NHRS ... NOW YOU KNOW

Funding path is not a straight line

There's a lot of information out there regarding the New Hampshire Retirement System, some of it fact, some of it fiction. This document, along with others in the "NHRS ... Now You Know" series, is designed to provide you with straight talk about the retirement system.

It's a simple question with a not-so-simple answer: If the New Hampshire Retirement System (NHRS, the retirement system) has exceeded its assumed rate of investment return over the past decade, why has the retirement system's unfunded actuarial accrued liability (UAAL) grown?

There are two primary factors contributing to the increase in the UAAL.

The first reason is straightforward: Adoption of more conservative actuarial assumptions by the Board of Trustees in 2011, 2016, and 2020 based on the results of actuarial experience studies required by statute and the Board's Actuarial Funding Policy. Changes to the assumptions for investment returns, payroll growth, and life expectancy increased the UAAL. Regular review and, when appropriate, recalibration of actuarial assumptions is necessary to ensure that the retirement system meets its long-term funding needs. It is also consistent with the Board's constitutional obligation to adopt actuarially sound assumptions.

The second reason is the way that the liability is being paid down. Basically, there are two ways a public pension plan can pay down a liability over a closed period: either level dollar or level percentage of payroll amortization.

Under the level dollar method, the liability is paid off in equal annual payments over a closed period. Level dollar front-loads the payments required, increasing the impact on employer contribution rates in the early years, which ultimately results in decreasing inflation-adjusted payments over time. Conceptually, this method is similar to a traditional fixed-rate home mortgage. According to NHRS' consulting actuary, if level dollar amortization was in effect, NHRS employers would pay approximately $82 million more in fiscal year 2024 than what they are projected to contribute under level percentage of payroll amortization.

Under the level percentage of payroll method – which is how NHRS and most public pension plans pay down their liabilities – the stream of payments increases as the covered payroll of active members grows. For example, if the UAAL payment is 10 percent of payroll, and the annual payroll is $1 billion, then $100 million is paid toward the liability that year. As the payroll increases over a period of years, the same percentage is assessed, but more dollars are paid in. An advantage of using level percent of payroll is that it provides "intergenerational equity" – i.e. employers 20 years from now will be paying down the debt at a similar percentage as employers are today.

Because contribution amounts in total dollars are smaller in the early years of level percent of payroll funding, this results in something known as "negative amortization," which occurs whenever the payment for any period is less than the interest accrued, thereby increasing the outstanding balance of the liability. This is an expected outcome of the long-term funding plan and the other primary reason the retirement system's UAAL has increased over the past decade.

The silver lining to negative amortization under the level percentage of payroll method is that there is ultimately a crossover point where contributions begin to exceed interest and the trajectory of the liability begins a slow-but-steady decline. The crossover point for NHRS was fiscal year 2021.

The chart below illustrates the funding trajectory for a hypothetical $1 billion liability being paid off over a closed, 30-year period under level dollar and level percent amortization.

Hypothetical 30-Year Amortization of $1 Billion Unfunded Liability