

CONTRIBUTION RATES

Calculated Member and Employer Rate Summary				
	Plan 1		Plans 2/3	
	2021	2019	2021	2019
<b>PERS</b>				
Member*	6.00%	6.00%	7.20%	6.36%
Employer (Normal Cost)	7.20%	6.36%	7.20%	6.36%
Employer (Plan 1 UAAL)	3.85%	3.71%	3.85%	3.71%
<b>Total Employer</b>	<b>11.05%</b>	<b>10.07%</b>	<b>11.05%</b>	<b>10.07%</b>
<b>TRS</b>				
Member*	6.00%	6.00%	8.64%	8.05%
Employer (Normal Cost)	9.70%	8.05%	9.70%	8.05%
Employer (Plan 1 UAAL)	6.46%	6.19%	6.46%	6.19%
<b>Total Employer</b>	<b>16.16%</b>	<b>14.24%</b>	<b>16.16%</b>	<b>14.24%</b>
<b>SERS</b>				
Member*	N/A	N/A	8.47%	7.76%
Employer (Normal Cost)	N/A	N/A	8.47%	7.76%
Employer (PERS Plan 1 UAAL)	N/A	N/A	3.85%	3.71%
<b>Total Employer</b>	<b>N/A</b>	<b>N/A</b>	<b>12.32%</b>	<b>11.47%</b>
<b>PSERS</b>				
Member	N/A	N/A	7.46%	6.50%
Employer (Normal Cost)	N/A	N/A	7.46%	6.50%
Employer (PERS Plan 1 UAAL)	N/A	N/A	3.85%	3.71%
<b>Total Employer</b>	<b>N/A</b>	<b>N/A</b>	<b>11.31%</b>	<b>10.21%</b>
<b>LEOFF</b>				
Member	0.00%	0.00%	9.94%	7.68%
Employer	0.00%	0.00%	5.96%	4.61%
State (Normal Cost)	0.00%	0.00%	3.98%	3.07%
State (Plan 1 UAAL)	0.00%	0.00%	0.00%	0.00%
<b>Total State</b>	<b>0.00%</b>	<b>0.00%</b>	<b>3.98%</b>	<b>3.07%</b>
<b>WSPRS</b>				
Member	8.61%	8.61%	8.61%	8.61%
Employer (State)	24.10%	18.57%	24.10%	18.57%

Note: Employer rates exclude administrative expense rate.

\*Plan 3 members do not contribute to the defined benefit plan.

Development of 2021 Employer/State Rates					
	PERS		TRS		SERS
	Plan 1	Plans 2/3	Plan 1	Plans 2/3	Plans 2/3
<b>a. Total Normal Cost</b>	13.20%	14.40%	15.70%	18.34%	16.94%
<b>b. Member Normal Cost*</b>	6.00%	7.20%	6.00%	8.64%	8.47%
<b>c. Employer Contribution (a - b)</b>	7.20%	7.20%	9.70%	9.70%	8.47%
<b>d. Cost to Amortize UAAL</b>	3.85%	3.85%	6.46%	6.46%	3.85%
<b>e. Total Employer Rate (c + d)</b>	<b>11.05%</b>	<b>11.05%</b>	<b>16.16%</b>	<b>16.16%</b>	<b>12.32%</b>

Note: Employer rates exclude administrative expense rate.

\*Plan 3 members do not contribute to the defined benefit plan. TRS Plan 2 member rate at current law maximum of 8.64 percent. The portion of the contribution rate exceeding the maximum of 0.53 percent is added to the Employer Contribution.

Development of 2021 Employer/State Rates (Continued)				
	PSERS	LEOFF		WSPRS
	Plan 2	Plan 1	Plan 2	Plans 1/2
<b>a. Total Normal Cost</b>	14.92%	0.00%	19.88%	32.71%
<b>b. Member Normal Cost*</b>	7.46%	0.00%	9.94%	8.61%
<b>c. Employer Contribution (a - b)</b>	7.46%	0.00%	9.94%	24.10%
<b>d. Cost to Amortize UAAL</b>	3.85%	0.00%	0.00%	N/A
<b>e. Total Employer Rate (c + d)**</b>	<b>11.31%</b>	<b>0.00%</b>	<b>5.96%</b>	<b>24.10%</b>

Note: Employer rates exclude administrative expense rate.

