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EXECUTIVE MESSAGE



A generational employer pivot

2025 saw some big changes for PERS, and more are on the horizon. A generation ago, many participating employers partnered with PERS to create large side accounts that reduced their employer contribution rates over a set period—typically 20 years. That period ends in 2027. In total, 183 side accounts representing 144 employers will expire that year, with initial investments totaling about \$4.5 billion.

The chart from Milliman, PERS' actuary, in the September 2025 board presentation illustrates how significant these side account offsets have been for school districts and state and local government employers over four rate cycles.

Changes in Average Side Account Offset



Many employers funded their side accounts using pension obligation bonds (POB) — borrowing funds to make a one-time prepayment of pension costs. For most, the annual savings from the side account exceeded the bond repayment costs, saving employers money. However, as these offsets phase out, employers must find new revenue sources to cover contributions. The 2027–29 advisory rate valuation reflects about a \$1 billion drop in side account offsets. While some employers may benefit as POB payments conclude, rising payroll costs may counteract much of that relief.

PERS is proactively providing information and guidance to affected employers on short- and long-term contribution rate impacts. Beginning December 2025, PERS will share 2027–29 advisory rates and continue individual outreach.

Side accounts will remain a tool for employer rate relief, though at a smaller scale. The Employer Incentive Fund (EIF) Program continues, with a new phase launched April 1, 2025. As of June 30, 2025, employers have committed \$144 million in new deposits, matched by \$36 million in EIF dollars — adding \$180 million in contributions to the PERS Trust.

To further ease employer costs, the Oregon Legislature passed Senate Bill 849 in 2025, distributing about \$168 million from the School District Unfunded Liability Fund proportionally to all school districts. This reduced 2025–27 contribution rates by up to 1.68% — \$168 million can now support other priorities.

PERS remains committed to providing timely information, rate relief options, and collaborative solutions to help employers navigate this transition and sustain the pension system for all members. I hope the information provided in *PERS by the Numbers* can help give more context about the system and effects from recent changes.

Kevin Olineck PERS Director

2025 AT A GLANCE

DEMOGRAPHICS

Number of active employers

907

Total number of members

421,934

Number of retirements

6,989

Retirees working after retirement

9,794



FINANCIALS

Funded percentage

With side accounts

77%

Economic impact in \$ for 2024

\$5.5

Without side accounts

73%

Average salary replacement

45%

PROGRAMS

OSGP participants

41,546

PHIP-covered lives

49,370

IAP accounts 340,511 accounts

Average annual retirement amount

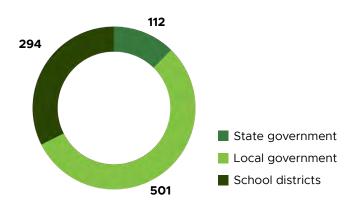
S35.423

IAP account balances after earnings crediting

\$14,298.9



PERS-PARTICIPATING EMPLOYERS AS OF JUNE 30, 2025



Currently 907, including state agencies, universities, community colleges, school districts, cities, counties, and other local government units. Find the full list of PERS-participating employers in Appendix A.

PERS MEMBERSHIP BY CATEGORY AS OF JUNE 30, 2025

Membership by Category		State Govt.	Local Govt.	School Districts	Total
T: O	Active	2,295	1,873	2,328	6,496
Tier One	Inactive	1,817	2,056	2,231	6,104
Tier Two	Active	5,795	6,820	9,182	21,797
Her Two	Inactive	2,672	4,136	4,918	11,726
OPSRP	Active	49,098	54,124	66,743	169,965
	Inactive	9,463	12,346	15,385	37,194
Codetetal	Active	57,188	62,817	78,253	198,258
Subtotal	Inactive	13,952	18,538	22,534	55,024
Retired*		48,642	50,944	69,066	168,652
TOTAL AS OF JUNE 30, 2025 421,934					421,934

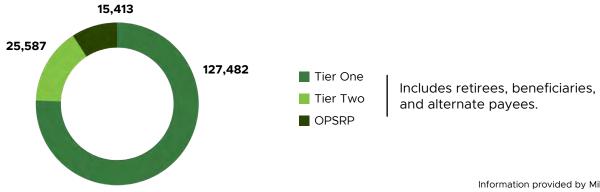
^{*&}quot;Retired" includes beneficiaries, but not members who received total lump-sum retirement or account withdrawal payouts.

