

## **“Actuarially Neutral” DROP is a matter of opinion**

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At the recent annual training conference, I participated in a seminar devoted to Deferred Retirement Option Plans (DROP's). The seminar focused on the design and funding of this type of program for Illinois police and firefighters. One of the speakers commented that he had done some design work to make the suggested DROP plan “actuarially neutral.” But what does that concept actually mean?

In order to understand the concept of “actuarially neutral”, the first step is to understand a little about two simple but often confusing terms – “Cost” and “Contribution”. On the surface, these two terms seem to mean the same thing. Municipalities ask – “What will this type of program cost us?” What they are saying is “ How much will my contribution change if we adopt this program?” Seems the same. But from the actuarial standpoint—they are entirely different questions. “Cost” has nothing to do with actuarial calculations and “contributions” have everything to do with actuarial calculations. Confused? Let’s look at an example.

Firefighter A is 35 years old and has been on the force for 10 years. He suffers a duty disability and applies for a disability pension. What is the cost of this pension? That’s easy. We have to pay him 65% of his salary for the rest of his life plus some increases and maybe some spousal coverage if he dies, etc. We can determine the cost by waiting until the last pension payment is made and adding them all up. Can you determine the cost before the last pension payment is made? No. The cost can only be estimated not actually determined. Semantics?? Hardly. Cost is defined as money paid out not guesses about what may or may not be paid out. Let’s call the guess a “Cost Estimate” to distinguish it from the actual “Cost”.

Once we understand this, the rest is easy. Cost Estimates are just that—estimates of what something will cost. Costs are real numbers determined after the facts are in. You don’t need an actuary to determine the cost. But you need an actuary to determine the cost estimate. (Actually, an actuary is not really required, but if the estimate is to be reasonably accurate an actuary should be used because of his professional training in this type of situation). To complete the picture, the “contribution” is simply a method of budgeting the cost estimate. Individual budget methods may vary but they all achieve the same result—they pay for the “cost estimate”.

In the practical world, it is not possible to wait until the event is over to determine the cost. Otherwise, we would never have pension improvements. Therefore, we must rely on cost estimates and this is where the problems arise. Actuarially, estimates are based upon assumptions as to what will likely happen. If an

actuary assumes that you will earn 5% on your investment portfolio, he can estimate what your portfolio assets will be one year later. If another actuary assumes that you will earn 10% on your portfolio, then he also can estimate what your portfolio will be worth one year later. Both estimates may be valid. But after one year (when your portfolio earns 8%) we look at the results and conclude that both actuaries were wrong!! But this doesn't change the validity of the estimates. Both estimates may have been valid at the time they were made.

Unfortunately actuarial estimates usually are for longer periods than just one year. Actuaries estimate for 50 or 60 years into the future, make assumptions about lots of other things besides interest earnings, and generally work on averages. Differing results in the cost estimates produce differing contributions, but they do not change the actual cost. The cost is the cost and can be determined only when it is over. Cost estimates depend upon the assumptions and two actuaries often use different assumptions.

In the DROP program cost estimates, the State actuary assumes that if the DROP program as designed is implemented, then participants will not retire any earlier than they do now. Therefore, in the State actuary's opinion, there is no contribution change in adopting the DROP program. This makes the DROP program "actuarially neutral". The actuary for the municipal league, on the other hand, assumes that if the DROP program as designed is implemented, then participants will retire one or two years earlier than they do now. Therefore, in the municipal league actuary's opinion, there will be a contribution increase in adopting the DROP program. The program then is not "actuarially neutral".

This difference in assumptions (remember, neither one may be right) is the cause of the difficulty. So who do you believe? If you are a legislator, you believe the State actuary, if you are a member of the municipal league, you believe your actuary. If you are neither, you must make a decision or you could go out, and find another actuary who might make a third assumption and believe him. Such is the way of the political process—many factions arguing about something that no one is sure is right.

Just remember that the actual cost of the DROP program is really unaffected by all this actuarial bickering. If we get a DROP, then fifty years from now, we can look at the results and get a good number as to what it actually costs. In the meantime, we will have to hope that the parties are able to put their differences aside and reach an agreement on a cost estimate and a contribution so that this legislation can become law.