Board of Retirement Regular Meeting

Sacramento County Employees' Retirement System

Agenda Item 15

MEETING DATE: **April 17, 2024**

SUBJECT: **Actuarial Smoothing Options**

SUBMITTED FOR: ____Consent ___ Deliberation and Action _X_ Receive and File

RECOMMENDATION

Receive and file presentation from Segal regarding actuarial smoothing options.

PURPOSE

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

DISCUSSION

SCERS is in receipt of the actuary's (Segal) letter that outlines adjustment options for smoothing $59.8 million of unrecognized net investment losses as of the June 30, 2023 Actuarial Valuation. Per the Board's Actuarial Funding Policy, all investment gains/losses are to be recognized in the determination of SCERS' actuarial value of assets for funding purposes using a seven-year smoothing method. However, for the purpose of this analysis, the discussion is around establishing a separate and single six-year smoothing layer to minimize employer contribution rate volatility in 2028 and 2029.

SCERS' current asset smoothing methodology has created a "non-level (uneven) pattern" of slight decreases in employer rates for the next four years followed by a minor uptick in rates for two years.[1] To counter the negative employer contribution rate impact, the actuary has proposed the following optional smoothing adjustment to reduce contribution rate volatility:

Effective July 1, 2024, combine the net deferred loss of $59.8 million from the current valuation into a single six-year smoothing layer and recognize the loss over the next six years in six level amounts of approximately $9.97 million each year. This would help reduce

[1] Respectively, gains of $55.9 million (2024), $22.5 million (2025), $20.2 million (2026), and $77.0 million (2027) recognized in the next four years, followed by offsetting losses of $218.3 million (2028) and $17.1 million (2029), respectively, in the last two remaining years of the smoothing period.

the volatility associated with the current pattern of deferred gain/loss recognition and result in more stable funded ratios (on an actuarial value basis) and more level employer contribution rates.

It is important to note, however, that the projected rate volatility is minor—approximately a 1 percentage point swing over the smoothing period. The rate projections are also dependent on future investment performance.

Given the relatively minor benefit of re-smoothing, the Board may wish to consider maintaining the status quo and allow the net deferred losses to remain as scheduled. SCERS is currently on track to meet or exceed its 6.75% investment return target in 2023-24, barring a market downturn. If SCERS exceeds the benchmark, those gains will be incorporated into the smoothing model to decrease rates in future years.

Additionally, should the deferred losses grow to a greater level of concern about a potential rate hike, SCERS could utilize a $370.9 million Contingency Reserve to supplement any shortfall.

While no action is proposed in this item, formal direction would need to be provided by the Board in coming months should it prefer an alternative smoothing approach.

ATTACHMENTS

- Board Order
- Segal Letter (April 4, 2024) Adjustment to Asset Smoothing Method to Combine Deferred Investment Gains and Losses as of June 30, 2023 for the June 30, 2024 Actuarial Valuation

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

Retirement Board Order

Sacramento County Employees' Retirement System

Before the Board of Retirement
April 17, 2024

AGENDA ITEM:

Actuarial Smoothing Options

THE BOARD OF RETIREMENT hereby approves Staff's recommendation to receive and file presentation from Segal regarding actuarial smoothing options.

I HEREBY CERTIFY that the above order was passed and adopted on April 17, 2024 by the following vote of the Board of Retirement, to wit:

AYES:

NOES:

ABSENT:

ABSTAIN:

ALTERNATES:
(Present but not voting)

____________________________	____________________________
James Diepenbrock Board President	Eric Stern Chief Executive Officer and Board Secretary

Segal

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

Via Email

April 4, 2024

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)
Adjustment to Asset Smoothing Method to Combine Deferred Investment Gains and Losses as of June 30, 2023 for the June 30, 2024 Actuarial Valuation

Dear Eric:

This letter provides information on a possible ad hoc adjustment to the asset-smoothing method in a manner that is provided for in SCERS' funding policy.* Note this adjustment is similar to one adopted by SCERS in 2014.

Background information

As discussed in the June 30, 2023 Actuarial Valuation Report, under the current asset smoothing method the total net unrecognized investment loss as of June 30, 2023 was $59.8 million. This investment loss will be recognized in the determination of the actuarial value of assets for funding purposes over the next six years.