State government — State agencies, universities (except Oregon Health and Science University, or OHSU), judges **Local government** — Cities, counties, special districts, community colleges, and OHSU

Active — Currently working for a PERS-participating employer

Inactive - Not retired; not currently working for a PERS-participating employer

CURRENT RETIREES BY MEMBERSHIP GROUP AS OF DEC. 31, 2024

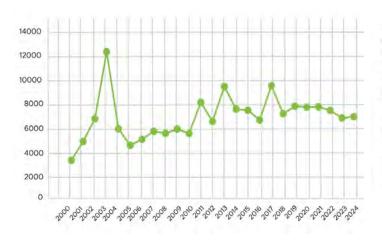


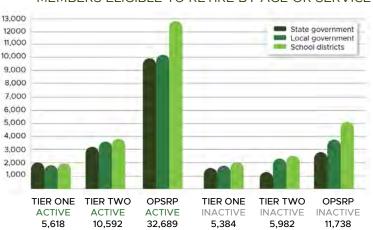
Information provided by Milliman, PERS' actuary.

RETIREMENTS BY CALENDAR YEAR (TIER ONE, TIER TWO, OPSRP)

MEMBERS ELIGIBLE TO RETIRE (AS OF JUNE 30, 2025)



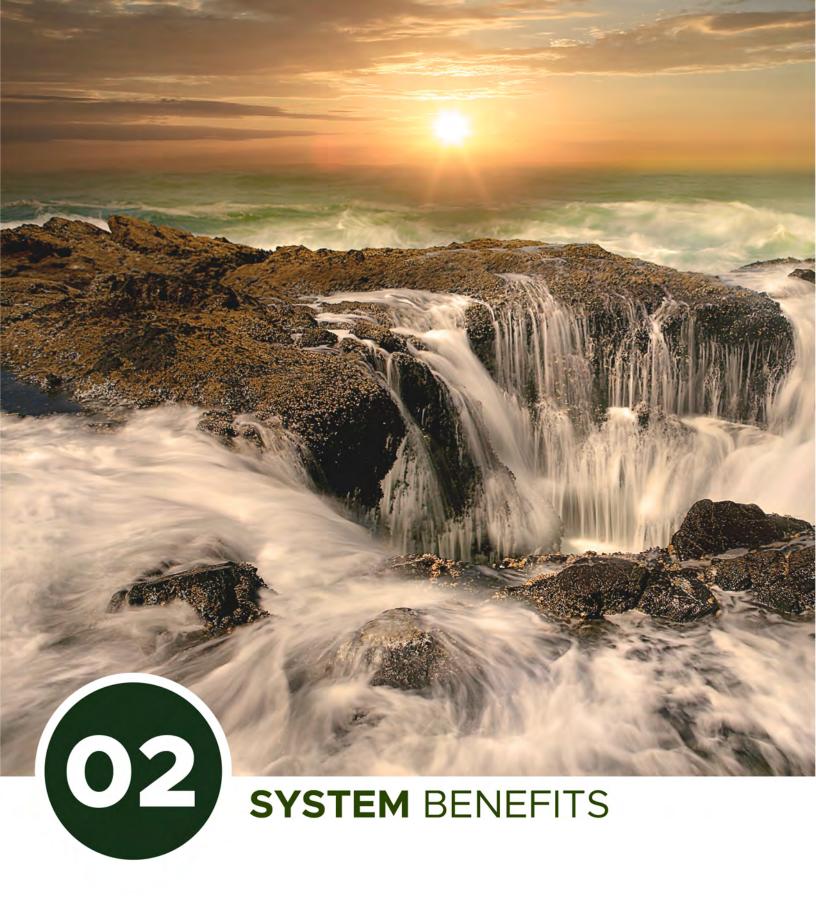




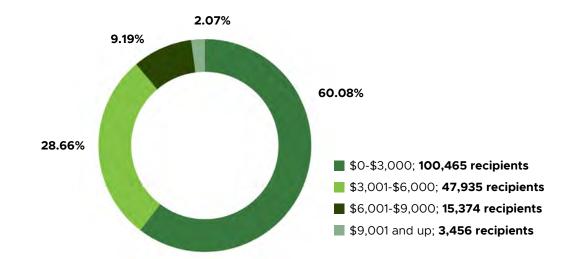
Note: Spikes in retirements may be related to legislative conversations about PERS.

