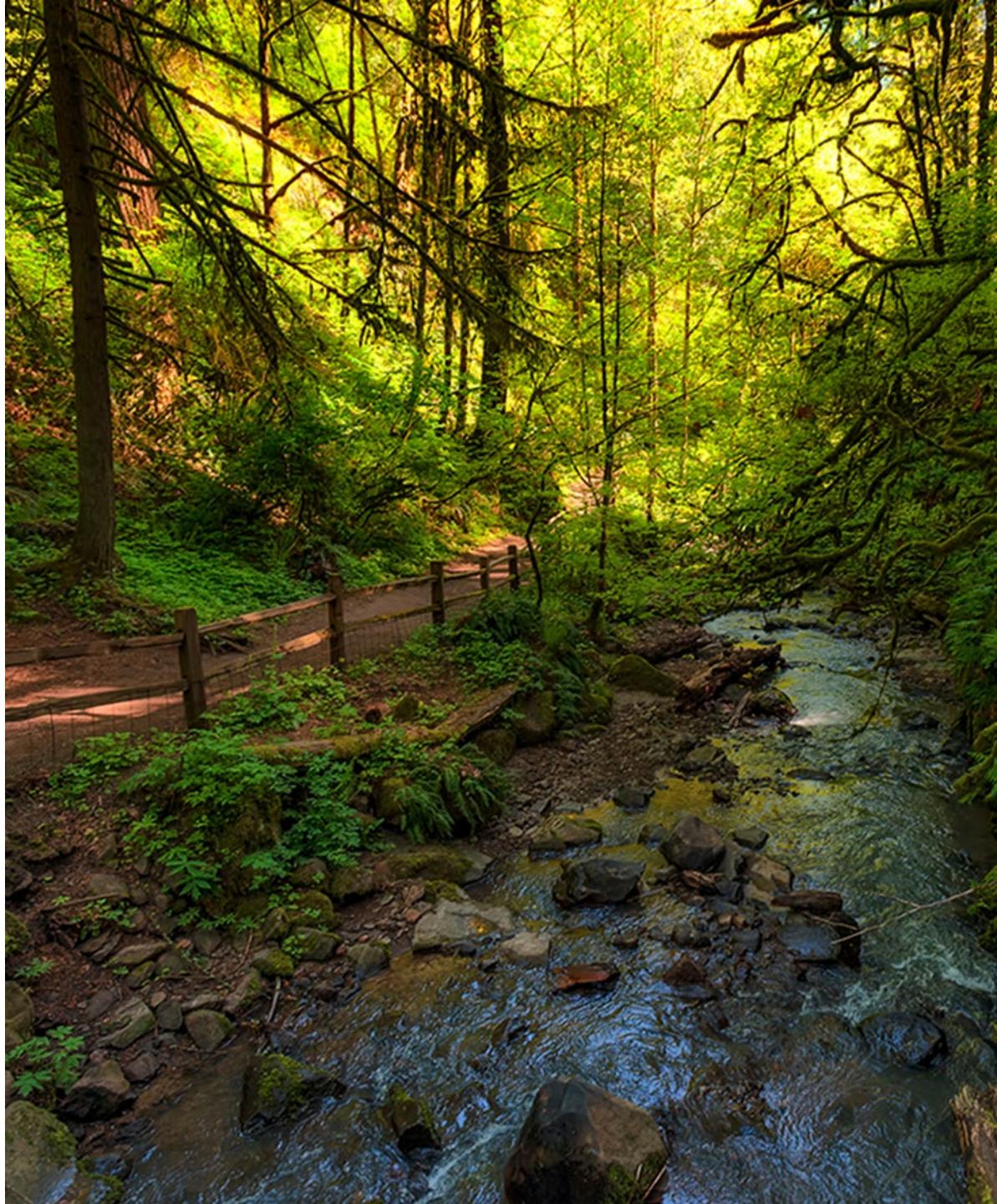




Preliminary changes to actuarial methods and assumptions

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September 30, 2025



Agenda

- Statutory requirement to report
- Board guiding principles
- Economic assumptions (non-investment)
- Assumed rate of return
- Rate collaring
- Amortization periods
- Actuarial impact
- Appendix: detailed changes

Statutory requirement to report

- This report is provided in accordance with Section 57 of Senate Bill 1049 (2019) (Chapter 355, 2019 Oregon Laws), which requires PERS to submit this report to the Joint Interim Committee on Ways and Means at least 30 days prior to the final adoption of actuarial methods and assumptions.
- Preliminary adoption took place at the July 25, 2025 PERS Board meeting.
- Written report was submitted to the Joint Interim Committee on Ways and Means on August 1, 2025.
- Final adoption took place at the September 26, 2025 PERS Board meeting.