\*Plan 3 members do not contribute to the defined benefit plan. WSPRS member rate at current law maximum of 8.61 percent. The portion of the contribution rate exceeding the maximum of 7.57 percent is added to the Employer Contribution.

\*\*The state pays 20% of the total normal cost for LEOFF 2. The total employer rate reflected above represents the local government, i.e., non-state, portion.

## II. ACTUARIAL EXHIBITS

TRRS Plan 2 Maximum Member Contribution Rates					
Valuation Year	Prior Max	Supplemental	New Max	Description	Source
2010 - 2021	8.63%	0.01%	8.64%	AFC protection against reduced salaries.	C 5 L 11
2007 - 2009	8.55%	0.08%	8.63%	Out-of-state service credit purchases.	C 101 L 08
2006	7.76%	0.79%	8.55%	Improved Subsidized ERFs for certain Plan 2/3 members.	C 491 L 07
2005	7.75%	0.01%	7.76%	Lowered vesting requirements for certain Plan 3 members.	C 33 L 06
1999 - 2004	6.59%	1.16%	7.75%	Subsidized ERFs for Plan 2/3 members.	C 247 L 00
1997 - 1998	N/A	N/A	6.59%		

Note: Maximum member contribution rates change each year by 50% of benefit improvements, except as stated in RCW 41.45.070.

WSPRS Plan 1/2 Maximum Member Contribution Rates					
Valuation Year	Prior Max	Supplemental	New Max	Description	Source
2019 - 2021	8.45%	0.16%	8.61%	Modified the definition of "Veteran" and leave cash-out as pensionable salary.	C 97 L 20
2017 - 2018	8.44%	0.01%	8.45%	Modified the definition of "Veteran".	C 61 L 18
2016*	7.68%	0.76%	8.44%	Expanded the definition of pensionable overtime.	C 181 L 17
	7.34%	0.34%	7.68%		
2014 - 2015	7.19%	0.15%	7.34%	L&I duty-related death benefits paid from pension trust fund on remarriage.	C 78 L 15
2009 - 2013	7.18%	0.01%	7.19%	Increased duty-related death benefits.	C 261 L 10
2008	6.95%	0.23%	7.18%	Survivor benefits for registered domestic partners.	C 522 L 09
2006** - 2007	N/A	N/A	6.95%		

Note: Maximum member contribution rates change each year by 50% of benefit improvements, except as stated in RCW 41.45.070.

\*This law stipulated a phased increase to the member maximum rate by applying 0.34% in Fiscal Year 2018 and 0.76% in Fiscal Year 2019.

\*\*The original maximum contribution rate of 7% was decreased by 0.05% for C 87 L 07 (raised maximum retirement age, 0.14% decrease) and C 488 L 07 (provided medical premium reimbursements for certain survivors, 0.09% increase).

The following table compares the member and total employer contribution rates that were adopted by the PFC and the LEOFF Plan 2 Retirement Board against the rates that were calculated by OSA. Note the 2021-23 adopted rates we display include the supplemental rates charged following the 2021 and 2022 Legislative Sessions.

## II. ACTUARIAL EXHIBITS

Contribution Rates			
	2021-23 Adopted <sup>1</sup>	2023-25 Calculated	2023-25 Adopted
<b>PERS 1</b>			
<b>Member</b>	6.00%	6.00%	6.00%
<b>Total Employer</b>	10.21%	11.05%	10.21%
<b>PERS 2/3</b>			
<b>Member<sup>2</sup></b>	6.36%	7.20%	6.36%
<b>Total Employer</b>	10.21%	11.05%	10.21%
<b>TRS 1</b>			
<b>Member</b>	6.00%	6.00%	6.00%
<b>Total Employer</b>	14.51%	16.16%	14.51%
<b>TRS 2/3</b>			
<b>Member<sup>2</sup></b>	8.05%	8.64%	8.05%
<b>Total Employer</b>	14.51%	16.16%	14.51%
<b>SERS 2/3</b>			
<b>Member<sup>2</sup></b>	7.76%	8.47%	7.76%
<b>Total Employer</b>	11.61%	12.32%	11.61%
<b>PSERS 2</b>			
<b>Member</b>	6.60%	7.46%	6.60%
<b>Total Employer</b>	10.45%	11.31%	10.45%
<b>LEOFF 1</b>			
<b>Member</b>	0.00%	0.00%	0.00%
<b>Employer</b>	0.00%	0.00%	0.00%
<b>State</b>	0.00%	0.00%	0.00%
<b>LEOFF 2<sup>3</sup></b>			
<b>Member</b>	8.53%	9.94%	8.53%
<b>Employer</b>	5.12%	5.96%	5.12%
<b>State</b>	3.41%	3.98%	3.41%
<b>WSPRS 1/2</b>			
<b>Member</b>	8.61%	8.61%	8.61%
<b>Employer (State)</b>	17.66%	24.10%	17.66%

