



## Regular Meeting

### Item Number 9 – Open Session

**Subject:** Review of Board Valuation Policy for the Defined Benefit Program

**Presenter(s):** David Lamoureux and Rick Reed

**Item Type:** Action

**Date & Time:** January 28, 2022 – 30 minutes

---

**Attachment(s):** Attachment 1 – Proposed Revisions to Section 7F of the Board Governance Manual

**PowerPoint(s):** Review of Board Valuation Policy

---

#### **PURPOSE**

The purpose of this item is to review and adopt minor changes to section 7F of the board governance manual, the board valuation policy used when performing actuarial valuations for the Defined Benefit Program.

#### **BACKGROUND AND SUMMARY**

The primary purpose of an actuarial valuation is to assess the financial condition of a pension plan. At CalSTRS, the actuarial valuation of the Defined Benefit Program is one of the tools used to monitor the funding plan and the financial health of the fund. It is used to determine whether current contributions from members, employers, and the state, combined with the limited rate setting authority provided to the board by the funding plan, are expected to be sufficient to keep the funding plan on track to allow the Defined Benefit Program to reach full funding by 2046.

Following the adoption of the funding plan in 2014, the board adopted in February 2015 a valuation policy related to performing actuarial valuations for the Defined Benefit Program. The current valuation policy addresses several key issues related to the preparation of an actuarial valuation, such as the frequency of valuations, the actuarial assumptions used in the actuarial valuation and the funding policy. The current valuation policy includes provisions related to the determination of the contribution rates for the state and the employers consistent with the authority and limitations provided by the funding plan. The policy also covers member contribution rates.

Even if the funding plan is working and the Defined Benefit Program is on track of reaching full funding by 2046, it has now been more than seven years since the funding plan has been in place

and six years since the valuation policy was put in place. It was determined that a review of the current policy would be beneficial to ensure its provisions remained appropriate and in line with the intent of the funding plan to enable the Defined Benefit Program to reach full funding by 2046.

What follows is a discussion of the various key provisions contained in the current valuation policy along with a recommendation as to whether the current practice should be continued, or changes be made.

### **Frequency of actuarial valuations**

A key provision of any valuation policy is the frequency at which actuarial valuations are performed. The current valuation policy requires that an actuarial valuation for the Defined Benefit Program be performed every year. With the exclusion of the year 2002, actuarial valuations have been performed annually since 1997. Prior to 1997, valuations were performed every two years. Note that existing statute allows for actuarial valuations to be performed less frequently. Section 22311.5 of the Education Code requires that an actuarial valuation for the Defined Benefit Program be performed at least every six years. Considering the importance of the actuarial valuation process as a tool to monitor the funding plan and to assist the board in setting both the state and employer supplemental contribution rates, it is recommended that actuarial valuations continue to be performed annually.

### **Actuarial assumptions and methods**

When performing actuarial valuations, actuaries rely on the use of various demographic and economic assumptions and methods. It is important to periodically review these assumptions and methods to ensure they remain reasonable, reflect the actual experience of the system and are appropriate for assessing funding levels and determining the contribution rates needed to achieve full funding.

The current valuation policy requires that the actuarial valuation be based on the most recently adopted actuarial assumptions and methods. It also requires that these assumptions and methods be reviewed every four years. A formal review of the actuarial assumptions and methods is performed through an experience study. Note that existing statute simply states that actuarial assumptions be based on a combination of past and anticipated future experience. Existing statutes do not specify a frequency of review.

The policy also states that actuarial assumptions can be reevaluated more frequently if the board determines that events since the last adoption warrant an earlier review. To assist in that matter, staff continually monitors the appropriateness of the actuarial assumptions and methods and reports on trends through the annual [Review of Funding Levels and Risks](#) report and, twice a year, as part of the semi-annual enterprise risk management report.

Considering actuarial assumptions are long-term in nature, it is not necessary to perform a full review of actuarial assumptions and methods every year. Most retirement systems perform a

formal review of their actuarial assumptions and methods every three to five years. It is recommended that the current practice of performing a formal review of the actuarial assumptions and methods every four years be maintained. The next review is scheduled to be presented to the board in January 2024.