Board guiding principles

The PERS Board attempts, when adopting actuarial methods and assumptions, to balance the following board's guiding principles within its funding policy (PERS Board Policy 1.03.03.01.001):

- Transparency
- Predictable and stable rates
- Protect funded status
- Equitable across generations
- Actuarially sound
- Governmental Accounting Standards Board compliant

Economic assumptions

| | 12/31/2023 Valuation assumptions | 12/31/2024 Valuation proposed assumptions |
|-------------------------|-------------------------------------|--|
| Inflation | 2.4% | 2.4% |
| Real wage growth | 1.0% | 1.0% or lower |
| System payroll growth | 3.4% | 3.4% or lower |
| Administrative expenses | \$64 million | \$72 million |

Mortality assumption

As per ORS 238.607, the board must use the best actuarial information on mortality available at the time.

For each group, the mortality assumption consists of two parts:

- A **base table** – for a given age, lists a probability of death at that age.
- A **projection scale** – modifies base table entries to reflect anticipated continued mortality improvement over time.
 - Reflects the long-term historical trend that a new retiree today will have a longer life expectancy than a new retiree 25 years ago, and that a new retiree 25 years from now is reasonably anticipated to have a longer life expectancy than a new retiree today.

The board adopted the use of the new “Pub-2016” family of base mortality tables from the Society of Actuaries Public Plans Mortality Study published in May 2025.

- Replaces the “Pub-2010” set of tables published in January 2019.
- Generally, the updated base tables show slightly shorter life expectancy for most groups versus the projected version of Pub-2010 tables; exception is male public safety.

The actuaries reviewed and adjusted the selected base tables to align with actual observed Oregon PERS experience.

Individual member merit and longevity salary increase assumption

Higher “select assumption”

- The actuaries reviewed long-term merit and longevity assumptions based on their normal-course process for review and updates and made minor changes to lower school district salary assumptions.
- The actuaries considered recent high inflation and job market pressures which lead to unusually high salary increases for a portion of PERS actives in 2023 and 2024.
- Aware of these agreements, the board adopted a special “select assumption” of an additional 2% merit and longevity increase to apply for the 2023, 2024, and 2025 valuations.
 - This reduces the potential for valuation liability losses as new agreements come into effect.

