to (4) as shown in Table One						
Estimated Incremental Rate Change as of 6/30/2022	0.00%	0.00%	0.00%	0.00%	-0.03%	-0.01%
Estimated Incremental Rate Change as of 6/30/2023	0.00%	0.00%	0.00%	0.00%	0.02%	0.01%
Estimated Incremental Rate Change as of 6/30/2024	0.00%	0.00%	0.00%	0.00%	0.12%	0.03%
Estimated Incremental Rate Change as of 6/30/2025	0.00%	0.00%	0.00%	0.00%	0.09%	0.02%
Estimated Incremental Rate Change as of 6/30/2026	0.00%	0.00%	0.00%	0.00%	0.08%	0.01%
Estimated Incremental Rate Change as of 6/30/2027	0.00%	0.00%	0.00%	0.00%	0.08%	0.02%
Estimated Incremental Rate Change as of 6/30/2028	0.00%	0.00%	0.00%	0.00%	0.10%	0.02%
Rate Change due to (5) as shown in Table One						
Estimated Incremental Rate Change as of 6/30/2022	0.06%	0.06%	0.06%	0.06%	0.03%	0.05%
Estimated Incremental Rate Change as of 6/30/2023	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Estimated Incremental Rate Change as of 6/30/2024	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Estimated Incremental Rate Change as of 6/30/2025	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Estimated Incremental Rate Change as of 6/30/2026	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Estimated Incremental Rate Change as of 6/30/2027	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Estimated Incremental Rate Change as of 6/30/2028	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Cumulative Rate Change as of 6/30/2022	-1.82%	-1.82%	-1.82%	-1.82%	-3.59%	-2.22%
Cumulative Rate Change as of 6/30/2023	-4.20%	-4.20%	-4.17%	-4.20%	-8.09%	-5.06%
Cumulative Rate Change as of 6/30/2024	-6.10%	-6.10%	-6.04%	-6.10%	-11.59%	-7.31%
Cumulative Rate Change as of 6/30/2025	-7.66%	-7.66%	-7.58%	-7.66%	-14.47%	-9.17%
Cumulative Rate Change as of 6/30/2026	-9.06%	-9.06%	-8.96%	-9.06%	-17.06%	-10.84%
Cumulative Rate Change as of 6/30/2027	-13.41%	-13.37%	-13.58%	-13.42%	-19.92%	-14.87%
Cumulative Rate Change as of 6/30/2028	-13.41%	-13.37%	-13.58%	-13.42%	-20.02%	-14.89%

Sacramento County Employees' Retirement System Projection of Estimated Employer Contribution Rates – County

Valuation Date Fiscal Year	June 30, 2020 2021-22	June 30, 2021 2022-23	June 30, 2022 2023-24	June 30, 2023 2024-25	June 30, 2024 2025-26	June 30, 2025 2026-27	June 30, 2026 2027-28	June 30, 2027 2028-29	June 30, 2028 2029-30
Miscellaneous County									
Tier 1 Members	24.38%	25.37%	23.55%	21.17%	19.27%	17.71%	16.31%	11.96%	11.96%
Tier 2 Members	20.87%	21.70%	19.88%	17.50%	15.60%	14.04%	12.64%	8.29%	8.29%
Tier 3 Members	24.07%	24.83%	23.01%	20.63%	18.73%	17.17%	15.77%	11.42%	11.42%
Tier 4 Members	23.65%	24.48%	22.66%	20.28%	18.38%	16.82%	15.42%	11.07%	11.07%
Tier 5 Members	22.59%	23.43%	21.61%	19.23%	17.33%	15.77%	14.37%	10.02%	10.02%
All Miscellaneous County Categories Combined	23.48%	24.28%	22.46%	20.08%	18.18%	16.62%	15.22%	10.87%	10.87%
Safety County									
Tier 1 Members	66.07%	72.96%	68.08%	65.03%	66.16%	65.24%	62.22%	60.76%	61.59%
Tier 2 Members	57.35%	58.70%	55.12%	50.60%	47.16%	44.42%	42.03%	39.42%	39.73%
Tier 3 Members	56.01%	57.47%	53.91%	49.39%	45.77%	42.80%	40.13%	37.19%	36.99%
Tier 4 Members	51.10%	52.37%	48.81%	44.29%	40.67%	37.70%	35.03%	32.09%	31.89%
All Safety County Categories Combined	55.31%	56.76%	53.17%	48.67%	45.17%	42.29%	39.70%	36.84%	36.74%

Note: These rates are after reflecting the two-year phase-in of the impact of the assumption changes on the employer's UAAL contribution rate.