Footnote 1 to the *Determination of Actuarial Value of Assets for Year Ended June 30, 2023* chart provided on page 23 of the Actuarial Valuation Report shows that under the asset smoothing method the $59.8 million in net deferred losses will be recognized in the next six years, but in a very non-level (uneven) pattern. In particular, there will be gains of $55.9 million, $22.5 million, $20.2 million, and $77.0 million recognized in the next four years, followed by offsetting losses of $218.3 million and $17.1 million in the two years after that, so as to ultimately recognize all of the current total net deferred losses of $59.8 million. This means that, absent any new gains or losses in the future, there will be four years of decreases in the employer contribution rate followed by two years of increases before the $59.8 million in net deferred losses are fully recognized.

For reference, the *Determination of Actuarial Value of Assets for Year Ended June 30, 2023* chart from page 23 of the June 30, 2023 Actuarial Valuation and Review has been included as Exhibit 1 to this letter.

* The funding policy provisions describing the proposed adjustment are provided in a later section of this letter.

Possible ad hoc adjustment to the asset smoothing method

For the June 30, 2024 valuation, the asset smoothing method that is part of SCERS' funding policy could be adjusted in a manner provided for in that policy by combining the deferred gain and loss "layers" that comprise the net deferred investment loss of $59.8 million as determined in the 2023 valuation into a single six-year smoothing layer. This layer would then be recognized over the next six years in six level amounts of approximately $9.97 million for each year. Otherwise, as mentioned earlier, the asset smoothing method would recognize gains for the next four years totaling about $175.6 million followed by losses for two years totaling about $235.4 million.

This anomalous result – having a relatively small net loss recognized as a large gain followed by an offsetting loss (both after asset smoothing) – is a routine result of the asset smoothing method whenever large market value gains are followed by large market value losses. This "tail volatility" can be avoided by occasional active management of the asset smoothing layers in the manner being recommended here and anticipated in SCERS' funding policy.

The recommended ad hoc adjustment would reduce the volatility associated with the current pattern of deferred loss recognition and result in both more stable funded ratios (on an actuarial value basis) and more level total employer contribution rates. Note that this adjustment would have no impact on the June 30, 2023 valuation results as the total amount of net deferred losses as of June 30, 2023 remains unchanged. Also note that we recommend using a six-year smoothing period (starting from July 1, 2023) for the combined deferred losses, as that will complete the recognition of the net loss over the same period as under the separate smoothing layers. Both of these features of the ad hoc adjustment derive from the fact that the policy intent here is not to change either the amount of or the period of recognition for the net deferred loss. This ad hoc adjustment is similar to a previous adjustment made by the Board in 2014 to level out the recognition of deferred investment loss after the June 30, 2013 valuation.

Exhibit 2 shows recent historical rates of return on both a market and actuarial value basis. We also show the projected future rates of return starting from July 1, 2023 based on an assumed market value return of 6.75% per year. The circled area on the graph illustrates the differences between the rates of return on an actuarial value basis under the current smoothing method and under the ad hoc adjustment of combining the net deferred losses as described above. This illustrates that the rates of return under the current smoothing method are expected to be more volatile than those that would result under the ad hoc adjustment.

Finally, the graph shown in Exhibit 3 to this letter displays a simplified illustration of the effect of the proposed adjustment, showing the projected average employer contributions over the next seven years (starting from the June 30, 2023 valuation date) under both the current policy and under the ad hoc adjustment of combining the net deferred losses as described above. After the end of the remaining smoothing period for the current net deferred losses, the contribution rates under the current policy and those under the ad hoc adjustment converge. The difference is the distinct paths the two lines take to get to substantially the same place.

We note that the results discussed in this letter do not take into account any actuarial gains/losses or assumption changes that may occur after the June 30, 2023 valuation date. Also, as stated in our basis for projections section, we have not taken into account the $370.9 million currently available in the Contingency Reserve which is more than sufficient to offset the investment losses scheduled to be recognized on June 30, 2028 and 2029. However, our recommendation to level out the recognition of the current net deferred investment gain will achieve greater contribution rate stability regardless of whether there are future gains/losses or assumption changes.

SCERS Statement of Funding Policy

As noted above, the proposed ad hoc adjustment is not a change in the underlying asset smoothing method, but rather an adjustment to manage an occasional but routine result of the current asset smoothing method. For that reason, the Conference of Consulting Actuaries Public Plans Community (CCA PPC) "White Paper" on Funding Policies and Practices for Public Pension Plans considers this adjustment a Model Practice when performed in the specific circumstances and in the particular manner that we propose.

