

September 2022

State Judiciary/2099

Oregon Public Employees Retirement System

As part of our engagement with the Oregon Public Employees Retirement Board, we performed a system-wide actuarial valuation of the Oregon Public Employees Retirement System (“PERS” or “the System”) as of December 31, 2021. The attached report, which is an informational supplement to the system-wide report, provides you with employer-specific contribution rates that will become effective July 1, 2023. Information to assist you in preparing your required financial reporting disclosures under Statement 68 and Statement 75 of the Governmental Accounting Standards Board (GASB) will be provided separately by PERS and is not included in this report.

This report reflects the System's benefit provisions in effect as of December 31, 2021, including Senate Bill 111 and House Bill 2906 which were enacted in June 2021. The full development of the valuation results for the Retiree Health Insurance Account (RHIA) and Retiree Health Insurance Premium Account (RHIPA) programs can be found in the separate system-wide actuarial valuation report. The State Judiciary does not participate in the OPSRP or IAP Plans.

If you have any questions about this report, please contact actuarial.services@pers.oregon.gov.

Contents of Report

The executive summary provides the basic information you need, including:

- Contribution rates, and
- A summary of principal valuation results.

The remainder of the report provides additional information including:

- Detailed development of Tier 1/Tier 2 valuation results,
- A brief summary of methods and assumptions, and
- A brief summary of any changes in System benefit provisions.

Additional information is provided in the system-wide actuarial valuation report, which is available at www.oregon.gov/PERS/Pages/Financials/Actuarial-Financial-Information.aspx.

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In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete, our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations) and which, in combination, offer a reasonable estimate of anticipated experience affecting the System. The valuation results were developed using models intended for valuations that use standard actuarial techniques.

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While a valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct. The System is subject to various risks that will affect the future plan liabilities and contribution requirements, including investment risk, demographic risk, and contribution risk. While the results of an actuarial valuation are based on one set of reasonable assumptions, it is almost certain that future experience will not exactly match the assumptions. The section of the system-wide valuation report titled Risk Disclosure discusses the System's risks in more detail.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The Board has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in October 2021.

The actuarial computations presented in this report are for purposes of determining the contribution rates effective from July 2023 to June 2025 for System employers. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System's funding requirements and goals, and with our understanding of the System benefit provisions described in the appendices of this report. Determinations for other purposes may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.



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This report is prepared solely for the use and benefit of the Oregon Public Employees Retirement System, the employer named above, or its auditors solely for the purpose of completing an audit related to the matters herein. To the extent that this report is not subject to disclosure under applicable public records laws, it may not be provided to other third parties without Milliman's prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of this report. Milliman's consent to release this report to any third party may be conditioned on the third party signing a release except for situations where such release is prohibited by law.

No third party recipient of this report should rely upon Milliman's work contained herein. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

The signing actuaries are independent of the System. We are not aware of any relationship that would impair the objectivity of our work.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices which are consistent with the principles prescribed by the Actuarial Standards Board and the Code of Professional Conduct and Qualification Standards for Actuaries Issuing Statements of Actuarial Opinion in the United States published by the American Academy of Actuaries. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Additional information is provided in the system-wide actuarial valuation report.

Sincerely,

A handwritten signature in black ink, appearing to read 'Matt Larrabee'.

Matt Larrabee, FSA, EA, MAAA
Principal and Consulting Actuary

A handwritten signature in black ink, appearing to read 'Scott Preppernau'.

Scott Preppernau, FSA, EA, MAAA
Principal and Consulting Actuary



ACTUARIAL VALUATION REPORT DECEMBER 31, 2021

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

State Judiciary -- #2099

September 2022

This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

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Executive Summary

Milliman has prepared this report for State Judiciary to:

- Provide summary December 31, 2021 valuation results for the Retiree Health Insurance Account (RHIA) and the Retiree Health Insurance Premium Account (RHIPA),
- Provide employer-specific contribution rates effective July 1, 2023 through June 30, 2025, and
- Provide employer-specific valuation results on assets and liabilities as of December 31, 2021.

