

TEACHERS' RETIREMENT BOARD

REGULAR MEETING

Item Number: **5**

SUBJECT: Review of the CalSTRS Funding Plan

CONSENT:

ATTACHMENT(S): 0

ACTION:

DATE OF MEETING: January 31, 2019 / 60 mins

INFORMATION: X

PRESENTER(S): David Lamoureux/Rick Reed

PURPOSE

When the funding plan was adopted by the Legislature in 2014, it contained a provision requiring CalSTRS to provide a report to the Legislature every five years on the progress of the plan. The purpose of this item is to discuss what information should be included in the report. The first report is due to the Legislature by July 1, 2019.

BACKGROUND

CalSTRS primary goal is to ensure a financially sound retirement system for California educators and their families. Prior to 2014, the biggest challenge in this effort was that, unlike most other pension plans in California, CalSTRS lacked the authority to raise contribution rates to fund retirement benefits on a sound actuarial basis. This inability to adjust contribution rates led to a situation where the CalSTRS Defined Benefit (DB) Program was projected to deplete its assets within 30 years.

Guided by the Teachers' Retirement Board, CalSTRS committed to promote the development of a comprehensive strategy to address the long-term funding needs of the system. After years of focused discussions, stakeholder outreach, legislative visits and hearings, in June 2014 the California Legislature adopted Assembly Bill 1469, creating the CalSTRS Funding Plan. The funding plan reflects a joint commitment by teachers, employers and the state to contribute more to CalSTRS to fully fund the DB Program by 2046 and to ensure the long-term sustainability of CalSTRS. The funding plan provides CalSTRS limited ability to adjust contribution rates.

The funding plan contains a provision requiring CalSTRS to provide a report to the Legislature every five years on the fiscal health of the DB Program and the progress of the funding plan. The first report to the Legislature is due by July 1, 2019. Existing statute requires that the report compare the funding levels and projected contribution rates at the time the funding plan was enacted to those based on the June 30, 2018, actuarial valuation. The report must also indicate whether additional contributions are needed to reach full funding by 2046.

The report to the Legislature provides CalSTRS with an opportunity to go beyond the statutory requirement and include, for example, information on how the funding plan operates, the risks faced by the system and the importance of acting quickly if it was ever determined in the future that another funding solution was needed.

SUMMARY

Although the first report to the Legislature on the progress of the funding plan is due five years after its implementation, CalSTRS has been regularly monitoring the funding plan since its implementation and has been providing annual updates on its progress through the annual review of funding levels and risk report. The most recent [report](#) was presented in November 2018.

As was demonstrated in the annual review of funding levels and risk report, the funding plan, as implemented, is working. The limited rate setting authority provided to CalSTRS is currently expected to allow the DB Program to reach near full funding by 2046. The risk of low funded status or even running out of money has been considerably reduced with the adoption of the funding plan. However, risk remains in the ability of CalSTRS to achieve full funding by 2046, especially if large drawdowns like the one experienced in the 2008–09 fiscal year were to occur.

The report to the Legislature provides CalSTRS with an opportunity to increase the understanding of the funding plan and include information on how the funding plan operates and highlight the risks faced by the system.

For the report to the Legislature, CalSTRS intends to fulfill the statutory requirement by providing updated projections of contribution rates and funded levels through 2046. These projections will show the funding plan is expected to provide enough rate-setting authority to the board to allow the DB Program to reach near full funding by 2046, to the extent actuarial assumptions are met long term.

It is recommended that the report go beyond the statutory requirement and include additional information. The following additional topics are being proposed to be included in the report:

- Reasons that led to changes in contribution rates and funding levels since 2014.
- Details regarding how the funding plan operates to convey its intricacies.
- Main risks that could prevent CalSTRS from reaching full funding.
- Information on the importance of acting quickly if it is determined that another solution is needed to reach full funding.

The purpose of this item is to discuss which topics and information should be included in the report to the Legislature.