Sacramento County Employees' Retirement System Projection of Estimated Employer Contribution Rates – Court

Valuation Date Fiscal Year	June 30, 2020 2021-22	June 30, 2021 2022-23	June 30, 2022 2023-24	June 30, 2023 2024-25	June 30, 2024 2025-26	June 30, 2025 2026-27	June 30, 2026 2027-28	June 30, 2027 2028-29	June 30, 2028 2029-30
Miscellaneous Court									
Tier 1 Members	28.20%	29.10%	27.28%	24.90%	23.00%	21.44%	20.04%	15.73%	15.73%
Tier 2 Members	24.95%	25.78%	23.96%	21.58%	19.68%	18.12%	16.72%	12.41%	12.41%
Tier 3 Members	29.21%	29.92%	28.10%	25.72%	23.82%	22.26%	20.86%	16.55%	16.55%
Tier 5 Members	22.55%	23.39%	21.57%	19.19%	17.29%	15.73%	14.33%	10.02%	10.02%
All Miscellaneous Court Categories Combined	27.42%	28.17%	26.35%	23.97%	22.07%	20.51%	19.11%	14.80%	14.80%

Note: These rates are after reflecting the two-year phase-in of the impact of the assumption changes on the employer's UAAL contribution rate.

Sacramento County Employees' Retirement System Projection of Estimated Employer Contribution Rates – Other Miscellaneous Districts

Valuation Date Fiscal Year	June 30, 2020 2021-22	June 30, 2021 2022-23	June 30, 2022 2023-24	June 30, 2023 2024-25	June 30, 2024 2025-26	June 30, 2025 2026-27	June 30, 2026 2027-28	June 30, 2027 2028-29	June 30, 2028 2029-30
Miscellaneous District									
Galt Arno Cemetery District and Fair Oaks Cemetery District									
Tier 3 Members	33.14%	34.43%	32.61%	30.23%	28.33%	26.77%	25.37%	20.69%	20.69%
Tier 5 Members	26.48%	27.90%	26.08%	23.70%	21.80%	20.24%	18.84%	14.16%	14.16%
Orangevale Recreation and Parks Distirct									
Tier 3 Members	32.10%	32.94%	31.12%	28.74%	26.84%	25.28%	23.88%	19.20%	19.20%
Tier 5 Members	30.62%	31.54%	29.72%	27.34%	25.44%	23.88%	22.48%	17.80%	17.80%
Rio Linda Elverta Recreation and Parks District									
Tier 5 Members	11.84%	12.04%	10.06%	10.02%	10.02%	10.02%	10.02%	10.02%	10.02%
All Other Districts									
Tier 3 Members	37.28%	38.07%	36.25%	33.87%	31.97%	30.41%	29.01%	24.33%	24.33%
Tier 5 Members	30.62%	31.54%	29.72%	27.34%	25.44%	23.88%	22.48%	17.80%	17.80%
All Miscellaneous District Categories Combined	33.99%	34.80%	32.98%	30.63%	28.76%	27.22%	25.84%	21.22%	21.22%

Note: These rates are after reflecting the two-year phase-in of the impact of the assumption changes on the employer's UAAL contribution rate.

Sacramento County Employees' Retirement System Projection of Estimated Employer Contribution Rates – Total Plan

Valuation Date Fiscal Year	June 30, 2020 2021-22	June 30, 2021 2022-23	June 30, 2022 2023-24	June 30, 2023 2024-25	June 30, 2024 2025-26	June 30, 2025 2026-27	June 30, 2026 2027-28	June 30, 2027 2028-29	June 30, 2028 2029-30
Total Plan	31.10%	32.04%	29.82%	26.98%	24.73%	22.87%	21.20%	17.17%	17.15%

Note: These rates are after reflecting the two-year phase-in of the impact of the assumption changes on the employer's UAAL contribution rate.