PERS MEMBERSHIP BY PLAN

2016	232,856	121,180
2017	228,932	131,097
2018	225,611	142,242
2019	221,787	152,712
2020	218,363	160,466
2021	214,103	170,879
2022	210,272	182,808
2023	206,724	198,649
2024	202,941	212,552
2025	198,667	223,267
	OPSRP OPSRP	
	Tier One/Tier Two	



MONTHLY BENEFIT PAYMENT AMOUNTS AS OF JANUARY 2025



Average annual benefit: \$35,423 Median annual benefit: \$28,138

Monthly Benefit (\$)	Number of Retirees	Percent of Benefits Paid*
0 - 500	16,395	1.06%
501 - 1,000	22,262	3.37%
1,001 - 1,500	18,886	4.76%
1,501 - 2,000	16,257	5.75%
2,001 - 2,500	14,054	6.40%
2,501 - 3,000	12,611	7.01%
Subtotal	100,465	
% of Total	60.08%	

Monthly Benefit (\$)	Number of Retirees	Percent of Benefits Paid*
3,001 - 3,500	10,923	7.18%
3,501 - 4,000	9,609	7.29%
4,001 - 4,500	8,333	7.17%
4,501 - 5,000	7,291	7.01%
5,001 - 5,500	6,321	6.72%
5,501 - 6,000	5,458	6.35%
Subtotal	47,935	
% of Total	28.66%	

continued on page 10



continued from page 9

Monthly Benefit (\$)	Number of Retirees	Percent of Benefits Paid*
6,001 - 6,500	4,515	5.71%
6,501 - 7,000	3,456	4.72%
7,001 -7,500	2,774	4.07%
7,501 - 8,000	2,068	3.24%
8,001 - 8,500	1,455	2.43%
8,501 - 9,000	1,106	1.96%
Subtotal	15,374	
% of Total	9.19%	

Monthly Benefit (\$)	Number of Retirees	Percent of Benefits Paid*
9,001 - 10,000	1,451	2.77%
10,001 - 11,000	832	1.76%
11,001 - 12,000	436	1.01%
12,001 - 13,000	264	0.67%
13,001 - 14,000	154	0.42%
14,001 and up	319	1.19%
Subtotal	3,456	
% Total	2.07%	

^{*}Percent of Benefits Paid values reflect the percentage of all monthly benefit payments issued for 1/1/2025.



TIER ONE/TIER TWO PENSION BENEFIT PAYMENT OPTIONS SELECTED IN CALENDAR YEAR 2024



At retirement, Tier One and Tier Two members have 13 options (14 including the AS Refund*) for how to receive their pension benefit payments. All monthly retirement pension benefits are paid to the retiree or beneficiary for life. The option a member chooses will affect the amount of the monthly pension benefit payment. An option that includes a beneficiary payment will produce a lower monthly pension benefit payment. Benefit payments are based on an actuarial equivalent of the member's and/or the beneficiary's life expectancy.

2024			
Option (definitions below)	Quantity	Percent	
1	1,106	26.40	
Refund Annuity	213	5.08	
15-Year Certain	238	5.68	
2	799	19.07	
2A	1,095	26.13	
3	107	2.55	
3A	236	5.63	
Lump-Sum 1	30	0.72	
Lump-Sum 2	9	0.21	
Lump-Sum 2A	25	0.60	
Lump-Sum 3	3	0.07	
Lump-Sum 3A	3	0.07	
Total Lump Sum	257	6.13	
Aggregate Sum (AS) Refund*	69	1.65	
Total	4,190	100.0%	

Option 1 (nonrefund): This option is paid for the member's lifetime. No benefit of any kind is paid to anyone after the member dies.

