



Pension Fund Sustainability

Identifying Potential Risks

June 26, 2020

In May, the SERS Board generated various topics for staff as well as SERS' actuary, Cavanaugh Macdonald, to research and help aid the Board's discussion.

On June 26, the sustainability session opened with an updated risk assessment presentation from Cavanaugh Macdonald. The purpose was to identify the stressors to the System and optimize policies and procedures (assumptions, funding policy, and perhaps benefits) in order to improve sustainability and educate stakeholders of potential risks.

Todd Green, president and consulting actuary, began the presentation by highlighting the positive steps SERS has already taken to improve its long-term funding. These changes included an update to the funding policy in 2015, which allocated employer contributions to the Health Care Fund based on the System's funded ratio, and the authority granted to the Board to adjust the annual cost-of-living adjustment (COLA).

Green presented four risk scenario models for consideration.

The first scenario examined the impact on the plan's funded status from varying levels of future investment performance. The analysis assumed a median investment return for the next 20+ years of 7% based on SERS' investment structure and the projected returns from that structure. The 7% projected return was lower than the current investment return assumption of 7.50%. The analysis also assumed a reduction in the inflation rate assumption from 3.00% to 2.50%, and a reduction in the payroll growth assumption from 3.50% to 3.00%. This change would result in a decrease in investment income over a 30-year period by nearly \$8 billion. The funded status with the 7% investment return assumption was projected to be lower than with a 7.5% return assumption, with a range from 15% to 165% and a median funded ratio after 30 years of approximately 70%.

Green noted that negative cash flow is expected of all large public pension funds. In a mature system like SERS, negative cash flow is the result of more benefits being paid than what the System is receiving in employee and employer contributions.



In the second scenario, the actuaries considered the impact of a 10% decrease in the active membership on cash flow and funded status. A reduction in active membership would result in a reduction in covered payroll and funding from employee and employer contributions. The analysis showed that the funded ratio would be expected to decrease from 70.5% to nearly 60% over the next 30 years. This also would ultimately increase the amount of time necessary to completely amortize the unfunded liability.

The third scenario used a similar analysis to show the impact of a 20% decrease in active membership. Under this scenario, the funded ratio was estimated to decrease to 50% over a 30-year period.

The actuaries provided forward-looking, year-by-year detail of the projected cash flow if the active membership and payroll were to remain flat, or decrease by 10% and 20%.

Finally, the last model looked at the impact on funded status and cash flow of a lower cost-of-living adjustment (COLA) cap.

Currently, the COLA is based on the Consumer Price Index for Urban Wage Earners and Clerical Workers (CPI-W), with a cap of 2.5% and floor of 0%. If the COLA assumption is lowered to 2%, it would reduce the negative cash flow from -5.8% to -5.3% over the next 19 years, and the funded ratio is expected to stay flat.

Green concluded that benefit payments over the next 20 years will place stress on the plan. While the largest risk factor is the investment return, population decline also is a risk factor.

Following Cavanaugh Macdonald's presentation, the Board discussed data requested from staff and SERS' actuaries. [Topics](#) included:

- **Vesting Period:** The actuaries noted that increasing the vesting period from 10 to 15 years would nearly double the benefit that the fund experienced when it changed from five to 10 years. However, several factors would need to be considered. The actuaries also noted that most retirement plans have a vesting period of five years.
- **Final Average Salary:** The Board agreed that a change in the calculation of the Final Average Salary would not be beneficial.
- **Disability Benefits:** Cavanaugh Macdonald noted that disability benefits are a nominal amount of the unfunded liability; however, more disability benefits are being applied for and granted than were expected. Board members would like to examine the disability programs of other public pension systems.

The Board would like to discuss the following topics in further detail at the July session:

- The appropriate vesting period to be eligible for service retirement and disability benefits;
- The history of the 120-day rule to earn one year of service credit;
- The appropriate income replacement ratios for career and non-career employees;
- An analysis of disability programs from other public pension systems;
- The appropriate income replacement from a disability benefit; and
- A review of the current COLA calculation.

Additional materials from this session are available on the [Sustainability page](#) of SERS' website.