ACTUARIAL ASSUMPTIONS OR METHODS

To calculate the contribution rates necessary to pre-fund a plan's benefits, an actuary uses an actuarial cost method, a funding policy, economic assumptions, and demographic assumptions. The actuary may also use an asset valuation method other than market value. The section below lists the methods and assumptions that change regularly or are new since the last AVR. Please see our Actuarial Methods webpage for descriptions of the actuarial cost methods and asset valuation method we use for this valuation, and please see our Actuarial Assumptions webpage for descriptions of all remaining assumptions.

CHANGES IN METHODS AND ASSUMPTIONS SINCE THE LAST VALUATION

- We updated our valuation programming to reflect recent high levels of inflation.
  - As discussed on our webpage, annuitants in Plans 2/3 and WSPRS Plan 1 receive annual COLAs up to a cap of 3.00%. Excess inflation above 3.00% is "banked" for future use when inflation is less than 3% for those annuitants.

    The prescribed future inflation assumption is 2.75%; however, the current annuitants have experienced high levels of banked inflation with some annuitants currently banking as much as approximately 10% during Calendar Years 2021 through 2023. See link for historical inflation.

    To value the current levels of COLA "banking" we modeled all annuitants in the applicable plans, as of our measurement date, will receive a 3.00% COLA for the duration of their expected lifetime. This represents our expectation of future inflation to be 2.75% combined with the current levels of "banking". No change in valuation software programming was made for members not currently in receipt of retirement benefits since the COLA banking only applies to members in receipt of benefits.

    LEOFF 1 annuitants also receive a COLA based on inflation but are not subject to a cap. For these members, we modeled the COLA of 5.52% they received on April 1, 2024.
- We corrected a programming error in TRS 1, introduced during the 2022 AVR, regarding eligibility determination for minimum benefits.
- We modified the methodology for determining the ten-year rolling amortization rate of the PERS 1 and TRS 1 Base UAAL. When determining the remaining UAAL, we included future receivable contributions between our measurement date of June 30, 2023, and the adopted contribution rates effective date of July 1, 2025, in PERS and PSERS and September 1, 2025, in TRS and SERS.
  - To determine the present value of future Base UAAL contributions (labeled "Contributions Receivable Adjustment" in Amortization of the Plan 1 UAAL table), we projected future salary base for employers collected UAAL forward from the valuation measurement date using our General Salary Growth and Growth in Membership assumptions. This salary was applied to the Base UAAL rates prescribed under ESSB 5294 (Chapter 396, Laws of 2023). Lastly, we found the present value of these contributions as of the valuation measurement date using our Investment Rate of Return assumption.
  - This change does not impact the fixed ten-year contribution rates for past benefit improvements nor minimum rates under the funding policy.
- We updated our valuation to reflect legislation passed during the 2023 Legislative Session.
  - SB 5350 (Chapter 397, Laws of 2023) provided PERS Plan 1 and TRS Plan 1 annuitants who are not receiving a basic minimum, alternate minimum, or temporary disability benefit with a one-time permanent 3% increase to their monthly benefit, not to exceed a maximum of $110 per month. We updated our valuation programming to reflect this legislation.
  - SHB 1056 (Chapter 410, Laws of 2023) allows 2008 Early Retirement Factors (ERF) recipients in PERS, TRS, and SERS, to return to work with a DRS employer up to 867 hours before reaching age 65 and increases benefits for recipients of the 2000 ERFs hired on or after September 1, 2008. Our valuation programming did not require changes to reflect the new return to work rules. The increases to benefit for eligible annuitants is effective during FY 2024 and will be reflected in our

valuation data beginning with the June 30, 2024, measurement date. To reflect this change in our valuation, we relied on the prepared fiscal note during the 2023 Legislative Session.

- SHB 1007 (Chapter 18, Laws of 2023) expands the definition of veteran to include individuals who received an Expeditionary medal (or badge) during any armed conflict and expands eligibility for IMSC. We study rates of IMSC during our demographic experience study with the next study scheduled to begin during FY 2025. To reflect this change in our valuation in the interim, we relied on the prepared fiscal note during the 2023 Legislative Session.
- House Bill 1055 (Chapter 199, Laws of 2023) allows existing Public Safety Telecommunicators (PSTs) who are in PERS 2/3 the opportunity to prospectively transfer into PSERS. Newly hired PSTs will also become PSERS members instead of PERS members. The transfer window for eligible members takes place during FY 2024 and any changes will be reflected in data starting with the June 30, 2024, measurement date. To reflect this change in our valuation in the interim, we relied on the prepared fiscal note during the 2023 Legislative Session.

❖ We corrected our methodology for determining employer contribution rates in TRS 2/3 in the event the member calculated normal cost exceeds the member maximum contribution rate.

