

Deferred Annuity Assumption

Overall Summary

What is the Deferred Annuity Assumption and how is it Used?

This assumption is used to anticipate the behavior of members who leave employment with greater than 20 Years Of Service (YOS) and defer retirement.

Specifically, terminated members of the Public Employees' Retirement System (PERS) Plan 3, the Teachers' Retirement System (TRS) Plan 3, the School Employees' Retirement System (SERS) Plan 3, and the Law Enforcement Officers' and Fire Fighters' Retirement System (LEOFF) Plan 2 with at least 20 YOS may qualify for additional benefits if they defer their retirement benefit. For each year after termination that the member defers retirement, the member's benefit is increased by 3 percent.

This increase creates a cost to the system so we use an assumption to estimate the cost.

High Level Takeaways

Using the most recent data, the behavior of members is very similar to the current assumption and we have made no changes.

Assumptions

We assume that for members of all Plans 3, the younger the member is at termination the more likely he or she is assumed to defer retirement and take advantage of the 3 percent COLA increase.

For LEOFF 2, we assume no members defer retirement when they leave after attaining age 50 with 20 YOS.¹ Since LEOFF 2 members receive unreduced benefits at age 53 with 20 YOS, and the early retirement reduction of 3 percent per year is the same as the Cost Of Living Adjustment (COLA) increase, there is less incentive to delay retirement than in the Plans 3.

Except as noted, all assumptions used in the development of the Deferred Annuity Assumption match those disclosed in the [2012 Actuarial Valuation Report](#).

General Methodology

We looked at the current inactive population of those already retired or were eligible to retire (i.e., were at least age 55 and 20 YOS). We determined the ratio of those who retired at each age versus those who deferred their benefit. We then created a series of age-based assumptions that approximated the curve created by the ratios.

Data

We utilized the most recent valuation data for all Plan 3 terminated vested and retired members with greater than 20 YOS but less than 30 YOS. No special data was added for this assumption, and no data was removed.

¹This is the earliest date that LEOFF 2 members can qualify for early retirement.

Law changes

Since the last study, no law changes have affected this assumption.

Results

The behavior of members using the most recent data is very similar to the current assumption, and we have made no changes.

The table to the right shows the prior valuation assumption, which is the probability the member will defer retirement to age 65, and the rates of deferral for each age we studied. The results were very close to the prior valuation assumption so we did not feel a change was needed.

Probability of Deferring Retirement to 65	
Age	Rate
55	0.85
56	0.85
57	0.75
58	0.75
59	0.75
60	0.6
61	0.4
62	0.4
63	0.2
64	0.15