Refund Annuity Option: This option is paid for the member's lifetime. When the member dies, the designated beneficiary receives a lump-sum refund of the amount remaining in the member's account. If any,

15-Year Certain Option: This option is paid for the member's lifetime. If the member dies before receiving 180 monthly payments (15 years), the beneficiary is entitled to receive the remainder of the 180 monthly payments. Once the member has received 180 payments, no benefit is payable to the beneficiary.

Survivorship Options (Option 2, Option 2A, Option 3A, and Option 3A): Under any of the survivorship options, the member may name only one beneficiary who must be a living person. The monthly benefit payment is paid to the member until their death, and then paid to the beneficiary if then living (under Options 2 and 2A, at the same base amount as the member; under Option 3 and 3A, at 1/2 the base amount of the member).

Lump-Sum Options (Lump-Sum Option 1, Lump-Sum Option 2, Lump-Sum Option 2A, Lump-Sum Option 3, and Lump-Sum Option 3A):
These options provide a lump-sum payment of the member's account balance plus a lifetime monthly pension from the employer's contributions. The lifetime monthly pension options are the same as those for the nonrefund and survivorship options described above.

Total Lump Sum: The balance of the member's account and a matching amount funded by employers' contributions are paid out in total; there is no ongoing monthly benefit.

AS Refund*: A one-time payment based on an actuarial calculation if the Option 1 benefit is less than \$200 per month.

Disability retirements are not included.

TIER ONE/TIER TWO MEMBERS HIRED BEFORE AUGUST 29, 2003

At retirement, PERS uses three methods to calculate a Tier One monthly benefit amount and two methods to calculate a Tier Two monthly benefit amount. Members receive the highest monthly benefit that results from these calculations.

Full Formula Method

(74% of benefits in 2024)

For General Service members: 1.67% × years of service credit × final average salary

For Police and Firefighter members: 2% × years of service credit × final average salary

Formula Plus Annuity Method

(0.0% of benefits in 2024)

Tier One only, available to those who made contributions before August 21, 1981. This benefit uses a formula similar to the Full Formula Method to compute the employer portion of the benefit.

For General Service members: 1% × years of service credit × final average salary

For legislators and Police and Firefighter members: 1.35% \times years of service

credit × final average salary

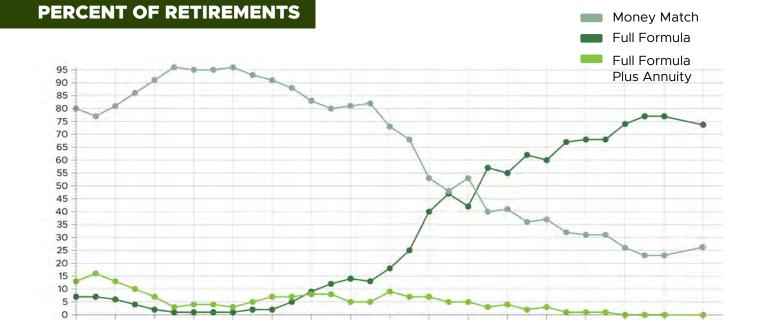
The total of the calculation will be added to based on member account balance and life expectancy.

Money Match

(26% of benefits in 2024)

The employer matches the member account balance by an equal amount. From that total, a monthly payment amount is then calculated based on life expectancy.

Reforms to the system have dropped the Money Match formula usage to 26%, down from a high of 96% in 2001.



Note: PERS by the Numbers editions prior to 2023 used a more narrow calculation to show formula usage for 30-year retirees. We have expanded this to include all Tier One/Tier Two retirements.

OREGON PUBLIC SERVICE RETIREMENT PLAN (OPSRP) MEMBERS (HIRED AFTER AUGUST 28, 2003)

At retirement, all OPSRP members who are vested and eligible to retire can receive a monthly pension benefit for life. The pension benefit is calculated using the following formulas:

For General Service members: 1.5% × years of total retirement credit × final average salary

For Police and Firefighter members: 1.8% × years of total retirement credit × final average salary

OPSRP PENSION BENEFIT PAYMENT OPTIONS SELECTED IN CALENDAR YEAR 2024

At retirement, OPSRP members have six different options for how to receive their pension benefit payments (five are monthly benefit payments and one is the one-time Cash Out Lump Sum). All monthly pension retirement benefits are paid to the retiree or beneficiary for life. The option a member chooses will affect the amount of the monthly pension benefit payment. An option that includes a beneficiary payment will produce a lower monthly pension benefit payment. Benefit payments are based on an actuarial equivalent of the member's or the beneficiary's life expectancy.