❖ We updated the minimum contribution rate calculation for LEOFF 2 to reflect changes enacted during the 2022 Legislative Session. We determined the minimum contribution rates calculated will be offset by 0.75% through the 2033 valuation. We assume the last biennium of rate offsets would be the 2035-37 Biennium.

- SHB 1701 (Chapter 125, Laws of 2022) directed an offset to minimum contribution rates to go into effect July 1, 2025 (see Section 8) in order for the minimum contribution rates to not increase for current LEOFF 2 members as a result of the benefit improvements contained within the bill.
- To determine the increase to the minimum contribution rates due to the benefit increases, we relied on our 2021 AVR when the new benefit improvements were first programmed. The entry age normal cost contribution rates, used to inform the LEOFF 2 minimum rates, increased by 0.75% due to the benefit improvements under this bill. Therefore, we selected a 0.75% offset to be applied to the base minimum contribution rates.
- This offset was intended to reduce future costs for members participating in LEOFF Plan 2 at the time these benefit improvements were enacted, approximately the end of FY 2022. To determine how long this offset should be applied, we relied on the remaining average future working lifetime of these members as of our June 30, 2021, measurement date, approximately 15 years. We will include the 0.75% offset in our rate calculations used to inform contribution rate adoption through the 2035-37 Biennium. This represents 15 years of contribution rate collection from the effective date of the benefit improvement.

OTHER KEY CONSIDERATIONS

❖ We considered but did not make changes to our model to reflect anticipated increases to salaries in PSERS, LEOFF, and WSPRS due to the 2023-25 Collective Bargaining Agreements. We will continue to monitor short-term salary increases and may make temporary, one-time assumption changes when deemed necessary.

❖ We considered but did not make an adjustment for SHB 2357 (Chapter 237, Laws of 2024) that enacts a non-pensionable longevity bonus for commissioned Washington State Patrol troopers. This legislation could impact retirement behavior. We will continue to monitor retirement rates and may make adjustments in the future.

LDROM METHODOLOGY

To select the discount rates for the LDROM we relied on US Treasury yields as of our measurement date. ASOP 4 directs the use of discount rates based on low-default-risk fixed income securities with cash flows that are reasonably consistent with the timing of benefits that are expected to be paid in the future. We selected US Treasury yields as the underlying basis for the discount rate for this measurement because they represent low-default fixed income securities, and we believe they are commonly understood by our readers.

To calculate discount rates that are reasonably consistent with the timing of benefits expected to be paid in the future for each plan, we projected future annual benefit payments and determined a corresponding annual discount rate based on linear interpolation of the US Treasury yield rates. We used these annual rates to discount the future payments to our measurement date of June 30, 2023. We then calculated a single discount rate applied to all future cashflows that would provide the same present value of future benefits. Under this approach, PERS 1, TRS 1, and LEOFF 1 have a LDROM discount rate of 4.0% while all other plans have a discount rate of 3.9%.

COMMENTS ON VALUATION MODEL

As required under ASOP No. 56 – Modeling, we share the following comments related to our reliance on the ProVal® software developed by Winklevoss Technologies.

- We understand this software model was primarily created for use by actuaries when performing valuations and projections of pension and retiree medical plans. The use of the model for this analysis is appropriate given its intended purpose.
- To assess the general operation of the model, we reviewed the output for reasonableness. This includes comparing the results to our simplified estimates done in Microsoft Excel and examining sample lives to confirm the programming is working as intended. We are not aware of any known weaknesses or limitations of the model that have a material impact on the results.
- The PFC hires auditors to independently review and replicate the results of rate-setting valuations. This process provides an additional reasonableness check of the model output.

Additionally, we considered how the use of different inputs to the model (e.g., data/assumptions/provisions) produce different results and evaluated the relative impacts to our expectations. This allows us to gain a deeper knowledge of the model's important dependencies and major sensitivities.

SUMMARY OF PLAN PROVISIONS

The summary of key plan provisions used in the actuarial valuation are provided in two sets of tables. The following tables contain plan provisions that can change frequently while the provisions that change less frequently can be found on our Summary of General Plan Provisions webpage.

These tables and those on our website present high-level summaries and are not meant to be exhaustive lists. For complete details of plan provisions, please refer to the statutes governing the systems or contact the plan administrator (DRS). In the unlikely event that information contained in these summary tables conflicts with state law, the law takes precedence.

