TEACHERS' RETIREMENT BOARD

REGULAR MEETING

Item Number: 5

SUBJECT: 80% Pension Funding Standard Myth

CONSENT:

ATTACHMENT(S): 0

ACTION:

DATE OF MEETING: September 21, 2018 / *30 mins*

INFORMATION: X

PRESENTER(S): David Lamoureux

PURPOSE

The purpose of this item is to highlight the importance of maintaining the commitment to fully fund CalSTRS Defined Benefit (DB) Program in a timely manner and to examine what has often been called the 80 percent funding myth, including the potential risks and long-term financial consequences of targeting an 80 percent funded ratio.

BACKGROUND

In 2014, with the passage of the CalSTRS Funding Plan (AB 1469 - Bonta), CalSTRS members, employers and the state made a joint commitment to ensure the long term sustainability of pensions for California educators by agreeing to higher contribution rates to fully fund the CalSTRS DB Program by 2046. As the Funding Plan progressed and contribution rates rose, some have called into question whether a 100 percent funding goal is an appropriate target for the system and have advocated for an 80 percent funding target as a means of reducing contribution rates in the near term.

The idea that an 80 percent funded ratio is a "healthy" level for a pension plan is frequently cited in media reports. It is unclear however when and where this idea or myth first started to appear. Further adding to the myth that it is acceptable to not fully fund pension benefits, the Haas Institute at UC Berkeley released, in February 2017, a policy brief which argues that it is possible to sustain a pension plan in perpetuity at a funding level below 100 percent and that there are advantages to doing so. As will be demonstrated in this item, there are drastic long-term financial consequences for not fully funding pension benefits over a reasonable time period.

Additional confusion around an 80 percent funding level is often caused by rules that were adopted by the federal government through the passage of the Pension Protection Act (PPA) of 2006. Some have mistakenly interpreted rules set by the PPA to mean that a plan is only considered at risk if the funded status is less than 80 percent. Taken together, it is easy to get the impression that it is not necessary to fully fund a pension program.

It is important to realize that the actuarial profession has never in its history advocated that funding policies should strive to achieve long-term levels of 80 percent funded. In 2012, the

American Academy of Actuaries decided to set the record straight and released an issue brief, titled "The 80% Pension Funding Standard Myth," which responded to the prevalence of the concept that 80 percent is a healthy funding level for a pension plan. This issue brief highlights the fact that actuaries look at more than just the funded status to determine a plan's health. The funded status is a snapshot in time and will naturally fluctuate throughout the life of a pension plan. Far more important is the trajectory of the funding levels and having a robust strategy in place to ensure the plan is funded in a timely manner. Furthermore, it is critical that the sponsor has both the commitment and capacity to follow through with the funding plan. The report concludes that "All plans should have the objective of accumulating assets equal to 100% of a relevant pension obligation, unless reasons for a different target have been clearly identified and the consequences of that target are well understood."

In 2014, the American Academy of Actuaries released another paper on the topic, this time shorter in the form of a publication called "Essential Elements." The message of the paper was similar to the previous issue brief and highlighted again that the 80 percent funded target level is a myth that should not be perpetuated and that all plans should have a funding target of 100 percent funded.

This item further examines the potential risks and long term financial consequences of targeting an 80 percent funded ratio.

ANALYSIS

Importance of Future Trajectory

The funded status of a pension plan is merely one of many elements necessary to make a comprehensive assessment of the health of the pension plan. The actuarial profession has long stated that the primary importance is the trajectory of funding levels and having a funding structure in place to ensure the plan will be fully funded over a reasonable period of time.