### **Allocating the unfunded actuarial obligation**

The current valuation policy reflects the requirements set in statute on how to allocate portions of the unfunded actuarial obligation to the state and the employers.

Consistent with Section 22955.1 of the Education Code, the valuation policy specifies the state is responsible for the unfunded actuarial obligation associated with the benefit and contribution structure in effect as of July 1, 1990. Similarly, consistent with Section 22950.5 of the Education Code, the valuation policy specifies the employers are responsible for the unfunded actuarial obligation associated with the changes made in the benefit and contribution structure after July 1, 1990, limited to service credited to members as of June 30, 2014. No changes to the valuation policy are necessary.

Since the funding plan limits the employers' responsibility for the new benefit structure to service as of June 30, 2014, the board does not have the authority to adjust contribution rates for the entire unfunded actuarial obligation. The portion for which the board has no authority to adjust contribution rates is referred to as the unallocated unfunded actuarial obligation. Since the board cannot adjust contribution rates to eliminate this amount, it is not covered by the existing valuation policy. This aspect of the funding plan has been discussed for the last several years in the annual [Review of Funding Levels and Risks](#) report.

### **Funding/amortization period**

A key component of funding a pension plan is the amortization policy. The amortization policy relates to the number of years over which the unfunded actuarial obligation should be eliminated. For CalSTRS, the current target funding date is June 30, 2046 and was set through the funding plan. This means the amortization period is not fixed and declines each year. When the June 30, 2020 actuarial valuation was completed last spring, the unfunded actuarial obligation was amortized over a 26-year period. In the upcoming June 30, 2021 actuarial valuation, the amortization period will be 25 years.

Note that existing statute does not specify a target date to eliminate the state's share of the unfunded actuarial obligation. Only the employers' share of the unfunded actuarial obligation has a June 30, 2046 target funding date set in statute.

When the valuation policy was created in 2015, the board adopted a target funding date of June 30, 2046 for the state's share of the unfunded actuarial obligation. A provision was also added to the policy stating the target funding date should be re-evaluated in 2025. A target funding date of June 30, 2046 was selected for consistency with the intent of the funding plan and the target

funding date set in statute for the employers' share of the unfunded actuarial obligation. It is recommended that the target funding date of June 30, 2046 be retained for the state. It is also recommended that the wording in the valuation policy, requiring a review of the target funding date in 2025, be eliminated. Since the funding plan is continually being monitored throughout the year by CalSTRS staff, if a situation was identified that required a modification to the valuation policy, changes would be brought to the board for consideration.

### **Maximum rate increase**

Once the unfunded actuarial obligation has been allocated to the state and the employers, the next step is the calculation of the contribution rates needed to eliminate each amount by the designated amortization period. The rate calculations are completed as part of the actuarial valuation. If a calculated contribution rate is greater than the contribution rate currently in effect, any necessary increases will be subject to the limits established through the funding plan. These limits have been included in the valuation policy.

For the state's share, the valuation policy specifies that, if an increase in contribution rate is needed to eliminate it by June 30, 2046, such increase be limited to 0.5% of payroll. This limit on rate increases is set in Section 22955.1 of the Education Code. For the employers' share, the valuation policy specifies that, if an increase in contribution rate is needed to eliminate it by June 30, 2046, such increase be limited to 1.0% of payroll. Once again, this limit on rate increases is set in statute, in Section 22950.5 of the Education Code.

Considering the maximum rate increases for the state and the employer supplemental contribution rates are set in statute, no changes to the valuation policy are recommended.

### **Maximum rate decrease**

The funding plan also contains a limit on rate decreases for the employer supplemental contribution rate that has been included in the current valuation policy.

For the employers' share, the valuation policy specifies that, if a decrease in contribution rate could be made while still allowing the elimination of the employer's share of the unfunded actuarial obligation by June 30, 2046, such a decrease is limited to 1.0% of payroll. This limit on rate decreases is set in statute, in Section 22950.5 of the Education Code; therefore, no changes to the valuation policy are recommended for the maximum rate decrease for the employer supplemental contribution rate.