SCERS' statement of funding policy specifically anticipates the possibility of such future adjustments. The policy describes both the circumstances and the manner of these ad hoc adjustments, and states that they would be at the discretion of the Board and considered only on the advice of the actuary. Here is the policy text, which was based on the specific text from the CCA PPC White Paper:

> "The Board reserves the right to consider future ad-hoc adjustments to change the pattern of the recognition of the deferred investment gains or losses after a period of significant market change followed by a period of market correction upon receiving the necessary analysis from its actuary."

Basis for projections

Unless otherwise noted, the illustrations shown in Exhibits 1 through 3 were made using generally accepted actuarial practices and are based on the June 30, 2023 actuarial valuation results, including the participant data and actuarial assumptions on which that valuation was based. Here is a summary of some of the important assumptions used in the illustration.

- Results are due solely to the $59.8 million in net deferred loss as of June 30, 2023. Employer contributions and UAAL due to all components of SCERS experience (past or future) have been excluded from these graphs.
- June 30, 2023 non-economic assumptions remain unchanged.
- June 30, 2023 economic assumptions remain unchanged, including the 6.75% investment earnings assumption.
- June 30, 2023 retirement benefit formulas remain unchanged.

- June 30, 2023 1937 Act and CalPEPRA statutes remain unchanged.
- UAAL amortization method remains unchanged (i.e., 20-year layers, level percent of pay).
- 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, 2023.
- Active payroll grows at 2.75% per annum.
- The amount in the Contingency Reserve remains unchanged (i.e., the Contingency Reserve will not be increased above 3% of the market value of assets as of June 30, 2023 nor will it be used to offset any future actuarial losses).
- All other actuarial assumption used in the June 30, 2023 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, 2023. The plan's funded status does not reflect short-term fluctuations of the market, but rather is based on the market values on the last day of the plan year. Moreover, this projection does not include any possible short-term or long-term impacts on mortality of the covered population that may emerge after June 30, 2023 due to COVID-19. Segal is available to prepare projections of potential outcomes of market conditions and other demographic experience upon request.

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.

Segal valuation results are based on proprietary actuarial modeling software. The actuarial valuation models generate a comprehensive set of liability and cost calculations that are presented to meet regulatory, legislative and client requirements. Our Actuarial Technology and Systems unit, comprised of both actuaries and programmers, is responsible for the initial development and maintenance of these models. The models have a modular structure that allows for a high degree of accuracy, flexibility and user control. The client team programs the assumptions and the plan provisions, validates the models, and reviews test lives and results, under the supervision of the responsible actuary.

Unless otherwise noted, all of the above calculations are based on the June 30, 2023 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

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

ST/elf
Attachment

cc: Margo Allen

Segal

Exhibit 1: Determination of Actuarial Value of Assets for Year Ended June 30, 2023

	Step	Expected Return	Actual Return	Investment Gain/(Loss)	Percent Deferred	Amount
1	**Market Value of Assets**					**$12,363,257,528**
2	**Calculation of unrecognized return**					
	a. Year ended June 30, 2018	$600,381,878	$834,483,764	$234,101,886	14.3%	$33,443,127
	b. Year ended June 30, 2019	649,300,474	665,185,884	15,885,410	28.6%	4,538,689
	c. Year ended June 30, 2020	690,394,213	292,913,229	(397,480,984)	42.9%	(170,348,993)
	d. Year ended June 30, 2021	676,831,490	2,744,248,606	2,067,417,116	57.1%	1,181,381,209
	e. Year ended June 30, 2022	851,772,426	(556,708,213)	(1,408,480,639)	71.4%	(1,006,057,599)
	f. Year ended June 30, 2023	802,694,164	682,769,803	(119,924,361)	85.7%	(102,792,309)
	g. Total unrecognized return*					**$(59,835,876)**
3	**Preliminary Actuarial Value of Assets 1 – 2g**					**$12,423,093,404**
4	Adjustment to be within 30% corridor					
5	**Final Actuarial Value of Assets 3 + 4**					**$12,423,093,404**
6	Actuarial Value of Assets as a percentage of Market Value of Assets					100.5%
7	Non-valuation reserves:					
	a. Contingency Reserve					$370,897,726
	b. Other Non-Valuation Reserves					0
	c. Subtotal					**$370,897,726**
8	**Preliminary Valuation Value of Assets 5 – 7c**					**$12,052,195,678**
9	Non-valuation amounts					
	a. Balance of transfer to offset member COLA rate					$11,730,000
10	**Valuation Value of Assets 8 – 9**					**$12,040,465,678**