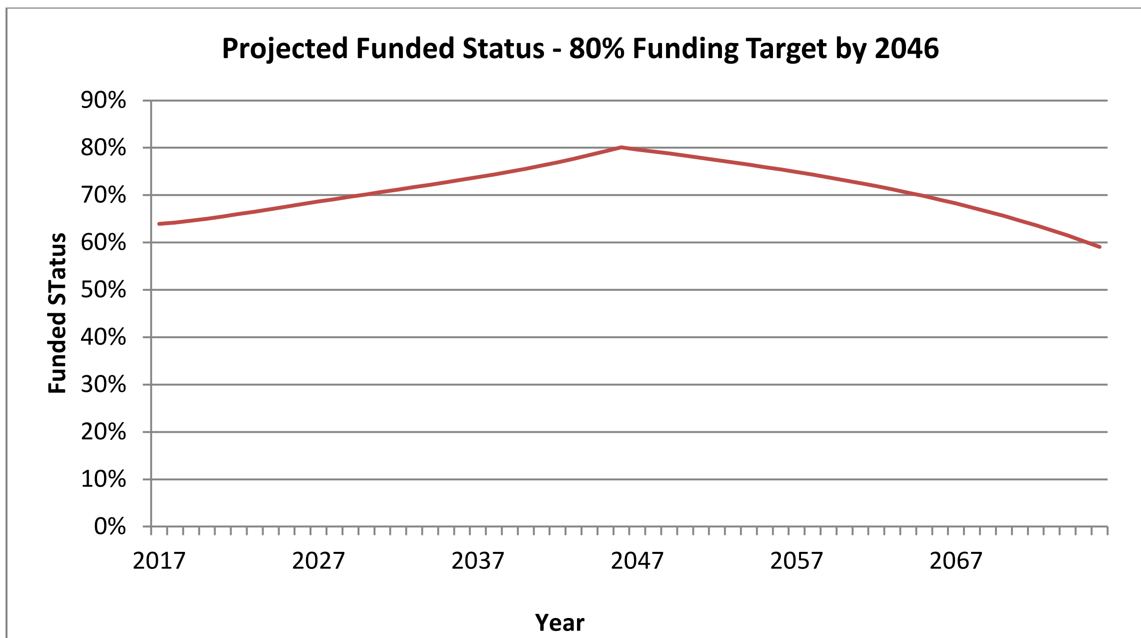
CalSTRS is a perfect example to test this principle. In the June 30, 2009 actuarial valuation of the CalSTRS DB Program, the funded status, based on the actuarial value of assets, was reported as 78.2 percent. The funded status was almost 80 percent. Someone who believed the 80 percent funding myth and simply looked at the funded status at that point in time may have thought the CalSTRS DB Program was in a healthy state.

In reality, the CalSTRS DB Program was projected to run out of money by 2043. This is the situation that eventually led to the passage of the CalSTRS Funding Plan in 2014.
In the most recent actuarial valuation, the funded status of the DB Program was reported as 62.6 percent. Once again, simply looking at the funded status and ignoring future trajectory, someone could conclude that CalSTRS is in a worse situation today than in 2009. However, the opposite is true. As a result of the passage of the CalSTRS Funding Plan, the CalSTRS DB Program is on a path to reach full funding by 2046. This example highlights the importance of focusing on the future trajectory of funding levels rather than focusing on a point in time assessment.

An 80% Funding Target is Incompatible with CalSTRS Current Funding Plan

The CalSTRS Funding Plan grants the board limited authority to increase the state and employer contribution rates through 2046 to achieve full funding and eliminate the unfunded actuarial obligation (UAO). As per current statute, the Funding Plan is set to expire in 2046, and contribution rates are scheduled to return to the pre-Funding Plan levels. As was reported last November in the Review of CalSTRS Funding Levels and Risk report, it is expected that pre-Funding Plan contribution rates would be sufficient to prevent funding levels to decline as long as the CalSTRS DB Program is at least 90 percent funded in 2046.

If the system were to target and attain an 80 percent funding level by 2046 and still return to pre-Funding Plan contribution rates at that point, the system would not be able to maintain an 80 percent funding level. Contributions levels would not be sufficient to cover both the normal cost for continuing service accrual and the interest on the remaining UAO. As a result, upon reaching 80 percent funded in 2046, the system would once again embark on a downward funding trajectory and a path towards insolvency. Below is a chart showing the projected funded status if the Funding Plan were to be changed to target an 80 percent level followed by a return to pre-Funding Plan contribution rates.