*Note: Employer rates exclude administrative expense rate.*

<sup>1</sup> 2021-23 adopted rates include 2022 Session supplemental rates.

<sup>2</sup> Plan 3 members do not contribute to the defined benefit plan.

<sup>3</sup> The LEOFF 2 Board adopts contribution rates for LEOFF 2.

The tables which follow show the development of the normal cost rates and the Plan 1 UAAL rates. Consistent with current funding policy, the normal cost rates include minimum contribution rates to provide stable and adequate contribution rates over time. These minimum rates are a percent of the normal cost calculated under the EAN funding method. The percent is 70 percent for WSPRS Plans 1 and 2, 80, 90, or 100 percent for LEOFF Plan 2 (dependent on the funded ratio), and 80 percent for all other plans.

The PERS I and TRS I UAAL, under current funding policy, must be amortized over a rolling ten-year period, as a level percentage of projected system payroll. All employers of PERS, SERS, and PSERS members contribute toward the PERS I UAAL, while all employers of TRS members contribute toward the TRS I UAAL. UAAL rates also include minimum contribution rates to ensure complete amortization of the UAAL. Before adjustments for benefit improvements, the minimum UAAL rate is 3.50 percent in PERS I and 5.75 percent in TRS I. Please see the Glossary on our website for a more detailed explanation of EAN and UAAL.

The contribution rates developed in these tables do not reflect the cap to contribution rates set by SHB 1701 or the PFC economic assumption phase-in adoption.

We provide additional contribution rate calculations on our Interactive Reports webpage. This interactive report calculates member and employer contribution rates that vary based on the asset valuation method and discount rate that the user selects. The state's funding policy, defined under Chapter 41.45 RCW, does not vary based on these selections.

