

Nearly five years ago I delivered a memorandum to the Board that outlined my concerns about severe challenges to the financial sustainability of the Teachers' Retirement System. It offered a sober first look at the fiscal knife edge we straddle and presented an analysis that drove home the need for solutions sooner rather than later. There was a lot of torment that followed that memo. I am sure those who were then on the board or who were following the board's actions...and reading the newspapers...will remember that.

A year later I presented a follow up to my original memo to the board. That second memo received far less attention than the first but it posed a serious and important question. It is a question that I have repeated frequently since. What do we do if nothing happens?

Sadly, nothing has happened since I first asked that question. Perhaps more accurately, nothing has changed in the intervening years. Legislation has been analyzed, debated and passed. Court cases have turned back the legislation. Much has been written about Illinois' pension challenges. We remain the poster child for pension underfunding. And TRS remains balanced on that same knife edge of fiscal sustainability. Except now the edge is sharper and more threatening. The solvency analysis that Segal will present illustrates that point. Our margin of error is small and we will spend more time on this issue at the retreat next April. Meanwhile, the answer to the question -- What do we do? -- is before us today. One action we must take is to certify ever-higher required contributions from the state.

In early 2012 when I wrote that original memo, the state's required contribution was \$2.4 billion. The valuation we consider today requires that we certify a statutory contribution of nearly \$4.6 billion for fiscal 2018. That is an increase of over \$500 million from last year.

Some may point back to our August meeting and recall the \$421 million presented as an example of the impact we might expect from adopting a lower rate of return. That number was derived by applying the new assumptions to last year's valuation. We have had a flat investment year in fiscal 2016 and given the perverse nature of Illinois' statutory funding formula, the contribution for fiscal 2018 was expected to rise by roughly \$110 million even before any assumption changes or investment shortfalls. So there are no surprises here in the higher number, just hard truths.

It is worth reminding everyone that there is no way that we can invest our way out of our funding shortfall. There is no incentive to take on extra risk in the hope of a miracle. It's not going to happen. We will keep doing what we have historically. That is, earn returns over long time horizons that are greater than the rate assumed as the long term average in our actuarial model.

Taking us back to that memo of nearly five years ago, it led to the resolution adopted by the board to certify actuarially based numbers alongside the contribution required by statute. That is why you see two calculations in Segal's work and the references to "Actuarial Math 2.0", which is the board's latest revision to a responsible funding policy.

As Segal presents keep in mind some key facts and conclusions that come out of their work. These are the consequences of the fact that nothing has changed over the last five years:

1. We have less than half of the money needed to fund benefits for those already retired. The only funds we have for the future benefits of active members are their contributions. We are not accumulating any investment earnings on active member contributions. That's the message of the chart on page 83 of the valuation.
2. There is a structural imbalance that makes the funding problem worse before it gets better, even before any changes in the assumptions. Namely,

- a. Required contributions grow over 3 percent each year on average over time. As I have mentioned before the Illinois funding math prescribed in the law has done just about everything possible to back load the costs.
 - b. State revenues as forecast by COGFA grow more slowly at only a 2 percent rate or slightly more.
 - c. That indicates an ever growing strain on state revenues to fund the state's pension obligations. The unfunded liability is projected to grow until it begins a slow downward path in fiscal 2030. The worst funding strains are yet to come.
3. The extent of the Tier II members' subsidy of the state's obligation to fund Tier I shortfalls is graphically shown in the charts Segal presents on pages 70 and 71 of the valuation. They make clear that, when treated as separate member groups, a Tier II benefit is over 150 percent funded today and never falls below 125 percent while a Tier I benefit tops out at around 80 percent funded in 2045. That means when the Tier II inequities are eventually corrected, the financial hole gets deeper.
4. Even at \$4.5 billion, the statutory contribution is only two-thirds of what should be contributed to fund TRS using actuarial math. There should be no surprise that the unfunded liability continues to grow.
5. The cost of this underfunding is punishing and unforgiving – roughly three future dollars are required to make up for every dollar the state did not dedicate to TRS in the past – but should have – during decades of underfunding. By design roughly one-third of the cost of all benefits is supported by contributions from members and employers. The remaining two-thirds of the cost is designed to be funded by investment earnings over the life of the member. There is nothing inherently flawed in the design of the TRS defined benefit, but when it is not funded as required, taxpayers must make up for the earnings lost through the political failure to fund the system.
6. To understand the impact of that last point consider the following examples:

- Only 21 percent of the \$4.5 billion contribution is for the cost of the benefits to be earned in fiscal 2018. The remaining 79 percent is due to the funding shortfalls. They are financing costs, not pension costs.
- If TRS was 80 percent funded today instead of 40 percent, the required state contribution would be roughly \$2.2 billion, less than half of the \$4.5 we must certify.
- If TRS were fully funded, the required state contribution would be right around \$1.0 billion.
- Knowing all that, imagine the different tenor of the budget deliberations over the last two years had there been an extra \$2.3 to \$3.5 billion available to apply to the many needs of the state and its people. And you can roughly double that estimate of available funds when you add in the other state funded pension systems.

Certifying a statutory contribution of over \$4.5 billion may bring protests and condemnations from those who would misuse the facts to deflect attention away from the real problem. But as I said a moment ago, no one should be surprised by this. The failure of Illinois politics that led to the perpetual lack of proper funding created the problem, not investment shortfalls or poor management of the System. The contribution required for fiscal 2018 is not devastating, the decades of fiscal failures that created it are.

Nothing has changed since that first memo five years ago. So we have to certify what is necessary to sustain TRS – both the inadequate contribution prescribed by Illinois math and a proper contribution required by the sober realities of actuarial math.

I am happy to answer any questions or if there are none will turn it over to Segal for their presentation.