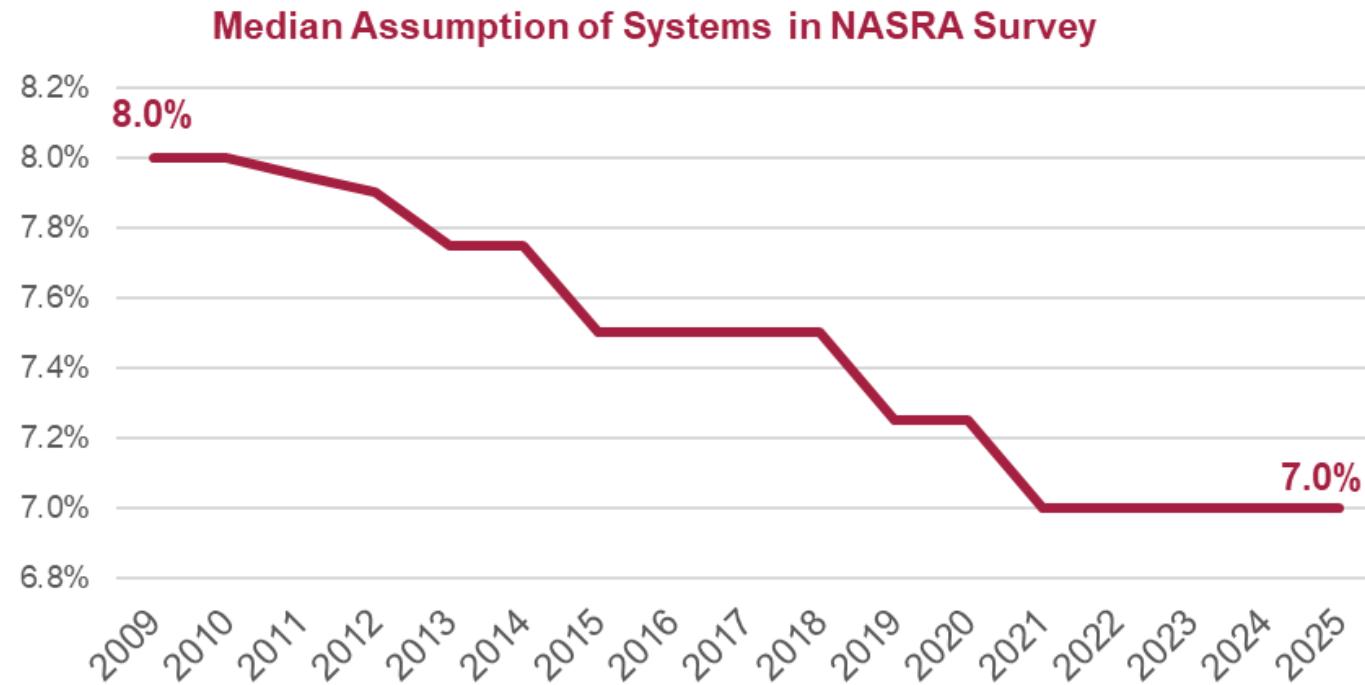
Assumed rate of return

Uses of the investment return assumption

- As an actuarial “discount rate” for establishing the:
 - Actuarial accrued liability, which is a net present value.
 - Associated unfunded actuarial liability (UAL) or actuarial shortfall.
- Guaranteed crediting level for regular Tier One active member account balances.
- Annuitization rate for converting member account balances to lifetime money match monthly benefits.

Assumed rate of return comparison

- There has been a downward trend in public plan return assumptions, with a current median assumption for large public systems of 7.00% and a mean average rate of 6.91%.
- While capital market expectations have increased recently, with limited exceptions large systems have not responded with increased return assumptions.



Content provided by Milliman, PERS' actuarial firm.

Assumed rate of investment return remains 6.9%

- Due to recent changes in financial markets, capital markets outlooks currently show lower expected investment returns than the last assumption review (7.3% vs 7.6%).
- Results based on different dates may look significantly different due to the speed with which markets changed.
- Lowering the assumed rate for evolving expectations took a decade. While outlooks have risen, significant volatility and uncertainty remain.
- If 2025 investment returns are strong, return expectations may be lower at the rate setting actuarial valuation date of December 31, 2025.
- Actuarial Standards of Practice allow assumptions, including assumed investment returns, to build in a margin for adverse deviation, if desired. This margin increases the chance actual returns exceed the assumption.
- While median forward-looking expectations are slightly above the current 6.9% investment return assumption, the board elected to leave the assumption unchanged. This is consistent with other large pension systems, which generally have not increased their return assumption.

Amortization periods

The PERS Board uses a level percent of pay with layered fixed periods methodology to amortize unfunded actuarial liabilities.

Tier 1 and Tier 2:

- One-time reamortization over 22 years as of December 31, 2019, per Senate Bill 1049 (2019).
- Resumed 20 years in 2021 as per ongoing board policy.

Oregon Public Service Retirement Plan (OPSRP):

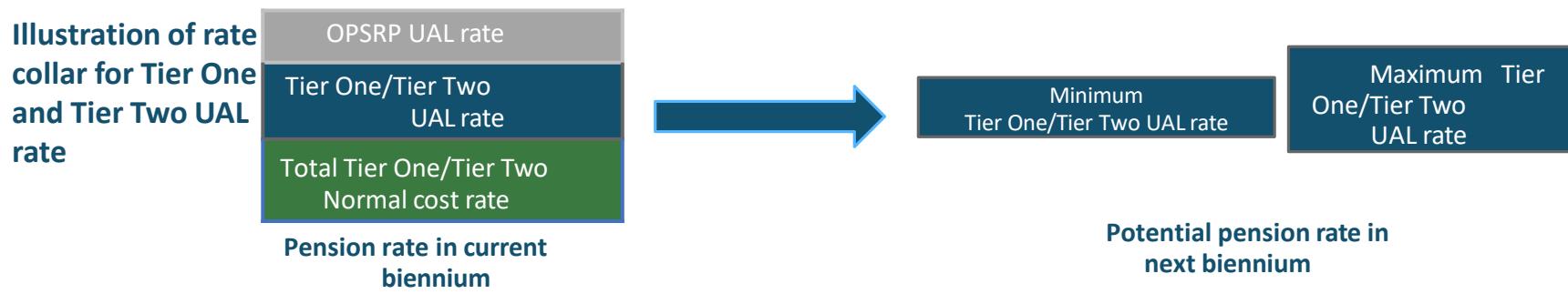
- Continue with 16-year amortization period.