## II. ACTUARIAL EXHIBITS

Development of Normal Cost Rates			
<i>(Dollars in Millions)</i>	PERS 2/3	TRS 2/3	SERS 2/3
<b>1. Calculated Member Normal Cost Rate</b>			
a. Future Value of Fully Projected Benefits	\$346,044	\$224,692	\$52,536
b. Present Value of Fully Projected Benefits	63,347	29,256	9,906
c. Valuation Assets	49,451	19,098	7,257
d. Unfunded Fully Projected Benefits (b - c)	13,895	10,158	2,648
e. Past Liability Balance	0	0	0
f. Adjusted Unfunded (d - e)	<b>\$13,895</b>	<b>\$10,158</b>	<b>\$2,648</b>
<b>Present Value of Projected Salaries to Current Members (PVS)</b>			
g. Plan 1 PVS	N/A	N/A	N/A
h. Plan 2 PVS	83,598	27,074	9,959
i. Plan 3 PVS	25,861	56,632	11,358
j. Weighted PVS (2g + 2h + i)	<b>\$193,057</b>	<b>\$110,779</b>	<b>\$31,276</b>
k. Member Normal Cost (f / j)	7.20%	9.17%	8.47%
l. Member Minimum Contribution Rate	4.84%	5.92%	5.20%
m. Prior Year Member Maximum Contribution Rate	N/A	8.64%	N/A
n. Member Contribution Rate with Max/Min	7.20%	8.64%	8.47%
o. Change In Plan Provisions (Laws of 2022)	0.00%	0.00%	0.00%
p. Calculated Member Contribution Rate (n + o)*	<b>7.20%</b>	<b>8.64%</b>	<b>8.47%</b>
<b>2. Calculated Employer Normal Cost Rate</b>			
a. Present Value of Fully Projected Benefits	\$63,347	\$29,256	\$9,906
b. Valuation Assets	49,451	19,098	7,257
c. Unfunded Benefits (a - b)	13,895	10,158	2,648
d. Present Value of Member Contributions	6,017	2,483	843
e. Past Liability Balance**	0	0	0
f. Employer Responsibility (c - d - e)	<b>\$7,878</b>	<b>\$7,675</b>	<b>\$1,805</b>
<b>Present Value of Projected Salaries to Current Members (PVS)</b>			
g. Plan 1 PVS	N/A	N/A	N/A
h. Plan 2 PVS	83,598	27,074	9,959
i. Plan 3 PVS	25,861	56,632	11,358
j. Total PVS (g + h + i)	<b>\$109,459</b>	<b>\$83,706</b>	<b>\$21,317</b>
k. Employer Normal Cost (f / j)	7.20%	9.17%	8.47%
l. Employer Minimum Contribution Rate	4.84%	5.92%	5.20%
m. Employer Contribution Rate with Minimum	7.20%	9.17%	8.47%
n. Excess Employer Rate	N/A	0.53%	N/A
o. Rate to Amortize Past Liability Balance**	0.00%	0.00%	0.00%
p. Change In Plan Provisions (Laws of 2022)	0.00%	0.00%	0.00%
q. Calculated Employer Contribution Rate (m + n + o + p)	<b>7.20%</b>	<b>9.70%</b>	<b>8.47%</b>
<b>3. Adopted Normal Cost Rates for 2023-25</b>			
a. Member Contribution Rate	6.36%	8.05%	7.76%
b. Employer Contribution Rate	6.36%	8.05%	7.76%
c. State Contribution Rate	N/A	N/A	N/A
d. Total Contribution Rate (a + b + c)	<b>12.72%</b>	<b>16.10%</b>	<b>15.52%</b>

Note: Totals may not agree due to rounding.

\*Plan 3 members do not contribute to the defined benefit plan.

\*\*Past liabilities are expected to be paid off when contribution rates are effective in 2021-23 Biennium.

## II. ACTUARIAL EXHIBITS

Development of Normal Cost Rates (Continued)			
(Dollars in Millions)	PSERS 2	LEOFF 2	WSPRS 1/2
<b>1. Calculated Member Normal Cost Rate</b>			
a. Future Value of Fully Projected Benefits	\$20,744	\$138,638	\$9,896
b. Present Value of Fully Projected Benefits	2,049	21,075	1,889
c. Valuation Assets <sup>1</sup>	1,013	16,494	1,483
d. Unfunded Fully Projected Benefits (b - c)	1,035	4,580	407
e. Past Liability Balance	0	0	4
f. Adjusted Unfunded (d - e)	<b>\$1,035</b>	<b>\$4,580</b>	<b>\$403</b>
<b>Present Value of Projected Salaries to Current Members (PVS)</b>			
g. Plan 1 PVS	N/A	N/A	\$180
h. Plan 2 PVS	7,031	26,475	1,065
i. Plan 3 PVS	N/A	N/A	N/A
j. Weighted PVS (2g + 2h + i)	<b>\$14,062</b>	<b>\$52,950</b>	<b>\$2,489</b>
k. Member Normal Cost (f / j)	7.36%	8.65%	16.18%
l. Member Minimum Contribution Rate	6.02%	9.94%	7.83%
m. Prior Year Member Maximum Contribution Rate	N/A	N/A	8.61%
n. Member Contribution Rate with Max/Min	7.36%	9.94%	8.61%
o. Change In Plan Provisions (Laws of 2022)	0.10%	0.00%	0.00%
p. Calculated Member Contribution Rate (n + o)	<b>7.46%</b>	<b>9.94%</b>	<b>8.61%</b>
<b>2. Calculated Employer Normal Cost Rate</b>			
a. Present Value of Fully Projected Benefits	\$2,049	\$21,075	\$1,889
b. Valuation Assets <sup>1</sup>	1,013	16,494	1,483
c. Unfunded Benefits (a - b)	1,035	4,580	407
d. Present Value of Member Contributions	518	2,290	201
e. Past Liability Balance	0	0	4
f. Employer Responsibility (c - d - e)	<b>\$518</b>	<b>\$2,290</b>	<b>\$201</b>
<b>Present Value of Projected Salaries to Current Members (PVS)</b>			
g. Plan 1 PVS	N/A	N/A	\$180
h. Plan 2 PVS	7,031	26,475	1,065
i. Plan 3 PVS	N/A	N/A	N/A
j. Total PVS (g + h + i)	<b>\$7,031</b>	<b>\$26,475</b>	<b>\$1,244</b>
k. Employer Normal Cost (f / j)	7.36%	8.65%	16.18%
l. Employer Minimum Contribution Rate	6.02%	9.94%	7.83%
m. Employer Contribution Rate with Minimum	7.36%	9.94%	16.18%
n. Excess Employer Rate	N/A	N/A	7.57%
o. Rate to Amortize Past Liability Balance <sup>2</sup>	N/A	N/A	0.35%
p. Change In Plan Provisions (Laws of 2022)	0.10%	0.00%	0.00%
q. Calculated Employer Contribution Rate (m + n + o + p)	<b>7.46%</b>	<b>9.94%</b>	<b>24.10%</b>
<b>3. Adopted Normal Cost Rates for 2023-25<sup>3</sup></b>			
a. Member Contribution Rate	6.60%	8.53%	8.61%
b. Employer Contribution Rate	6.60%	5.12%	17.66%
c. State Contribution Rate	N/A	3.41%	N/A
d. Total Contribution Rate (a + b + c)	<b>13.20%</b>	<b>17.06%</b>	<b>26.27%</b>