This report summarizes the valuation results for the RHIA and RHIPA. The full development of these results can be found in the December 31, 2021 system-wide actuarial valuation report. This report develops employer-specific pension rates and applies the results from the system-wide valuation to State Judiciary. In the system-wide actuarial valuation report, pension valuation results for the State Judiciary are included in the Tier 1/Tier 2 valuation results for Independent Employers.

Employer Contribution Rates

The following table summarizes the employer contribution rates effective July 1, 2023 through June 30, 2025.

Employer Rates Effective July 1, 2023 for State Judiciary

Pension

Employer normal cost rate	19.54%
UAL rate ¹	9.47%
Employer pension contribution rate	29.01%
Member pension contribution rate	7.00%
Total pension contribution rate	36.01%

Retiree Healthcare

Normal cost rate	0.13%
UAL rate	(0.13%)
Total retiree healthcare rate	0.00%
Total contribution rate	36.01%

¹ Includes Multnomah Fire District #10 rate.

Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 UAL Contribution Rates for the July 2025 to June 2027 Biennium

The rate collar limits changes in the Tier 1/Tier 2 UAL Rate for an employer, but does not limit changes in rates related to side accounts and does not limit the change in the normal cost rate. The table below shows the possible minimum and maximum Tier 1/Tier 2 UAL Rates first effective as of July 1, 2025. The collar width, which in general is the amount the UAL Rate could increase or decrease from the current UAL Rate being paid, is 4% of pay or (if greater) one-third of the difference between the collared and uncollared UAL rates at the last rate-setting valuation. However, the UAL Rate is only allowed to decrease by the full collar width if the employer's funded status (excluding side accounts) is greater than or equal to 90%. The UAL Rate is not allowed to decrease at all if funded status is below 87%, and the allowable decrease is phased in for funded status levels from 87% to 90%.

For reference, the employer's funded status as of December 31, 2021 is 81%.

2023-2025 Biennium	2025-2027 Biennium	
	13.32%	<<<No higher than this
9.32%	9.32%	<<<No lower than this if December 31, 2023 funded status is 87% or lower
	5.32%	<<<No lower than this if December 31, 2023 funded status is 90% or higher

Normal Cost Rates

As seen on the prior page, the other large rate component is the normal cost rate. The normal cost rate represents the projected cost of benefits earned by current year service.

The normal cost rate in any biennium is driven by the active member demographics of the experience pooling groups in the which the employer's members participate. The active member census as this rate-setting valuation is used to calculate the adopted 2023 - 2025 biennium normal cost rate.

Each biennium's normal cost rate is also sensitive to the investment return assumption, or assumed rate, adopted by the PERS Board for the valuation. The lower the assumed rate, the higher the normal cost rate. The normal cost rate that will be effective as of July 1, 2025 will be based on the active member demographics and investment return assumption as of December 31, 2023.

Executive Summary

Accounting Information

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist the employer in completing its financial statements, but any accounting determination should be reviewed by your auditor.

Pension

In June 2012 the GASB issued Statement No. 68 (GASB 68), which replaced Statement No. 27 and governs employer financial reporting for fiscal years beginning after June 15, 2014. The new standard replaced many of the key elements of the prior reporting requirements. Under the new rules, employers are required to record a balance sheet liability for their unfunded pension obligations. In addition, the timing and coordination of plan and employer reporting has changed under the new requirements. GASB 68 information for employers will be provided separately by PERS and is not included in this report.

Schedule of Funding Progress

Under GASB 27, the Schedule of Funding Progress for Tier 1/Tier 2 pension liabilities was reported in the Required Supplementary Information. This schedule is no longer required now that GASB 68 has replaced GASB 27. However, for additional information and the sake of historical comparison, the updated schedule is shown below for the last several valuations. For employers with side accounts, the actuarial value of assets in this Schedule includes the value of the employer's side accounts.