Option (definitions below)	Quantity	Percent
Single Life Option	1,101	44.56
Full-Survivorship Option	565	22.87
Full-Survivorship Increase Option	312	12.63
Half-Survivorship Option	46	1.86
Half-Survivorship Increase Option	71	2.87
Cash Out Lump Sum	376	15.22
Total	2,471	100%

Single Life Option: This option is paid for the member's lifetime. No benefit of any kind is paid to anyone after the member dies.

Full-Survivorship Option: This benefit is paid monthly for the member's lifetime. After the member dies, their surviving beneficiary will receive, for life, the monthly benefit the member was receiving at the time of the member's death. Payments are actuarially reduced to provide the same monthly benefit amount to the member for life and to the member's beneficiary for their lifetime.

Full-Survivorship Increase Option: Same as the Full-Survivorship Option, but if the member's beneficiary dies before the member, or if the member's beneficiary is their spouse and they are divorced after retirement, the member will receive the higher-paying Single Life Option benefit for the remainder of the member's lifetime.

Half-Survivorship Option: This benefit is paid monthly for the member's lifetime. After the member dies, their surviving beneficiary will receive, for life, one-half of the monthly benefit the member was receiving at the time of the member's death.

Half-Survivorship Increase Option: Same as the Half-Survivorship Option, but if the member's beneficiary dies before the member, or if the member's beneficiary is their spouse and they are divorced after retirement, the member will receive the higher-paying Single Life Option benefit for the remainder of the member's lifetime.

Cash Out Lump Sum: If an OPSRP member's monthly pension benefit is less than \$200, the member will receive a one-time lump-sum payment that represents the actuarial equivalent of the present value of the pension.

Disability retirements are not included.

2025 REPLACEMENT RATIO STUDY (BASED ON 2024 RETIREMENTS)

Summary of findings

PERS uses a replacement ratio, the percentage of a member's final average salary, to show pension benefits as a percentage of pay. The 2025 PERS Replacement Ratio Study (RRS) gives an overview of this. The population consists of 130,096 Tier One/Tier Two retirements from January 1990 through December 2024 and covers retired members who selected comparable monthly benefit options. The techniques used in the 2025 study are generally consistent with the techniques used in previous studies.

The calculations do not include federal Social Security benefits that a retiree may be eligible for based on the retiree's work history and do not include Individual Account Program (IAP) benefits the retiree may be receiving. The calculations do include the effects of the Strunk v. Public Employees Retirement Board (PERB)/City of Eugene v. PERB benefit adjustments, which will generally impact retirements that occurred during 2000-04 and reduce the reported replacement ratios for those periods by several percentage points.



Average age at retirement for applicable 2024 retirees:

61 years old

Average years of service at retirement for applicable 2024 retirees:

28 years of service

Average monthly retirement benefit

- For all retirees from 1990 2024, the average monthly retirement benefit at time of retirement was \$2,578 per month, or about \$30,939 annually.
- For those retirees in the most recent year (2024), the average monthly retirement benefit was \$4,067 per month, or about \$48,807 annually.

Average public employee salaries at retirement

- For all retirees from 1990 2024, the final average salary at retirement was \$60,343 annually.
- For 2024 retirees, the final average salary at retirement was \$106,096 annually.

Average salary replacement ratio (see chart on following page)

- For all retirees from 1990 2024, the average annual retirement benefit equaled 51% of final average salary at the time of retirement.
- For 2024 retirees, the average annual retirement benefit equaled 45% of final average salary (see chart on following page.)
- For all retirees from 1990 2024, there were 5.4% who received annual benefits more than 100% of final average salary. The average of years of service for this group was 31 years.

• For 2024 retirees, 0.43% received annual benefits more than 100% of final average salary. The average of years of service for this group was 39 years.