To make the above point more concrete, consider the following. As of the June 30, 2017 actuarial valuation, CalSTRS had a UAO of $107.3 billion. As per projections provided to the board as part of the June 30, 2017 actuarial valuation of the DB Program, the UAO is expected to decrease to $2.6 billion by 2046 and be completely eliminated the following year. If instead the Funding Plan were to target an 80 percent funding level, the UAO would instead increase to about $156 billion by 2046. Beyond 2046, funding levels would decline over time and the UAO

would more than double every 15 years if no further action were taken, reaching approximately $340 billion in 2061 and more than $800 billion in 2076.

In addition to not being an acceptable target for the long-term sustainability of the system, an 80 percent funding target is incompatible with a Funding Plan that has an expiration date. If CalSTRS were to target an 80 percent funded ratio, further changes would need to be made to the Funding Plan to allow it to at least maintain that level into the future and to avoid insolvency.

An 80 Percent Funding Target Shifts Contributions into the Future and Increases Cost

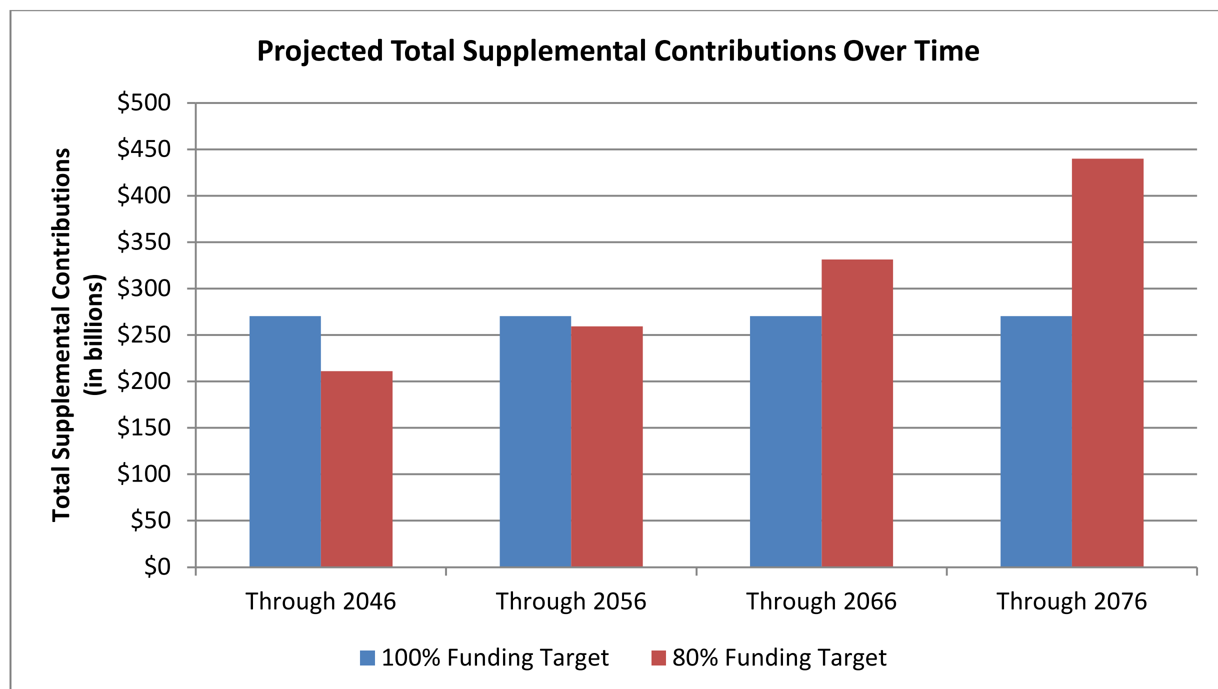
The Funding Plan as currently structured will require total supplemental contribution rates, employer and state combined, to increase to 17.1 percent by 2023 and remain at that level through 2046. The supplemental contribution rates were originally set by the Funding Plan and have increased since 2014 based on the schedule set in statute. The Funding Plan also granted the board with limited authority to adjust them on an annual basis, beginning in 2017-18 for the state and 2021-22 for employers. The supplemental contribution rates do not include the 8.25 percent base employer contribution rate and the 2.017 percent base state contribution rate.