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded AAL (b - a)	Funded Ratio (a ÷ b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b-a) ÷ c)
12/31/2016	\$230,602,015	\$285,616,344	\$55,014,329	81%	\$23,539,629	234%
12/31/2017	262,639,343	304,198,922	41,559,579	86%	23,894,906	174%
12/31/2018	242,406,445	317,657,820	75,251,374	76%	25,010,239	301%
12/31/2019	255,321,589	327,246,147	71,924,558	78%	25,861,231	278%
12/31/2020	261,773,802	351,666,937	89,893,135	74%	28,438,338	316%
12/31/2021	293,090,159	359,840,672	66,750,514	81%	29,580,512	226%

Executive Summary

Accounting Information (continued)

Retiree Healthcare

In June 2015, the GASB issued Statement No. 75 (GASB 75), which replaces Statement No. 45 and governs employer financial reporting for retiree healthcare obligations for fiscal years beginning after June 15, 2017. In general, the changes required by GASB 75 parallel those that occurred for pension reporting when GASB 68 replaced GASB 27. Accounting information for reporting the Retiree Health Insurance Account (RHIA) and Retiree Health Insurance Premium Account (RHIPA) under GASB 75 will be provided separately and is not included in this report.

Executive Summary

Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods, or plan provisions between the two valuations are described later in this report. More detailed information can be found in the system-wide actuarial valuation report.

State Judiciary

	Actuarial Valuation as of	
	December 31, 2021	December 31, 2020
Total normal cost	\$7,851,699	\$7,689,196
Valuation payroll	29,580,512	28,438,338
Total normal cost rate (includes member contributions)	26.54%	27.04%
Actuarial accrued liability	\$359,840,672	\$351,666,937
Actuarial asset value	293,090,159	261,773,802
Unfunded actuarial accrued liability	66,750,513	89,893,135
Funded status	81%	74%
Combined valuation payroll	\$29,580,512	\$28,438,338
UAL as a percentage of payroll	226%	316%
UAL rate (includes Multnomah Fire District #10)	9.47%	9.46%
Allocated pooled RHIA UAL	(918,912)	(653,184)
Allocated pooled RHIPA UAL	(277,592)	(119,581)
Active members ¹	188	186
Dormant members	19	19
Retirees and beneficiaries	283	277

¹ Active counts do not include concurrent employees who have a separate dominant employer.

Executive Summary

Principal Valuation Results (continued)

Retiree Healthcare

(\$ in millions) RHIA	Actuarial Valuation as of	
	December 31, 2021	December 31, 2020
Normal cost	\$1.5	\$1.7
Tier 1 / Tier 2 valuation payroll	3,518.8	3,687.3
Normal cost rate	0.04%	0.05%
Actuarial accrued liability	\$369.2	\$383.6
Actuarial asset value	763.2	660.2
Unfunded actuarial accrued liability	(394.0)	(276.6)
Funded status	207%	172%
Combined valuation payroll	\$12,684.1	\$12,042.7
UAL as a percentage of payroll	(3%)	(2%)
UAL rate	(0.04%)	(0.05%)

(\$ in millions) RHIPA	Actuarial Valuation as of	
	December 31, 2021	December 31, 2020
Normal cost	\$0.9	\$1.0
Tier 1 / Tier 2 valuation payroll	1,053.3	1,091.8
Normal cost rate	0.09%	0.09%
Actuarial accrued liability	\$45.9	\$48.0
Actuarial asset value	82.9	63.6
Unfunded actuarial accrued liability	(37.0)	(15.6)
Funded status	180%	133%
Combined valuation payroll	\$3,938.0	\$3,712.6
UAL as a percentage of payroll	(1%)	0%
UAL rate	(0.09%)	(0.09%)

RHIPA liabilities are allocated to State Agencies and the State Judiciary, the only employers participating in the RHIPa program.

Pension Valuation Results

Assets

A summary of the market value of pension assets, and reconciliation from the prior year are shown below.