Note that neither existing statute nor the current valuation policy defines a maximum rate decrease for the state supplemental contribution rate. Considering the state contribution rate is most sensitive to investment volatility, limiting decreases in the state supplemental contribution rate would reduce the risk that the state's share of the unfunded actuarial obligation may not be fully eliminated by 2046. It is recommended the existing valuation policy be amended to also limit reductions in the state contribution rate to 0.5% of payroll. Note that the proposed limit on rate

reductions would only apply if the state's share of the unfunded actuarial obligation is not eliminated.

### **Maximum contribution rate**

In addition to limits on annual adjustments in the contribution rates, the funding plan also contains a cap on the employer supplemental contribution rate. As per Section 22950.5 of the Education Code, the employer supplemental contribution rate cannot increase above 12.00% of payroll. Employers are also required to pay each year a base contribution rate of 8.25% of payroll. This means that the maximum total contribution rate for the employers is 20.25% of payroll. Consistent with statute, the valuation policy sets the maximum supplemental contribution rate at 12.00% of payroll. No changes to the valuation policy are required.

Note that neither existing statute nor the current valuation policy defines a maximum rate for the state supplemental contribution rate. However, because the provisions of the funding plan expire on June 30, 2046 and annual increases in the state contribution rate are limited to 0.5% of payroll, there is an implicit maximum rate that can be calculated based on the current state supplemental contribution rate and the remaining amortization period. Based on the fact the current state supplemental contribution rate is 6.311% of payroll, the highest level the state supplemental contribution rate could reach in fiscal year 2045-46 is 18.311% of payroll. When adding the base rate of 2.017%, this means the highest possible state contribution rate to the Defined Benefit Program is 20.328% of payroll, acting as an implicit maximum contribution rate.

Considering the state contribution rate is most sensitive to investment volatility, introducing a cap on the state contribution rate could increase the risk that the state's share of the unfunded actuarial obligation may not be fully eliminated by 2046. No changes are being recommended to the valuation policy.

### **Minimum contribution rate**

The valuation policy contains a minimum contribution rate for the state. In June 2016, the board adopted a revision to the valuation policy to include a minimum supplemental contribution rate of 4.311% of payroll for the state. When the board adopted the state minimum contribution rate, rate increases set in the funding plan were still being phased in. The state supplemental contribution rate was set to increase to 4.311% of payroll in fiscal year 2016-17. In 2016, the funding situation had improved compared to when the funding plan was adopted. Based on the valuation policy in place at that time, future projections showed the state contribution rate could potentially be lowered below 4.311% starting in 2017-18 and still allow the state to eliminate its share of the unfunded actuarial obligation by 2046.

The board discussed the idea of adding a minimum state supplemental contribution rate of 4.311% of payroll to strengthen the funding plan and allow the state to potentially eliminate its share of the unfunded actuarial obligation ahead of schedule. At the time, Department of Finance, which advocated on behalf of the Governor, supported the idea, and indicated it also preferred to not

lower the state supplemental contribution rate below 4.311%, which was the long-term supplemental rate initially projected when the funding plan was adopted. The state minimum contribution rate provision was adopted by the board and added to the valuation policy in June 2016. Note that the minimum rate is in effect only if the state's share of the unfunded actuarial obligation is not eliminated. No changes are being recommended to the valuation policy with respect to the minimum state supplemental contribution rate.

The current valuation policy does not contain a minimum contribution rate for the employers. If the board wanted to add a minimum employer contribution rate to the valuation policy, a similar approach to the one used for the state could be utilized. A minimum employer supplemental contribution rate could be set at 10.85% of payroll, the long-term supplemental rate initially projected when the funding plan was adopted. Combined with the base employer contribution rate of 8.25%, this would represent a minimum total employer rate of 19.1% of payroll. Adding a minimum rate for the employers would have the benefit of strengthening the funding plan and provide more contribution rate stability long term. It could, however, be viewed as not being consistent with the initial intent of the funding plan which was to allow for the employer contribution rate to be lowered if the funding situation improved.