* Deferred return as of June 30, 2023 recognized in each of the next six years:

Date	Amount
a. Amount recognized on June 30, 2024	$55,931,203
b. Amount recognized on June 30, 2025	22,488,077
c. Amount recognized on June 30, 2026	20,218,733
d. Amount recognized on June 30, 2027	$77,001,731

Date	Amount
e. Amount recognized on June 30, 2028	(218,343,571)
f. Amount recognized on June 30, 2029	(17,132,049)
g. Total unrecognized return as of June 30, 2023	**$(59,835,876)**

Exhibit 2: Market and Actuarial Rates of Return for Years Ended June 30, 2021 – 2030

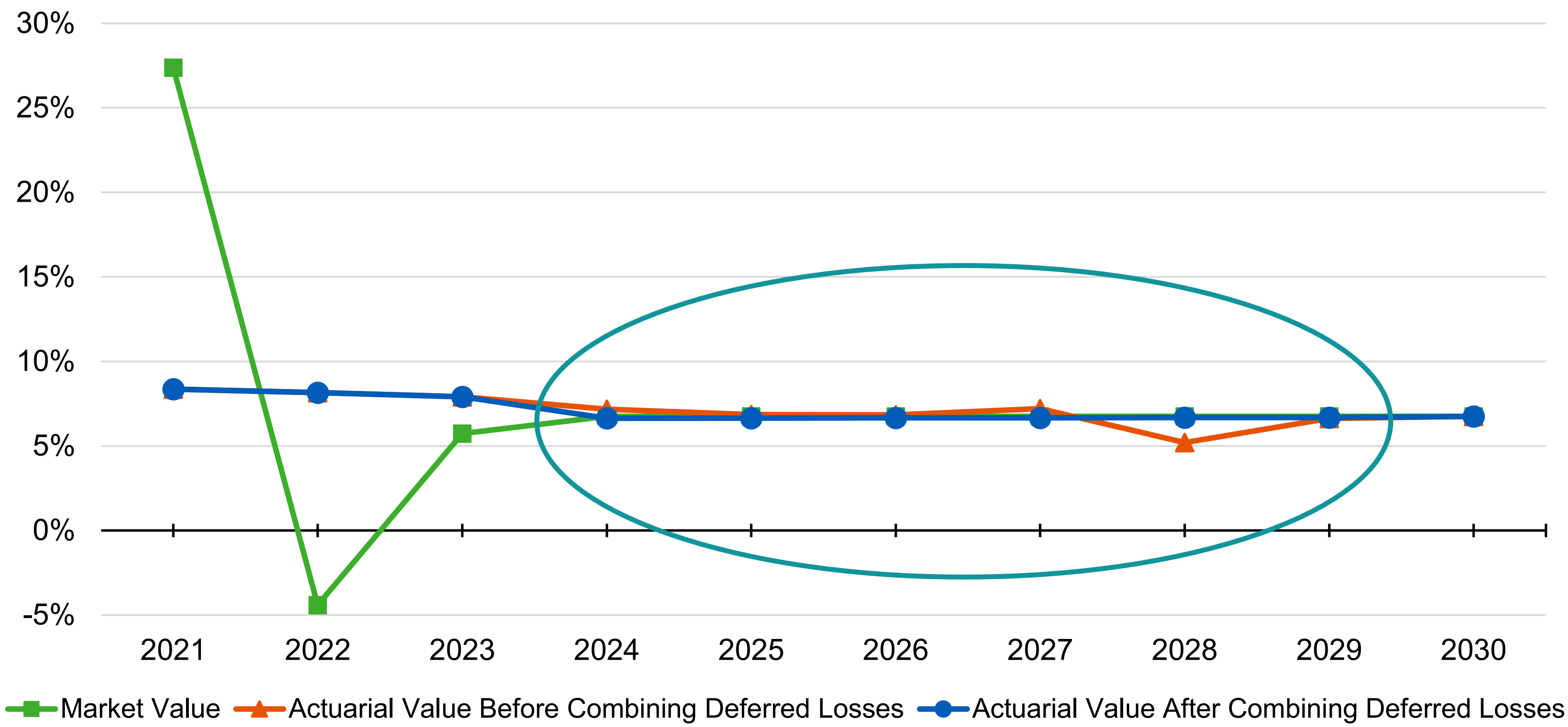

Exhibit 3: Comparison of Average Employer Contribution Rate Assuming Investments Earn a Market Return of 6.75% in 2023/2024 and Thereafter