Summary of Market Value of Pension Assets

	December 31, 2021	December 31, 2020
1. Member reserves	\$27,514,844	\$28,943,276
2. Employer reserves	177,646,250	148,898,816
3. Benefits in force reserve	87,929,065	83,931,710
4. Total market value of assets (1. + 2. + 3.)	\$293,090,159	\$261,773,802

The market value of member and employer reserves is provided by PERS. The benefits in force reserve provided by PERS is allocated each year among employers in proportion to their liabilities for benefits in force.

Reconciliation of Pension Assets

	December 31, 2020 to December 31, 2021
1. Market value of assets at beginning of year	\$261,773,802
2. Regular employer and member contributions	8,973,479
3. Benefit payments and expenses	(21,964,115)
4. Adjustments ¹	(3,333,772)
5. Interest credited	47,640,765
6. Total transferred from side accounts	0
7. Market value of assets at end of year (1. + 2. + 3. + 4. + 5. + 6.)	\$293,090,159

¹ Note the adjustment item above includes a reallocation of the benefits in force reserve, transfers to Multnomah Fire District #10, and other adjustments made by PERS.

Pension Valuation Results

Liabilities

Normal Cost

The normal cost represents the value of benefits assigned to the next year of service by the actuarial cost method. If all actuarial assumptions are met, the normal cost represents the percent of payroll that would need to be contributed each year to fund plan benefits. Amounts shown below include assumed administrative expenses, which are allocated pro-rata based on normal cost.

Summary of Normal Cost

	December 31, 2021	December 31, 2020
Total Normal Cost	\$7,851,699	\$7,689,196

Change in Total Normal Cost Due to Changes

The following table shows the impact of the assumption, method, and plan changes on normal cost as of December 31, 2021.

	Before Changes	After Changes	Net Change
Total Normal Cost	\$7,851,699	\$7,851,699	\$0

Pension Valuation Results

Liabilities (continued)

Actuarial Accrued Liability

The actuarial accrued liability represents the value of benefits allocated to service performed before the valuation date by the actuarial cost method. If all actuarial assumptions are met, the actuarial accrued liability represents the amount of assets that would need to be accumulated as of the valuation date to provide for the portion of benefits allocated to service already performed.

	December 31, 2021	December 31, 2020
Active Members	\$91,322,458	\$90,000,382
Dormant Members	6,358,803	7,462,569
Retired Members and Beneficiaries	262,159,411	254,203,986
Total Actuarial Accrued Liability	\$359,840,672	\$351,666,937

Change in Actuarial Accrued Liability Due to Changes

The following table shows the impact of the assumption, method, and plan changes on the actuarial accrued liability as of December 31, 2021.

	Before Changes	After Changes	Net Change
Actuarial Accrued Liability	\$359,840,672	\$359,840,672	\$0

Tier 1/Tier 2 Valuation Results

Unfunded Accrued Liability (UAL)

Summary of UAL

The UAL represents the difference between the assets accumulated and the liability attributed to prior years of service by the cost method.

	December 31, 2021	December 31, 2020
1. Actuarial accrued liability	\$359,840,672	\$351,666,937
2. Actuarial value of assets	293,090,159	261,773,802
3. Unfunded accrued liability (1. – 2.)	66,750,513	89,893,135
4. Funded percentage (2. ÷ 1.)	81%	74%
5. Combined valuation payroll	\$29,580,512	\$28,438,338
6. Unfunded accrued liability as % of combined valuation payroll (3. ÷ 5.)	226%	316%

Reconciliation of UAL Bases

Beginning with the December 31, 2013 actuarial valuation, the PERS Board established a policy to amortize the Tier 1/Tier 2 UAL over a 20-year period, with each subsequent odd-year valuation establishing a new 20-year closed-period amortization schedule for new Tier 1/Tier 2 UAL amounts based on the total Tier 1/Tier 2 UAL as of that valuation date less the remaining unamortized balance of previously established Tier 1/Tier 2 UAL bases. As part of Senate Bill 1049, passed in 2019, the Legislature directed the PERS Board to enact a one-time re-amortization of Tier 1/Tier 2 UAL over 22 years. This means that, effective with the December 31, 2019 rate-setting valuation, the entire unamortized Tier 1/Tier 2 UAL for each rate pool and independent employer was re-amortized over a 22-year period as a level percentage of projected future payroll. For the December 31, 2021 and subsequent odd-year valuations, the PERS Board again has authority to set the amortization schedule. In the 2020 Experience Study, the PERS Board confirmed the policy of 20-year closed-period amortization schedules for Tier 1/Tier 2 UAL going forward.

