

SERS Liabilities by Tiers

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At the first Commission meeting I mentioned that most of the unfunded liability exposure for SERS was largely attributable to Tier 1 and that the current Tier, II-A benefit levels and funding were not the problem. I was asked to provide documentation of this to the group prior to the next Commission meeting. Attached please find the last SERS valuation dated June 30, 2008, which illustrates this point.

Actuarial Liability

The actuarial liability chart on page 9 shows total actuarial liabilities in June, 2008, \$19.2 Billion. Of that total \$14.3 billion is attributable to retirees, (most of whom were Tier I) and Tier I actives. The remaining liability is attributable to active Tier II members (\$4.0 billion) and active Tier II-A members (\$0.9 billion).

Actuarial Normal Cost

The actuarial funding method currently being used by SERS is the projected unit credit cost method, often called the level percentage of payroll method. While it tends to back-end costs to later in the amortization schedule it is designed to produce contributions as a level percent of payroll *if all actuarial assumptions are met*.

Table IV-1 on page 26 shows the normal cost for SERS participants expressed as a percent of payroll. The table shows that while Tier I normal costs are in double digits, Tier II-A had a normal cost of only 4.7% of payroll as of the valuation date. The lower costs were due primarily due to reduced benefit levels for Tier II-A, a 2% of payroll contribution rate for Tier II-A participants, as well as the fact that the average Tier II-A participant is a number of years away from normal retirement.

According to the the SERS actuaries at the time, the normal cost for Tier II-A is expected to increase as that population ages but should settle somewhere between 7% and 8% of payroll. This forecast is supported by the fact that Tier II normal cost, with its older population, was 9.75% in 2008. The difference between Tier II and II-A is the 2% employee contribution. When that is taken into account, Tier II normal cost, if it were contributory like Tier II-A, would be 7.75%--in the range of what the actuaries forecast for Tier II-A once the population ages. By comparison, the state's defined contribution retirement plan at its colleges and universities, the Alternate Retirement Plan, costs the state 8% of payroll.

Reasons for SERS Unfunded liabilities

Four factors have led to the increasing unfunded liabilities of SERS: long periods of not fully funding Tier I and to some extent Tier II; cyclical Retirement Incentive Plans

(every five to six years); the chosen actuarial cost method which back-loads costs to the end of the amortization period; and investment losses. The actuaries “smoothed” the actuarial losses (and gains) by a method where 20% of the loss is included in the next year and 20% of the remaining loss in each of subsequent years (20% of the remaining 80% in year 2 or 16%, and so on until the amount approaches zero). This method results in losses (or gains) being spread over more than a decade after they have occurred.

The impact of the SERS smoothing methodology is illustrated by the “Historical Rates of Return” chart on Page 8.

The smoothing of investment losses in 2002 and 2003 and the 2003 Retirement Incentive Plan, along with the chosen actuarial cost method, have resulted in steadily increasing unfunded liabilities illustrated on page 10—even though the actuarially required contributions were made in each of those years.