

Frequently Asked Questions: Assumed Rate

1. What is the “assumed rate”?

The assumed rate is the rate of investment return (including inflation) that the PERS Fund’s regular account is expected to earn over the long term. Oregon Administrative Rule 459-007-0001(2) states: “Assumed rate” means the actuarial assumed rate of return on investments as adopted by the Board for the most recent actuarial valuation.

2. How is the assumed rate determined?

The PERS Board decides on the assumed rate based on:

- The long-term projection of investment returns based on the portfolio allocations of the Oregon Investment Council, and
- Independent analysis by the PERS actuary, Mercer, of those projected returns from that allocation, again over a long-term investment horizon.

3. What is the current assumed rate?

The current assumed rate is 8 percent and has been in effect since 1989. Historical assumed earnings rates and the periods to which they apply are:

- 5 percent for 1971-1974
- 7 percent for 1975-1978
- 7.5 percent for 1979-1988
- 8 percent for 1989 – present

4. When is the assumed rate set?

The assumed rate is reviewed and approved by the PERS Board every two years as part of the Experience Study.

5. What happens if the assumed rate changes?

The assumed rate is used when crediting Tier One regular accounts with annual earnings. If the rate changed, annual earnings would be credited based on that new rate.

The assumed rate is also used to credit pro-rated earnings to a Tier One member’s regular account upon retirement or a withdrawal, so those earnings would be pro-rated at the new assumed rate.

When a Tier One or Tier Two member retires, their account is annuitized based on the assumed rate to calculate their retirement benefit. Changing the assumed rate means using new actuarial factors, and that would change the amount of the benefit. This change would have the biggest effect on Money Match or Formula Plus Annuity benefit calculations.

The assumed rate also is used to discount system liabilities when setting employer rates. If the earnings assumption is lowered, the amount that must be contributed increases to cover the reduced earnings projection. If the assumed rate is increased, the amount that must be contributed decreases due to the projected increase in earnings.

6. What is the earliest the assumed rate could change?

The PERS Board is scheduled to decide on the assumed rate at its July 29, 2011 meeting and could set a date for a new rate to become effective, if the rate is changed.

7. What is the connection between the assumed rate and actuarial equivalency factors (AEFs)?

When retirement benefits are calculated using an account based method such as Money Match and Formula Plus Annuity, or adjusted for benefit payment options, actuarial equivalency factors (AEFs) are used to determine the benefit amount. Actuarial equivalency factors (AEFs) are based on two primary variables:

- 1) expected member longevity (how long members are expected to live) and
- 2) the assumed earnings rate (how much the member's account balance will earn during retirement).

When either the mortality or assumed earnings assumptions are changed by the Board, the AEFs must be updated. The recalculated AEFs are then used to calculate the benefits of future retirees. The actuary will report recommended changes to the AEFs, if necessary, to the Board in November 2011. If the AEFs are changed, they would become effective January 1, 2012.

8. If I am receiving installment payments of my account because I chose a lump- sum option, will I be affected by a change to the assumed rate?

Yes, if you are a Tier One member. Earnings are credited to the remaining balance of your account and distributed with your last installment. A change to the assumed rate will prospectively change the earnings rate applied to your remaining account balance. Note that monthly benefit payment amounts for members who retired before the assumed rate changes will not be affected, as those benefits were set using the actuarial factors in place when they retired.

9. Does the assumed rate affect a retirement benefit if the member's benefit is based on the Full Formula method?

The basic Full Formula benefit is based on final average salary, years of service, and a statutory factor. None of those elements are affected by a change in the assumed rate. However, if you elect a benefit option, actuarial equivalency factors are applied and a change to the assumed rate would affect those factors (see Question 7).

10. Are employer contribution rates affected if the assumed rate is changed?

Yes. Employer contribution rates are based on the balance in the employer's reserve earning the assumed rate in the future; if that assumed rate changes, employer contribution rates will change to reflect the different future earnings assumption.

11. Can you show an example of the impact of a change in the assumed rate?

Mercer provided an example at the May 26, 2011 PERS Board meeting. The example shows how using an assumed rate of 7.5 percent instead of the current 8 percent would affect a future retiree under the Money Match formula.

Assumptions used in example:

- Tier One general service member
- Age 60; 26 years of PERS projected service at the end of 2011
- \$70,700 projected 2011 salary
- \$197,000 accumulated Tier One member contribution account balance by end of 2011
- Projected to retire under Money Match

Benefit Start Date	July 1, 2011	December 31, 2011	January 1, 2012	July 1, 2012
Assumed Rate	8%	8%	7.5%	7.5%
Starting Benefit	\$2,880	\$3,010	\$2,880	\$3,010

The example shows that it would take an additional six months without retirement (until July 2012) for the December 2011 initial benefit level to be reached.