Amortization Base	UAL December 31, 2020	Payment	Interest	UAL December 31, 2021	Next Year's Payment
December 31, 2019	\$72,159,072	\$4,843,216	\$4,800,731	\$72,116,587	\$5,008,096
December 31, 2021	N/A	N/A	N/A	(\$5,366,074)	(\$372,644)
Total				\$66,750,513	\$4,635,452

Pension Valuation Results

Unfunded Accrued Liability (UAL) (continued)

Actuarial Gain or Loss since Prior Valuation

The system-wide actuarial valuation report contains a detailed analysis of gains and losses since the last valuation. The table below shows the gain or loss for the individual employer.

1. Expected actuarial accrued liability	
a. Actuarial accrued liability at December 31, 2020	\$351,666,937
b. Total normal cost at December 31, 2020 (excluding assumed expenses)	7,458,988
c. Benefit payments during 2021	(21,756,641)
d. Interest at 6.90% to December 31, 2021	23,771,750
e. Expected actuarial accrued liability before changes (a. + b. + c. + d.)	361,141,034
f. Change in actuarial accrued liability due to assumption, method, and plan changes	0
g. Expected actuarial accrued liability at December 31, 2021 (e. + f.)	361,141,034
2. Actuarial accrued liability at December 31, 2021	359,840,672
3. Gain/(loss) on actuarial accrued liability (1.g. – 2.)	1,300,362
4. Expected actuarial value of assets	
a. Actuarial value of assets at December 31, 2020	261,773,802
b. Contributions for 2021 ¹	8,973,479
c. Benefit payments and expenses during 2021	(21,964,115)
d. Interest at 6.90% to December 31, 2021	17,614,215
e. Expected actuarial value of assets at December 31, 2021 (a. + b. + c. + d.)	266,397,381
5. Actuarial value of assets at December 31, 2021	293,090,159
6. Gain/(loss) on actuarial value of assets (5. - 4.e.)	26,692,778
7. Total actuarial gain/(loss) (3. + 6.)	\$27,993,140

Unfunded Accrued Liability Reconciliation

A reconciliation of the Tier 1/Tier 2 UAL from December 31, 2020 is provided below.

1. UAL at December 31, 2020	\$89,893,135
2. Expected increase	4,850,518
3. Liability (gain)/loss	(1,300,362)
4. Asset (gain)/loss	(26,692,778)
5. Change due to changes in assumptions, methods, and plan provisions	0
6. UAL at December 31, 2021 (1. + 2. + 3. + 4. + 5.)	\$66,750,513

¹ Excludes contributions for Multnomah Fire District.

Pension Valuation Results

Contribution Rate Development

Normal Cost Rate

For State Judiciary, the total normal cost calculated previously is divided by projected payroll to determine a total normal cost rate. The member contribution rate is subtracted from the total normal cost rate to determine the employer normal cost rate. The table below shows the development of the rate.

Development of Normal Cost Rate

	December 31, 2021			December 31, 2020		
	Normal Cost	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost Rate	Normal Cost	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost Rate
Total normal cost	\$7,851,699	\$29,580,512	26.54%	\$7,689,196	\$28,438,338	27.04%
Member contribution rate			(7.00%)			(7.00%)
Employer normal cost rate			19.54%			20.04%

Pension Valuation Results

Contribution Rate Development (continued)

Development of UAL Rates

The UAL rate is determined by calculating the next year's scheduled payment to the UAL as a percentage of combined valuation payroll.