Changes Since 2014

When the funding plan was adopted by the Legislature in 2014, it was based on the June 30, 2013, actuarial valuation, which was the most recent actuarial valuation available at the time. It

is important to remember that the funding plan was developed based on the actuarial assumptions in place at that time, which included a long-term investment return assumption of 7.5 percent.

Since the passage of the funding plan, the board has taken steps to further strengthen the funding of the system. In 2015, the board recognized the importance of mitigating against equity market downturns by creating and investing in a Risk Mitigating Strategies asset class. In 2017, the board adopted new actuarial assumptions, reflecting lower future investment earnings and longer life expectancies. The long-term investment return assumption was lowered from 7.5 percent down to 7.0 percent over a two-year period, while the assumed life expectancy of CalSTRS members was increased by two to three years through the adoption of what is called a generational mortality approach.

As of June 30, 2018, financial markets had also provided better than assumed returns, positively impacting projected funding levels and contribution rates, putting the system in a stronger financial position long term. The strong economy that has persisted since the funding plan was adopted has also contributed to faster growth in CalSTRS membership and payroll, contributing in part to the projection of lower than anticipated employer rates.

These changes and events have had a combination of a positive and negative impact on funding levels and contribution rates. Today, the state contribution rate is higher than projected when the funding plan was adopted; the employer rate is projected to be lower long term than anticipated in the funding plan; and funding levels are lower. Highlighting such changes and their impact in the report to the Legislature is important and will help increase awareness of the uncertainties and risks related to the funding of retirement benefits.

How the Funding Plan Operates

The funding plan was designed to be a shared commitment between CalSTRS members, employers and the state to fully fund CalSTRS DB Program obligations by 2046. The plan laid out a measured schedule of contribution increases for both the state and employers that balanced the need for greater contributions with the need to adjust and prepare budgets for the financial impact. The funding plan also provided the board with limited authority to further increase or decrease both the state and employer contribution rates to ensure the plan remains on track and to react, as necessary, to unexpected changes in CalSTRS' economic and demographic situation. These were important changes that have helped put CalSTRS in a much stronger position.

However, the funding plan is a complex funding structure with many intricacies that often lead to what some may view as counterintuitive results. A key element of this complexity is the structure established to pay down the Unfunded Actuarial Obligation (UAO). Specifically, the plan assigned to the state responsibility for any UAO related to all service but limited to benefits that were in effect prior to July 1, 1990. The employers are responsible for any UAO that can be attributed to the new benefit structure (i.e. any benefit increases on or after July 1, 1990), but that responsibility is limited to service accrued by teachers before July 1, 2014.

There are several consequences of this complex allocation structure that are worth highlighting in the report to the Legislature.

First, the state is most impacted by changes in actuarial assumptions, by demographic experience and, more importantly, by investment experience. This is the direct result of the fact the state is responsible for funding the actuarial obligation attributable to benefits in effect before July 1, 1990, which represents more than 80 percent of the total actuarial obligation.

Also, the state contribution rate is based on a hypothetical UAO calculated by estimating what the DB Program's assets and liabilities would be today if the benefit improvements had never occurred after July 1, 1990, with the state being responsible for funding what had been promised before 1990. When applying the rules set in the funding plan, the hypothetical asset value exceeds the actual total assets of the DB Program. This means that when returns are greater or lower than the assumed 7 percent, the actuarial gains or losses are greater on the hypothetical asset value than on the actual assets of the system. As a result, the state's share of the UAO and the state contribution rate are both extremely sensitive to investment volatility.

For purposes of setting the employer contribution rate and determining the employers' share of the UAO, the employer's share of the assets is calculated as the difference between the hypothetical assets attributed to the state and the actual assets of the DB Program. Since the state's share of the assets is greater than the actual total DB Program assets, the employer's share is effectively a negative number. It is also much smaller relative to the state's share of the assets. As a result, the employer contribution rate does not fluctuate as much as the state contribution rate following investment volatility, and when it does, it reacts in the opposite direction from that of the state. The employer rate increases when the plan experiences investment returns greater than assumed, and it decreases when the return is less than assumed. This is a counterintuitive result that adds to the complexity of the funding plan.