For members who retired with 30 years of service (see chart on following page)

- From 1990 2024, the average retirement benefit for 30-year members equaled 73% of final average salary and the average monthly benefit was \$3,803 per month.
- The average replacement ratio for 30-year members peaked at 100% of final average salary in 2000 and their average monthly benefit was \$4,200 per month.
- For 2024 only, the average retirement benefit for 30-year members equaled 49% of final average salary and the average monthly benefit was \$4,820 per month.
- 10.3% of retirees from 1990 2024 had 30 years of service.
- 11.2% of retirees in 2024 had 30 years of service.

CHARACTERISTICS OF THE RETIRED MEMBERS IN THE RRS POPULATION¹



For all retirees from 1990 - 2024, the average monthly retirement benefit at time of retirement was \$2,578 per month, or about \$30,939 annually.



For those retirees in the most recent year (2024), the average monthly retirement benefit was \$4,067 per month, or about \$48,807 annually.



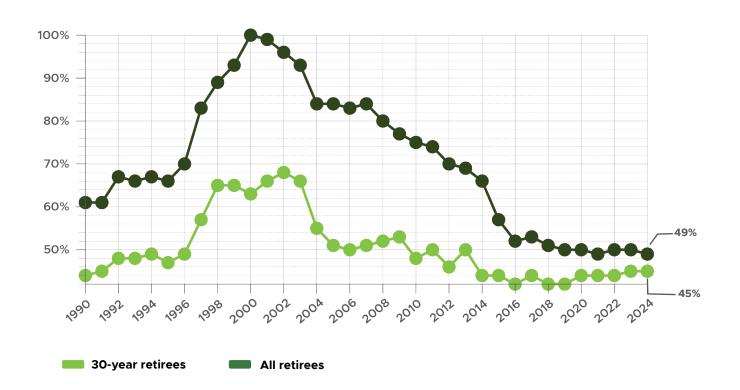
For all retirees from 1990 - 2024, 5.4% received annual benefits more than 100% of final average salary. The average years of service for this group was 31 years. For 2024 retirees, 0.43% received annual benefits more than 100% of final average salary. The average years of service for this group was 39 years.

The exclusions and other factors applied to this population are explained in Appendix B on page 53. Generally, these exclusions remove about 35% of members who retire in a given year. Replacement Ratio Summary of Findings are found in Appendix D on page 59.



TIER ONE/TIER TWO REPLACEMENT RATIO TRENDS (DATA FROM PERS REPLACEMENT RATIO STUDY)

Average replacement ratios based on high three years' salary (%)



INDIVIDUAL ACCOUNT PROGRAM (IAP)

All PERS members actively employed since 2004 have an Individual Account Program (IAP) account-based benefit. A portion of members' salary, whether paid by the member or their employer, is placed into the IAP. Senate Bill (SB) 1049 (2019) requires that members earning more than the current monthly salary threshold have a portion of their 6% IAP contributions redirected to an Employee Pension Stability Account. At retirement, the payment members receive from the IAP is based on their account balance — contributions plus investment earnings or losses over time.

AVERAGE IAP ACCOUNT BALANCES AND DISTRIBUTIONS TO RETIRED MEMBERS, WITHDRAWALS, AND DECEASED MEMBERS

Year (as of December 31)	Total IAP Account Balance After Earnings Crediting (\$M)	Number of Accounts	Average IAP Account Balance (\$)	Number of Payees
2004	423.4	162,119	2,611	2
2005	928.9	181,055	5,130	4,131
2006	1,396.8	197,491	7,072	6,557
2007	2,120.5	210,133	10,091	6,705
2008	1,851.2	218,192	8,484	8,624
2009	2,742.8	231,256	11,847	7,727
2010	3,536.9	236,265	14,970	8,695
2011	3,939.7	238,062	16,549	11,479
2012	4,855.1	240,637	20,176	14,728
2013	5,127.3	242,516	21,142	14,994
2014	6,001.1	245,768	24,821	15,118
2015	6,906.1	255,896	26,988	15,644
2016	7,634.7	262,096	29,129	16,213
2017	8,960.4	269,812	33,210	16,866
2018	9,015.2	276,739	32,577	17,597
2019	10,391.9	285,293	36,425	17,983
2020	11,230.1	292,983	38,330	17,633
2021	12,997.8	298,397	43,559	17,034
2022	12,411.5	315,783	39,304	18,784
2023	13,336.7	328,994	40,538	18,343
2024	14,298.9	340,511	41,992	18,698

IAP TARGET-DATE FUND VALUES (AS OF DECEMBER 31, 2024)

Starting January 1, 2018, all PERS members became invested in age-based target-date funds in an effort by the Oregon Investment Council to reduce investment risk and volatility as members age. Retired members receiving installment payments are invested in the Retirement Installments Fund.