	December 31, 2021	December 31, 2020
1. Total UAL	\$66,750,513	\$89,893,135
2. Next year's UAL payment	4,635,452	6,074,748
3. Combined valuation payroll	29,580,512	28,438,338
4. UAL rate (2. ÷ 3)	15.67%	21.36%

Pension Valuation Results

Contribution Rate Development (continued)

Pension Contribution Rate Summary (Pre-Rate Collar)

The following table summarizes the employer's pension contribution rate.

	July 1, 2023 Rates calculated as of December 31, 2021	Advisory July 1, 2023 Rates calculated as of December 31, 2020
1. Employer pension contribution rates		
a. Employer Normal Cost Rate	19.54%	20.04%
b. UAL rate	15.67%	21.36%
c. Multnomah Fire District #10 rate	0.15%	0.14%
d. Total employer pension rate (a. + b. + c.)	35.36%	41.54%
2. Member pension contribution rate	7.00%	7.00%
3. Total pension contribution rate	42.36%	48.54%

Tier 1/Tier 2 Valuation Results

Contribution Rate Development

Adjustments Due to Rate Collar and Decrease Restrictions

The UAL Rate for an employer is confined to a collared range based on the prior biennium's collared UAL Rate. For an independent employer, the collar width for the Tier 1/Tier 2 UAL Rate is the greater of 4% of payroll or one-third of the difference between the collared and uncollared UAL Rate at the prior rate-setting valuation. The maximum Tier 1/Tier 2 UAL Rate will always be at least 0.00% of payroll if the employer's funded status (excluding side accounts) is less than 100%. The PERS Board adopted restrictions on when the UAL Rate may decrease: the UAL Rate may not decrease if the funded status (excluding side accounts) is 87% or lower, while it may decrease by the full collar width if funded status is 90% or greater. The allowable decrease is phased in from 87% to 90% funded.

The table below shows the current Tier 1/Tier 2 UAL Rate for the period from July 1, 2021 through June 30, 2023, develops the maximum and minimum UAL Rates effective July 1, 2023 based on the collar, and determines the collared Tier 1/Tier 2 UAL Rate.

1. Current Tier 1/Tier 2 UAL Rate	4.77%
2. Size of rate collar	
a. Impact of rate collar, prior rate-setting valuation	(13.64%)
b. Size of rate collar (<i>maximum of 4% or absolute value of [a. / 3]</i>)	4.55%
c. Funded percentage	81%
d. Permissible decrease to UAL Rate (<i>If c. > 90%, b.; if c. < 87%, 0.00%; otherwise, graded between those rates</i>)	0.00%
3. July 1, 2023 minimum Tier 1/Tier 2 UAL Rate (1. – 2.d.)	4.77%
4. July 1, 2023 maximum Tier 1/Tier 2 UAL Rate (1. + 2.b., but not less than 0% if 2.c. < 100%)	9.32%
5. July 1, 2023 Tier 1/Tier 2 UAL Rate, before collar	15.67%
6. Net adjustment due to rate collar (3. – 5., but not < 0, or 4. – 5., but not > 0)	(6.35%)
7. July 1, 2023 Tier 1/Tier 2 UAL Rate, after collar (5. + 6.)	9.32%

Pension Valuation Results

Contribution Rate Development (continued)

Pension Contribution Rate Summary (Post Rate Collar)

The table below summarizes the employer's pension contribution rate for Tier 1 /Tier 2 after adjustments for the rate collar.

	July 1, 2023 Rates calculated as of December 31, 2021	Advisory July 1, 2023 Rates calculated as of December 31, 2020
1. Employer pension contribution rates		
a. Employer normal cost rate	19.54%	20.04%
b. UAL rate	9.32%	9.32%
c. Multnomah FD #10 rate	0.15%	0.14%
d. Total employer pension rate (a. + b. + c., minimum 0.00%)	29.01%	29.50%
2. Member pension contribution rate	7.00%	7.00%
3. Total pension contribution rate	36.01%	36.50%

Data

Demographic Information

State Judiciary Member Census

	December 31, 2021	December 31, 2020
Active Members ¹	188	186
Active Members with previous service segments with the employer	1	1
Dormant Members	19	19
Retired Members and Beneficiaries	283	277
Grand Total Number of Members	491	483

¹ Active counts do not include concurrent employees who have a separate dominant employer.