In fiscal year 2018-19, the combined supplemental contribution rate from the state and employers is 13.3 percent. If CalSTRS were to be funded to achieve an 80 percent target by 2046, the combined supplemental contribution rate from the state and employers would need to be about 13.1 percent through 2046. This would be a level equivalent to the supplemental rate in effect this fiscal year. Aiming toward an 80 percent funding target would result in savings of about 4 percent of payroll through 2046. Note, however, that under the current structure of the Funding Plan, it is not clear how the savings would be distributed between the state and the employer portions of the contribution rate if the funding target were adjusted, thus only the total supplemental contribution rates are considered for this analysis.

As stated in the previous section, in order to maintain a funded ratio of 80 percent beyond 2046 and avoid insolvency, the Funding Plan would need to be extended and additional supplemental contributions would be required in perpetuity from both employers and the state. As a result, if the CalSTRS Funding Plan were to target an 80 percent funding level and keep that level beyond 2046, contributions would initially be reduced, providing relief to the state and employers through 2046. Such temporary relief would however come at the expense of much higher contributions long term.

Estimates show that in order to maintain an 80 percent funded ratio beyond 2046, additional contributions of about 4 percent of payroll would first be required in 2046. These additional contributions would quickly reduce any savings experienced prior to 2046. In addition, if contributions were set at the level necessary to keep funding levels at 80 percent in perpetuity, the UAO would be expected to grow faster than the payroll. This means that the additional contribution rate needed to keep the funding level at 80 percent would increase each year. The initial 4 percent of payroll of additional contributions needed to maintain an 80- percent level would increase over time to about 5.25 percent of payroll by 2076.

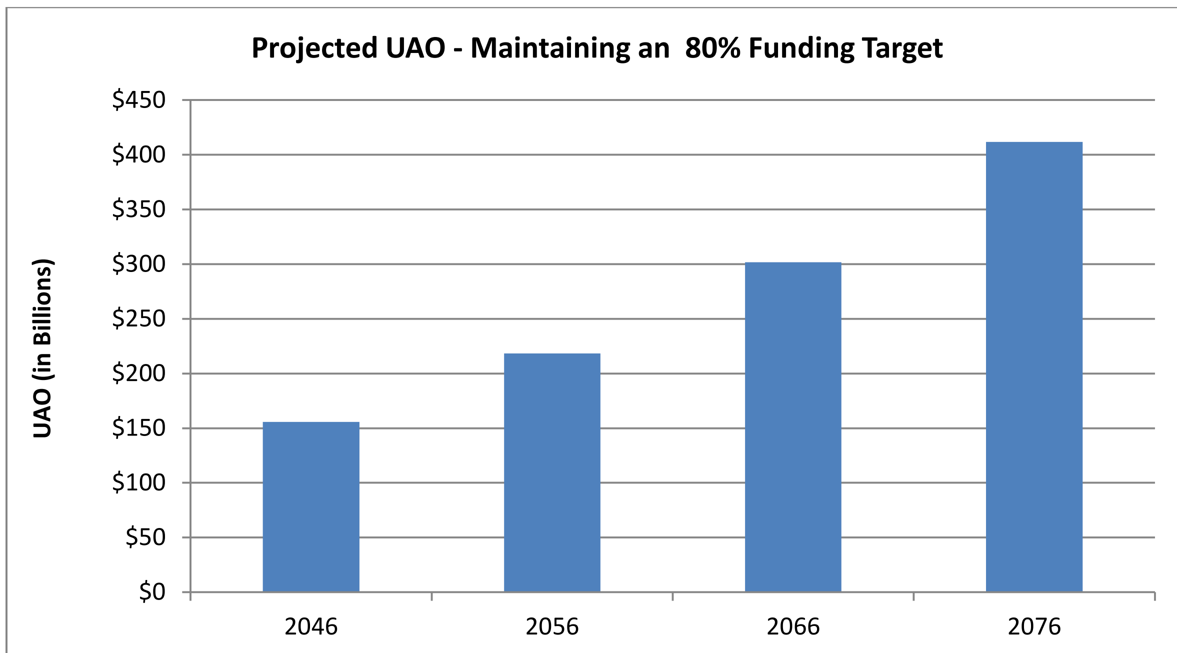
In terms of total dollars contributed towards the UAO, as the following chart illustrates, initially funding only to 80 percent saves approximately $60 billion through 2046 compared to funding toward 100 percent. However, after 2046, the additional contributions required to maintain an 80 percent funding level would quickly eliminate the savings achieved prior to 2046. By 2056, any anticipated savings would evaporate. By 2066, contributions would now be more than $60 billion over what would have been needed to achieve full funding and keep the plan fully funded beyond 2046. By 2076, total additional contributions to CalSTRS would be in excess of $170 billion.