Finally, since the funding plan was adopted, a UAO has developed that is attributable to the new benefit structure for service that was accrued by teachers after July 1, 2014, which is referred as the unallocated UAO. It is currently estimated to be about \$200 million as of June 30, 2018. The funding plan does not provide any mechanism for funding the unallocated UAO. As a result, the unallocated UAO is expected to grow to about \$1 billion by 2046. The unallocated UAO could potentially increase significantly if investment returns fell significantly below the assumed 7 percent.

It's important to note that each of the items highlighted above are a result of elements of the funding plan. Highlighting how the funding plan operates and these intricacies in the report to the Legislature should be considered.

Risks that Could Prevent Full Funding

For the last three years, CalSTRS has been monitoring the progress of the funding plan through the annual review of funding levels and risk report. This report analyzes various risks faced by

CalSTRS that could impact the ability for the DB Program to reach full funding by 2046. The most recent [report](#) was presented in November 2018.

For the report to the Legislature, it is recommended that a discussion be included to highlight the main risks that could prevent CalSTRS from reaching full funding. Even if current baseline projections show that the DB Program is expected to reach near full funding by 2046, it is important that stakeholders and the Legislature are aware of the situations that could lead to the inability by the board to set contribution rates to the levels necessary to reach full funding by 2046. Because the board has limited rate-setting authority, there will always be a risk that it may not be sufficient to reach full funding.

Even if a reference to the risk report is included in the report to the Legislature, it is recommended that a specific discussion on investment risk be included. Since the state contribution rate is most impacted by investment volatility, investment returns significantly below the assumed 7 percent could result in a situation where the board is asked to increase the state rate by the maximum allowed 0.5 percent of payroll every year through 2046. Such a situation would then leave no additional room for the board to react to future investment losses, increasing the likelihood of not being able to reach full funding by 2046.

Informing the Legislature and stakeholders of the risks that could prevent the funding plan from achieving its full funding goal will also help highlight the need to act quickly if at some point in the future it is ever determined another solution is needed. As illustrated in the next section, acting quickly will be key to minimizing potential costs long term and strengthening funding levels faster.

Importance of Acting Quickly if Another Solution Is Necessary

To demonstrate the importance of acting quickly, an analysis was performed to determine where funding levels would be today if contribution rates had been raised immediately following the 2008–09 financial crisis. For the analysis, it was assumed the board would have been able to raise the employer contribution rate by 1 percent of payroll each year and increase the state contribution rate by 0.5 percent of payroll each year. This is consistent with the existing rate-setting authority granted to the board. Member contribution rates were kept the same and increased solely in accordance with the funding plan.

The starting point for this analysis was the June 30, 2007, actuarial valuation. In that valuation, on a market value of asset basis, the DB Program was almost fully funded with a funded status of 97.1 percent. The analysis shows that had contribution rates been increased following the 2008-2009 downturn in the manner described above, the system would be in a stronger financial position today, funded at about 70 percent instead of 63 percent. Also, contribution rates for both the state and employers would be at a level just below those in place this fiscal year and would not be expected to increase any further. Today, both the state and employer contribution rates are expected to increase by at least another 2 percent of payroll over the rates in place this fiscal year.

It is recommended that the report to the Legislature include a section discussing where funding levels and contribution rates would be today had rates been adjusted following the 2008-09 financial crisis. Including such discussion will help highlight the importance and effectiveness of acting quickly if another funding solution is deemed necessary in the future.

Next Steps

In May 2019, staff will return to the board with a draft report to the Legislature based on direction received from the board at this meeting. This will provide an opportunity for the board to review the report and provide additional comments prior to its submission to the Legislature. In May 2019, the board will also receive the June 30, 2018, actuarial valuation from Milliman upon which the final report to the Legislature will be based.

ATTACHMENT

None

POWERPOINT

PowerPoint – Review of CalSTRS Funding Plan