Data

Demographic Information (continued)

State Judiciary Active Members as of December 31, 2021

Age	Years of Service									Total
	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	
<20										
20-24										
25-29										
30-34										
35-39	2									2
40-44	11			1						12
45-49	17	7		5	1					30
50-54	12	18	8		9	2				49
55-59	7	9	7	7	3	4	1			38
60-64	6	2	6	5	6	1	5			31
65-69	1	2	3	4		3	2	1	1	17
70-74	1		1	1	4		1		1	9
75+										
Total	57	38	25	23	23	10	9	1	2	188

Distribution of State Judiciary Dormant Members

Age	Count	Average Deferred Monthly Benefit
<20		
20-24		
25-29		
30-34		
35-39		
40-44	1	203
45-49	2	3,878
50-54	1	4,670
55-59	4	2,093
60-64	5	3,596
65-69	2	510
70-74	3	1,694
75+	1	10,180
Total	19	2,909

Distribution of State Judiciary Retired Members and Beneficiaries

Age	Count	Average Monthly Benefit
<45		
45-49		
50-54		
55-59		
60-64	17	6,695
65-69	41	7,289
70-74	75	7,280
75-79	67	7,273
80-84	38	6,596
85-89	23	6,124
90-94	18	5,943
95-99	4	3,903
100+		
Total	283	6,926

Brief Summary of Actuarial Methods and Assumptions

A detailed summary of the actuarial methods and assumptions used to prepare the December 31, 2021 valuation can be found in the system-wide actuarial valuation report.

Actuarial Methods and Valuation Procedures

A brief summary of the methods used in this valuation is shown below:

<i>Actuarial cost method</i>	Entry Age Normal.
<i>Amortization method</i>	The UAL is amortized as a level percentage of combined payroll. The OPSRP UAL as of December 31, 2007 and experience in each subsequent biennium is amortized over a closed 16 year period. The Retiree Healthcare UAL as of December 31, 2007 and experience in each subsequent biennium is amortized over a closed 10-year period. If a Retiree Healthcare program is over 100% funded the actuarial surplus is amortized over a rolling 20-year period over Tier 1/Tier 2 payroll. Senate Bill 1049 was signed into law in June 2019 and required a one-time re-amortization of Tier 1/Tier 2 UAL over a closed 22-year period at the December 31, 2019 rate-setting actuarial valuation, which set actuarially determined contribution rates for the 2021-2023 biennium. Future Tier 1/Tier 2 gains and losses between subsequent odd-year valuations will be amortized as a level percentage of projected combined valuation payroll over a closed 20-year period.
<i>Asset valuation method</i>	Market value of assets, excluding reserves.
<i>Contribution rate stabilization method (rate collar)</i>	The contribution rate stabilization method, also referred to as the rate collar, is applied separately to OPSRP and to each Tier 1/Tier 2 experience sharing pool (State and Local Government Rate Pool, School Districts) and independent employer. The UAL Rate contribution rate component is confined to a collared range based on the prior biennium's collared UAL Rate and a defined collar width. The UAL Rate is not allowed to decrease if the funded status of the rate pool or employer is 87% or lower. The rate collar does not limit the change in the normal cost rate or changes for individual employers related to side accounts.

Economic Assumptions

A brief summary of the key economic assumptions used in this valuation is shown below:

<i>Investment return</i>	6.90% compounded annually on system assets.
<i>Interest crediting</i>	6.90% compounded annually on members' regular account balances. 6.90% compounded annually on members' variable account balances.
<i>Inflation</i>	2.40% per year.
<i>Payroll Growth</i>	3.40% per year.
<i>Healthcare cost trend</i>	Ranging from 5.5% in 2022 to 3.9% in 2074.
<i>Administrative Expenses</i>	\$59 million per year is added to the total system normal cost and allocated between Tier 1/Tier 2 and OPSRP based on valuation payroll.