Retirement Health Insurance Account (RHIA) and Retirement Health Insurance Premium Account (RHIPA):

- Continue with 10-year amortization period. When funded status is over 100% at a rate-setting valuation, amortize the actuarial surplus over Tier 1 and Tier 2 payroll using a rolling 20-year amortization basis.
- Allow the resulting negative UAL Rate to offset the normal cost for the program, but not below 0.0%.

Confirmation of rate collar methodology

- Rate collar focuses on the biennium-to-biennium change in the UAL rate component.
 - Normal cost rate component is always paid in full and is not subject to a rate collar limitation.
- The maximum biennium to biennium change in UAL rate permitted by the rate collar is:
 - State and Local Government Rate Pool and School District Pools:
 - Tier One and Tier Two UAL Rates: 3% of pay.
 - OPSRP UAL rate: 1% of pay.
 - Tier One and Tier Two UAL Rates of independent employers: greater of 4% of pay or 1/3rd of the difference between the collared and uncollared Tier One and Tier Two UAL Rates at the last rate-setting valuation.
- UAL rate is not allowed to decrease at all unless funded status excluding side accounts is at least 87%, and a full collar width decrease is not allowed unless funded status is at least 90%.



Content provided by Milliman, PERS' actuarial firm.

Actuarial impact

Liabilities

| 12/31/2024 Accrued liability | Assumed return 6.9% |
|---|---------------------|
| Current assumptions | \$109.7 billion |
| Mortality | (\$0.9 billion) |
| All other demographic assumptions | (\$0.1 billion) |
| Revised assumptions (before assumed return) | \$108.7 billion |
| Assumed return | \$0.0 billion |
| Revised assumptions | \$108.7 billion |

Actuarial impact

Contribution rates

| | Assumed return 6.9% | |
|-------------------|---------------------|---------------|
| | UAL | Normal cost |
| Mortality | (0.4%) | 0.0% |
| Other assumptions | 0.0% | (0.1%) |
| Assumed return | <u>0.0%</u> | <u>0.0%</u> |
| Total | (0.4%) | (0.1%) |
| Combined total | | (0.5%) |

OREGON PERS

PUBLIC EMPLOYEES RETIREMENT SYSTEM



Thank you



Appendix (2024 Experience Study)

Economic assumptions

- The **current investment return assumption of 6.90%** per year is lower than the median expectation based on an analysis of PERS's current target asset allocation using several capital market outlook models.
 - The median annualized geometric return for the 10-year outlook developed by the Oregon State Treasury in collaboration with the Oregon Investment Council advisors Meketa and Aon was 7.3%, with an underlying inflation assumption of 2.3%.
 - The median annualized geometric return for a 10-year time horizon based on Milliman's December 31, 2024 capital market outlook was 7.07% and for a 20-year time horizon was 7.39%.
 - However, significant volatility and uncertainty remain. **The current assumption of 6.90% continues to be reasonable.**

Appendix (2024 Experience Study)

Economic assumptions (continued)

- Maintain the **system payroll growth assumption of 3.40%**.
- Update the assumption for future administrative expenses.
- Update the RHIPA health cost trend (e.g., healthcare cost inflation) assumption.

Appendix (2024 Experience Study)

Demographic assumptions

- Adjust mortality assumptions to use the new “Pub-2016” base tables, matched to observed PERS-specific experience.
- Increase the individual member salary increase assumption’s merit and longevity component for one member category based on observations of the last 12 years of experience. The individual member salary increase assumption consists of the sum of inflation, real wage growth, and merit/longevity components, with the latter varying by member. We also recommend maintaining an assumed additional 2% annual increase specifically for calendar year 2025 above the long-term assumptions, which was first adopted in the 2022 Experience Study to reflect significant bargained increases already known at that time.
- Adjust retirement rates for certain member categories and service bands to more closely align with recent and expected future experience.

Appendix (2024 Experience Study)

Demographic assumptions (continued)

- Lower assumed rates of ordinary (non-duty) disability incidence to more closely match recent experience.
- Adjust the Tier One and Tier Two unused sick leave assumption for one member category to reflect recently observed experience.
- Decrease the likelihood of program participation for non-disabled and disabled retirees in the RHIA retiree healthcare program.
- Decrease the RHIPA likelihood of program participation assumption for most service bands.