At this time, it is not recommended that the valuation policy be modified to include a minimum contribution rate for the employers. The board will be reviewing the adequacy of the employer contribution rate annually as part of its review of the actuarial valuation. If the results of future actuarial valuations indicate the employer contribution rate could be lowered, the board will be able to decide at that time whether it would be more prudent to keep the employer contribution rate at existing levels rather than reducing them. The board made such decision in June 2021 when the employer supplemental contribution rate was kept at 10.85% even though the results of the actuarial valuation indicated it could have been lowered. Concerns over the impact of the investment performance on future employer contribution rates and the recent decline in the number of teachers prompted the board to act prudently, and not lower the employer supplemental contribution rate knowing that a reduction could likely be followed with the need to increase the employer rate a year or two later.

### **Special situations**

Although the funding plan has greatly strengthened the long-term funding of the Defined Benefit Program, it is a very complex funding arrangement, especially considering how the various shares of the unfunded actuarial obligation are allocated and change from year to year. To accommodate this complexity, various provisions were initially added to the valuation policy to cover special situations.

Section 2(d), for the determination of the state contribution rate, and section 3(e), for the determination of the employer contribution rate, deal with certain situations that could occur in the future if funding levels greatly improve and a surplus develops. These sections remain appropriate. No changes are being recommended to the valuation policy.

Section 3(f), for the determination of the employer contribution rate, deals with situations where the total amount of contributions collected by CalSTRS may not be enough to eliminate the total unfunded actuarial obligation. This provision applies to the total unfunded actuarial obligation for service prior to July 2014 only.

The initial concept behind this provision was to increase the employer contribution rate if there was a situation where in total CalSTRS was not collecting enough to eliminate the pre-2014 unfunded actuarial obligation by 2046, even if the employer contribution rate was sufficient to allow for the elimination of the employers' share of the unfunded actuarial obligation by 2046. This provision would generally be triggered in situations where the board cannot collect enough from the state due to the 0.5% of payroll limit on state rate increases. A triggering of this provision would result in the employers paying more to increase the total amount of contributions collected by CalSTRS but would also accelerate the elimination of their share of the unfunded actuarial obligation. Employers would continue to pay more until the state contribution rate reached higher levels, at which point the employer contribution rate would be lowered.

The funding plan has now been in place for more than seven years. CalSTRS has gained a better understanding of its inner workings, including how sensitive the state's contribution rate is to investment performance. If CalSTRS is unable to reach full funding by 2046, it is most likely going to be the result of the limitations imposed on the state contribution rate. If a situation develops in the future where this provision is triggered, a better approach might be to seek more funding from the state rather than collecting more from employers. It is recommended that this provision be eliminated at this time.

Several of the provisions included in the current valuation policy are based on requirements set in statute in the funding plan. As part of the review of the valuation policy, it was identified that the current valuation policy did not include one of the provisions of the funding plan dealing with the state contribution rate in the event the state's share of the unfunded actuarial obligation is eliminated. It is recommended that a new provision be added to the valuation policy stating that the state supplemental contribution rate be set to 0% of payroll once the state's share of the actuarial obligation has been eliminated.

### **Member contribution rates**

The last section of the current valuation policy deals with the member contribution rates. The member contribution rates for all members as well as the situations that could result in an adjustment for the 2% at 62 members are set in statute. They have been included in the valuation policy. No changes to the valuation policy are necessary with respect to member contribution rates.

**RECOMMENDATION**

It is recommended that the board adopt the proposed revisions to section 7F of the board governance manual, as shown in attachment 1.

The revisions include:

- Eliminating the 2025 review date for the funding period applicable to the state's share of the unfunded actuarial obligation.
- Introducing a maximum rate decrease for the state to also limit decreases in the state supplemental contribution rate to 0.5% of payroll.
- Adding a new provision, consistent with existing statute, that the state supplemental contribution rate be set to 0% of payroll once its share of the unfunded actuarial obligation is eliminated.
- Deleting a provision dealing with a special situation that could result in the employer supplemental contribution rate increasing when the state supplemental contribution rate is not sufficient.
- Clarifying and clerical adjustments