Note: Totals may not agree due to rounding.

<sup>1</sup> LEOFF 2's assets include \$450 million transferred from the LEOFF 2 Benefit Improvement Account under SHB 1701 measured at June 30, 2021.

<sup>2</sup> WSPRS liability is attributable to past costs for improved survivor benefits.

<sup>3</sup> LEOFF 2 rates adopted by LEOFF 2 Board; all others adopted by the PFC. LEOFF 2 rate: 50% Member, 30% Employer, 20% State.

## II. ACTUARIAL EXHIBITS

Amortization of the Plan 1 Unfunded Actuarial Accrued Liability (UAAL)			
(Dollars in Millions)	PERS 1	TRS 1	LEOFF 1
a. Future Value of Fully Projected Benefits	\$22,145	\$15,836	\$8,436
b. Present Value of Fully Projected Benefits (PVFB)	11,216	8,094	4,032
c. Valuation Assets	8,064	6,001	6,143
d. Actuarial Present Value of Future Normal Costs	24	6	0
e. Balance of Plan 1 Benefit Improvements <sup>1</sup>	243	239	N/A
f. UAAL (b - c - d - e)	<b>\$2,884</b>	<b>\$1,848</b>	<b>(\$2,110)</b>
g. Amortization Date	N/A	N/A	6/30/2024
h. Present Value of Projected Salaries <sup>2</sup>	\$141,134	\$67,917	\$2,234
i. Contribution Rate Before Adjustments (f / h)	2.04%	2.72%	(94.44%)
j. Minimum Contribution Rate	3.50%	5.75%	N/A
k. Preliminary Contribution Rate	3.50%	5.75%	(94.44%)
l. Plan 1 Benefit Improvements	0.21%	0.44%	N/A
m. Change In Plan Provisions (Laws of 2022)	0.14%	0.27%	7.92%
n. Calculated Plan 1 UAAL Contribution Rates (k + l + m) <sup>3</sup>	<b>3.85%</b>	<b>6.46%</b>	<b>(86.52%)</b>
<b>Adopted UAAL Contribution Rates for 2023-25</b>	<b>3.85%</b>	<b>6.46%</b>	<b>0.00%</b>

Note: Totals may not agree due to rounding.

<sup>1</sup> As stated in RCW 41.45.060, the cost of funding Plan 1 benefit improvements shall be amortized over a fixed 10-year period.

<sup>2</sup> Measured under the plan's amortization method.

<sup>3</sup> No LEOFF 1 UAAL contributions are required when the plan is fully funded under current methods and assumptions.