Brief Summary of Actuarial Methods and Assumptions

Changes Since Last Valuation

The key changes since the December 31, 2020 actuarial valuation are described briefly below and are described in additional detail in the system-wide actuarial valuation report.

Changes in Actuarial Methods and Allocation Procedures

There were no changes in actuarial methods and allocation procedures since the December 31, 2020 actuarial valuation. A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA actuarial methods and allocation procedures is provided as part of the system-wide actuarial valuation report.

Changes in Assumptions

There were no changes in assumptions since the December 31, 2020 actuarial valuation. A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA assumptions is provided as part of the system-wide actuarial valuation report.

Brief Summary of Changes in Plan Provisions

There were no changes in plan provisions reflected since the December 31, 2020 actuarial valuation. A complete summary of the Tier 1/Tier 2, OPSRP, RHIA, and RHIPA plan provisions valued is provided as part of the system-wide actuarial valuation report.

Glossary

Actuarial Accrued Liability

The portion of the present value of prospective benefits allocated to service and compensation before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value

The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions

Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement, rates of investment earnings, and other relevant items.

Actuarial Cost Method

Sometimes called “funding method,” a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss)

A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Combined Valuation Payroll

Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for both Tier 1/Tier 2 and OPSRP active members. This payroll is used to calculate UAL rates.

Employer Contribution Rate

Consists of the normal cost rate and the UAL rates, plus adjustments for other items such as side account rate offsets.

Funded Status

The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

Normal Cost

The annual cost allocated to the current year under the actuarial cost method in use. The normal cost divided by the applicable payroll is the normal cost rate.

OPSRP Valuation Payroll

Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for OPSRP active members. This payroll is used to calculate OPSRP normal cost rates.

Glossary

Pre-SLGRP Liability/(Surplus)

The sum of Pre-SLGRP Pooled Liabilities and Transition Liabilities.

Pre-SLGRP Pooled Liability/(Surplus)

The difference between the total UAL and the UAL attributable to the SLGRP for a pool of employers that joined the SLGRP. There are currently two pre-SLGRP pools. One was created for State Agencies and Community Colleges when the SLGRP was formed. The other one was created when the Local Government Rate Pool joined the SLGRP.

Present Value

Sometimes called “actuarial present value,” the estimated cost (as of the valuation date) of a series of future payments. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Rate Collar

A contribution rate setting methodology that defines the maximum biennium-to-biennium change in the UAL contribution rate for a given experience-sharing pool.

Required Supplementary Information (RSI)

Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 68 of the Governmental Accounting Standards Board (GASB 68)

The accounting standard governing a state or local governmental employer’s accounting for pensions. The standard replaced GASB 27 for fiscal years beginning after June 15, 2014.

Statement No. 75 of the Governmental Accounting Standards Board (GASB 75)

The accounting standard governing a state or local governmental employer’s accounting for post-employment benefits other than pensions. The standard replaced GASB Statement 45 for fiscal years beginning after June 15, 2017.

Tier 1/Tier 2 Valuation Payroll

Projected payroll subject to PERS employer contribution rates for the calendar year following the valuation date for Tier 1 and Tier 2 active members. This payroll is used to calculate the Tier 1/Tier 2 normal cost rates.

Transition Liability/(Surplus)

The difference between the total UAL and the UAL attributable to the SLGRP for an individual employer that joined the SLGRP or the Local Government Rate Pool. The initial balance of liability or surplus is calculated at the time an employer joins the pool. That balance is then amortized over time via employer contribution rate charges (for a liability) or rate offsets (for a surplus).

Unfunded Accrued Liability (UAL)

The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets. The UAL is divided by combined valuation payroll and an amortization factor to determine an initial pre-collar UAL rate. The final UAL rate can be adjusted by the rate collar.



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