

Dear Actuary:



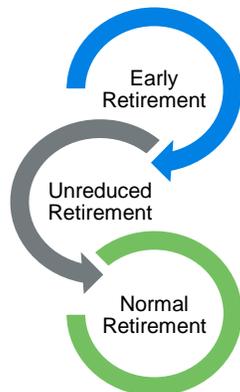
The cost of my public pension plan has increased significantly in recent years. How can I have a plan that provides a sustainable level of benefits?
– Studios in Springfield

Dear Studios,

When faced with rising pension costs, many plan sponsors are pressured to freeze plan benefits. In some cases, this is the right solution, but in others it feels like setting fire to your garage to eliminate a bug problem. Plan sponsors should first focus on understanding what drives their pension costs to high or unpredictable levels, and then determine whether there are ways to bring the costs to more sustainable levels by changing some elements of the plan's design. There are five key plan provisions that are the biggest drivers of pension costs; let's take them one at a time.

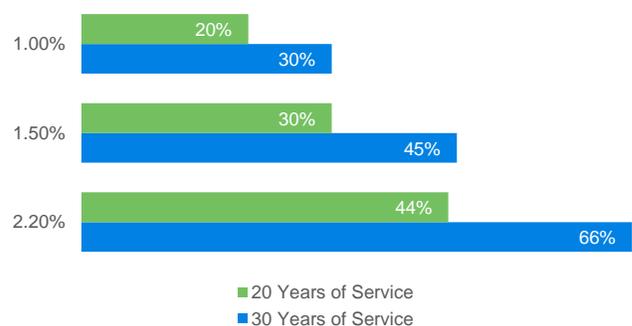
1 | Eligibility for unreduced benefits

Some public pension plans offer unreduced benefits that start when employees are as young as age 55 or sometimes even younger, especially for employees with long service or employees who work in high-risk occupations like police or firefighters. The younger the age at which benefits start, the longer the benefits will be paid to the retiree and the more expensive the pension plan will be. Reducing the availability of generous retirement benefits at younger ages could greatly decrease a plan's cost.



One way to reduce future contributions is to reduce the benefit multiplier prospectively. Assume your plan currently has a 2.20% benefit multiplier, but reduces it to 1.50% for future years. Existing members have earned benefits based on 2.20% through the date of the change, but future benefits would be based on the lower 1.50% benefit multiplier. If your plan's liability is increasing too rapidly, reducing that multiplier for future benefits will slow the liability increases. But check with your legal counsel, because in some states this isn't an option. However, you still might be able to reduce the benefit multiplier for new employees.

PERCENTAGE OF INCOME REPLACED: BENEFIT MULTIPLIER



3 | Pensionable earnings

Is the plan replacing 35% of base pay or 35% of total pay? Does the plan include accrued vacation pay or unused sick leave days? What about overtime or private duty pay? The specific type of earnings that is used



to calculate an employee's monthly pension benefit is called "pensionable earnings," and it matters a lot when it comes to

the cost of the pension plan. If employees typically retire with six months of accrued sick leave built up, their monthly benefit might be substantially higher if the unused sick leave is included in their pensionable earnings than if the unused sick leave is excluded. Consider basing the pension benefit on a portion of the earnings the plan sponsor has more control over, like base pay.

Another option is to calculate the benefit based on an employee's earnings over that person's entire career rather than using an average of earnings in the final couple of years of employment. Such "career average" plans generally result in lower benefits because average pay over a career is lower than the highest pay at the end of a career. The higher the pensionable earnings, the higher the pension benefit and the more expensive the pension plan will be.

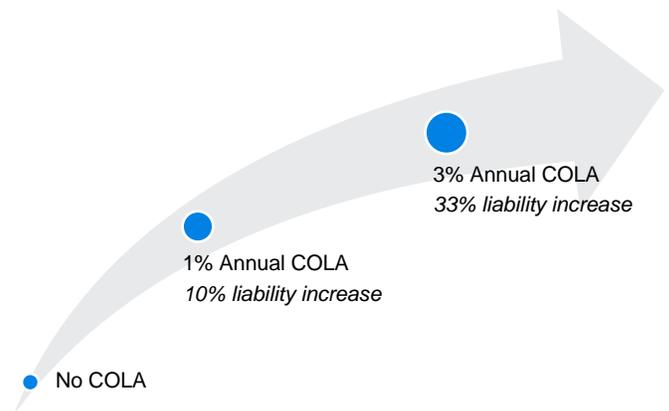
4 | The employee contribution rate

Most public pension plans require employees to share some of the cost of the plan by contributing a portion of their incomes to the plan. Every dollar that employees contribute to the pension plan is a dollar less for the plan sponsor to pay. When was the employee contribution rate determined? In many cases, longer life spans and changing patterns of turnover and retirement may have increased the total cost of the plan, and the agreed upon portion of employee contributions is no longer in line with the original intent. Clearly, the lower the employee contributions, the more expensive the pension plan will be for the plan sponsor.

5 | Cost of living adjustments (COLAs)

Some public pension plans include automatic or periodic increases to pension benefits to protect retirees against inflation. This may not seem excessive, but because the increases usually compound over time, they can drive pension costs up. For example, for a retiree who is expected to live for 25 years, an

annual 1% COLA makes the value of the retiree's benefits about 10% higher than if there was no COLA, and an annual 3% COLA makes the value of the retiree's benefits a whopping 33% higher! The more pension benefits go up over time, the more expensive the pension plan will be.



I hope you've found these explanations helpful. Understanding what drives your pension plan costs is the first step to finding ways to alleviate those costs without a total pension freeze. Remember that you should always talk to legal counsel when you're thinking about plan changes, because there are some important state and federal laws that have to be followed, as well as collective bargaining rules that you might be subject to.

Your Milliman Actuary

P.S. A shout-out to Jake Pringle, EA for providing technical assistance and some great visuals!



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To brush up on your asset smoothing options, see prior letter [here](#).

Do you have a question about your defined benefit pension plan? Write to us at dear.actuary@milliman.com.