Summary of Frequently Changing Plan Provisions			
PERS	**Plan 1**	**Plan 2**	**Plan 3**
COLA	$2.85* per Month per YOS on 7/1/24	Lesser of CPI** or 3%	Lesser of CPI** or 3%
Minimum Benefit per Month	$75.80 per YOS on 7/1/24, $2,268.87* for Select Annuitants	N/A	N/A
Material Plan Provision Changes since Last Rate-Setting Valuation	Plan 1 COLA 3% Increase on 7/1/23 & 7/1/24 (C 397, L 23) & (C 255, L 24) Reduced Saving Fund Regular Interest (WAC 415-02-150)	Reduced Saving Fund Regular Interest (WAC 415-02-150) Reduction of Postretirement Employment Restrictions (C 410, L 23)	Reduction of Postretirement Employment Restrictions (C 410, L 23)
Significant Plan Provisions Not Included in This Valuation	None	None	None

**Minimum COLA payable to qualified members only; increases by 3% annually. The Uniform COLA was removed under C 362, L 11.*

***CPI: Urban Wage Earners & Clerical Workers, Seattle-Tacoma-Bellevue, WA — All Items.*

Summary of Frequently Changing Plan Provisions *(Continued)*			
TRS	**Plan 1**	**Plan 2**	**Plan 3**
COLA	$2.85* per Month per YOS on 7/1/24	Lesser of CPI** or 3%	Lesser of CPI** or 3%
Minimum Benefit per Month	$75.80 per YOS on 7/1/24, $2,268.87* for Select Annuitants	N/A	N/A
Material Plan Provision Changes since Last Rate-Setting Valuation	Plan 1 COLA 3% Increase on 7/1/23 & 7/1/24 (C 397, L 23) & (C 255, L 24) Reduced Saving Fund Regular Interest (WAC 415-02-150)	Reduced Saving Fund Regular Interest (WAC 415-02-150) Reduction of Postretirement Employment Restrictions (C 410, L 23)	Reduction of Postretirement Employment Restrictions (C 410, L 23)
Significant Plan Provisions Not Included in This Valuation	None	None	None

**Minimum COLA payable to qualified members only; increases by 3% annually. The Uniform COLA was removed under C 362 L 11.*

***CPI: Urban Wage Earners & Clerical Workers, Seattle-Tacoma-Bellevue, WA — All Items.*

Summary of Frequently Changing Plan Provisions *(Continued)*		
SERS	**Plan 2**	**Plan 3**
COLA	Lesser of CPI* or 3%	Lesser of CPI* or 3%
Minimum Benefit per Month	N/A	N/A
Material Plan Provision Changes since Last Rate-Setting Valuation	Reduced Saving Fund Regular Interest (WAC 415-02-150) Reduction of Postretirement Employment Restrictions (C 410, L 23)	Reduction of Postretirement Employment Restrictions (C 410, L 23)
Significant Plan Provisions Not Included in This Valuation	None	None

**CPI: Urban Wage Earners & Clerical Workers, Seattle-Tacoma-Bellevue, WA — All Items.*

Summary of Frequently Changing Plan Provisions *(Continued)*	
PSERS	**Plan 2**
COLA	Lesser of CPI* or 3%
Minimum Benefit per Month	N/A
Material Plan Provision Changes since Last Rate-Setting Valuation	Reduced Saving Fund Regular Interest (WAC 415-02-150) Modified the definition of "Veteran" (C 18, L 23) & (C 146, L 24) Expansion of PSERS Eligibility (C 199, L 23) & (C 359, L 24)
Significant Plan Provisions Not Included in This Valuation	None

**CPI: Urban Wage Earners & Clerical Workers, Seattle-Tacoma-Bellevue, WA — All Items.*

Summary of Frequently Changing Plan Provisions *(Continued)*		
LEOFF	**Plan 1**	**Plan 2**
COLA	Full CPI*	Lesser of CPI* or 3%
Minimum Benefit per Month	N/A	N/A
Material Plan Provision Changes since Last Rate-Setting Valuation	None	Reduced Saving Fund Regular Interest (WAC 415-02-150) Modified the Definition of "Veteran" (C 18, L 23) & (C 146, L 24) Modified Death Benefits, Definition of "Firefighter", Overpayment Management, & Disability Benefits (C 304, L 24)
Significant Plan Provisions Not Included in This Valuation	None	None

**CPI: Urban Wage Earners & Clerical Workers, Seattle-Tacoma-Bellevue, WA — All Items.*

Summary of Frequently Changing Plan Provisions *(Continued)*		
WSPRS	**Plan 1**	**Plan 2**
COLA	Lesser of CPI* or 3%	Lesser of CPI* or 3%
Minimum Benefit per Month**	$44.19 per YOS on 1/1/24	$44.19 per YOS on 1/1/24
Material Plan Provision Changes since Last Rate-Setting Valuation	Reduced Saving Fund Regular Interest (WAC 415-02-150) Modified the Definition of "Veteran" (C 18, L 23) & (C 146, L 24)	Reduced Saving Fund Regular Interest (WAC 415-02-150) Modified the Definition of "Veteran" (C 18, L 23) & (C 146, L 24)
Significant Plan Provisions Not Included in This Valuation	None	None

**CPI: Urban Wage Earners & Clerical Workers, Seattle-Tacoma-Bellevue, WA — All Items.*

***Amount increases by 3% annually.*