The chart above clearly shows that any temporary relief that would be provided by reducing contribution levels in the short term would come at the expense of much higher contributions long term, shifting cost to a future generation of taxpayers.

Maintaining an 80% Funding Level Results in a Ballooning of the UAO

Targeting an 80 percent funded ratio is equivalent to accepting a UAO of 20 percent of total actuarial obligations in perpetuity. Since the total actuarial obligation is projected to grow each year, the UAO would continue to grow if CalSTRS remained 80 percent funded in perpetuity. The following chart illustrates how the UAO would be expected to increase in the future with an 80 percent funding target. Sustaining a large and growing unfunded liability in this manner would present both a financial and political risk.



The 80% Funding Myth and the Pension Protection Act (PPA)

What potentially adds to confusion around the 80 percent myth is the Pension Protection Act (PPA) of 2006 that was adopted by the federal government. The PPA was adopted in 2006 in an attempt to strengthen the long-term security of private and multi-employer pension plans. Since private companies can and often do go out of business, the intent of the PPA was to strengthen the funding of private plans by imposing a shorter funding period. These requirements do not apply to public plans like CalSTRS. The PPA contains a provision that defines an "at-risk" plan as being below 80 percent funded. It is important to realize that defining a plan that is below 80 percent funded as "at-risk" is not an acknowledgment that 80 percent funded is sufficient and an acceptable target.

The argument that the PPA implies a plan is healthy if it is at least 80 percent funded is a misreading of the rules that apply to private sector pension plans. As per the PPA, private sector pension plans are required to maintain a funding target of 100 percent of actuarial obligations and are required to amortize funding shortfalls over a seven-year period. The PPA does not allow a plan to fund to an 80 percent level. Instead, the PPA imposes restrictions on benefit improvements and requires accelerated payments if the plan is "at-risk" and its funded ratio falls below 80 percent.

If CalSTRS were held to the rules under the PPA, full funding would have to be reached in seven year rather than by 2046, resulting in much greater contribution requirements. As a comparison, if CalSTRS was funded to eliminate the UAO over a seven-year period, estimates show that the state contribution rate would need to increase to 21 percent of payroll, and the employer contribution rate would need to increase to 44 percent of payroll. In both cases, this would be a

contribution rate more than twice the current projected contribution rates. Clearly, following the rules set by the PPA to increase contribution rates to fully fund CalSTRS over a seven-year period would be a shock to district budgets and would not be a viable option.

The CalSTRS Funding Plan took a measured approach of gradually increasing contribution rates to balance the fiscal constraints of its stakeholders with the long-term sustainability of CalSTRS. Before its passage, CalSTRS was on a path towards insolvency. It is vital that the commitment to fully fund the benefits of California educators be maintained in order to ensure the long-term sustainability of the fund.

ATTACHMENT(S)

None

POWERPOINT

PowerPoint – 80% Funding Myth