The Retirement Allocation Fund is a target-date fund designed to provide current income needs as well as preservation of capital. Members born in 1957 or earlier are enrolled in this fund for their IAP account.

Target-Date Fund	Number of Accounts	Total Account Balance
Retirement Installment Fund	9,112	\$426,652,908.78
Retirement Allocation Fund	16,144	\$470,409,899.56
2025 Born between 1958 and 1962	21,727	\$1,127,378,578.88
2030 Born between 1963 and 1967	32,107	\$1,986,191,135.39
2035 Born between 1968 and 1972	41,882	\$2,680,065,357.37
2040 Born between 1973 and 1977	45,000	\$2,547,824,043.07
2045 Born between 1978 and 1982	48,878	\$2,039,604,456.76
2050 Born between 1983 and 1987	45,124	\$1,220,455,868.63
2055 Born between 1988 and 1992	37,900	\$595,560,996.41
2060 Born between 1993 and 1997	27,670	\$234,873,368.58
2065 Born in 1998 or after	15,358	\$73,505,771.30

RETIRED TIER ONE, TIER TWO, AND OPSRP MEMBERS WHO WORKED IN A PERS-PARTICIPATING POSITION IN 2024, CATEGORIZED BY EMPLOYER GROUP

After PERS members begin receiving a PERS retirement benefit, they may choose to return to work for a PERS-participating employer.

Prior to the passage of SB 1049, most PERS members had restrictions on the number of hours they could work in a calendar year without stopping their pension benefit payments. Tier One, Tier Two, and OPSRP retirees were subject to specific hour limitations and exceptions.

From January 1, 2020, through December 31, 2034, most* retirees may work for a PERS-participating employer for an unlimited number of hours while continuing to receive their pension benefit.





HOURS WORKED AFTER RETIREMENT IN CALENDAR YEAR BY EMPLOYER TYPE

		Local		
Annual Hours	s State	Government	K-12	Total
<200	393	913	1,752	3,058
200-400	298	467	842	1,607
401-600	207	358	573	1,138
601-800	155	246	470	871
801-1,039	179	276	469	924
>1,039	490	785	921	2,196
Totals	1,722	3,045	5,027	9,794

*If a member retires earlier than normal retirement age, they must have a complete break in all PERS-participating employment for at least six months in order to be eligible for unlimited retiree hours under SB 1049. Otherwise, the existing Tier One/Tier Two and OPSRP limits of working fewer than 1,040 and 600 hours per year, respectively, apply.

OTHER PERS PROGRAMS



Oregon Savings Growth Plan 457(b) deferred compensation

The Oregon Savings Growth Plan (OSGP) is a 457(b) deferred compensation plan that provides many public employees a convenient way to save for retirement. Enrollment is available to all state of Oregon employees upon hire as well as local government and school district employees whose employers have adopted the plan.

Participation (as of June 30, 2025)

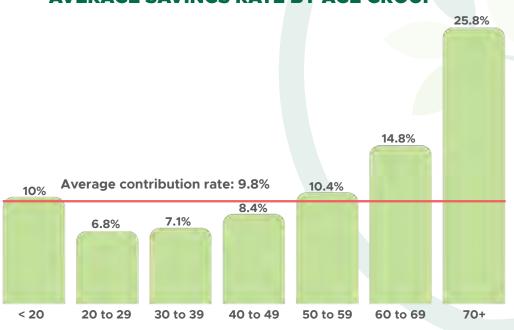
- 41,546 total participants
 - 34,294 participants are state government employees (includes universities, higher education, and miscellaneous state agencies).
 - 23,758 participants are actively contributing to OSGP.



O2 SYSTEM BENEFITS

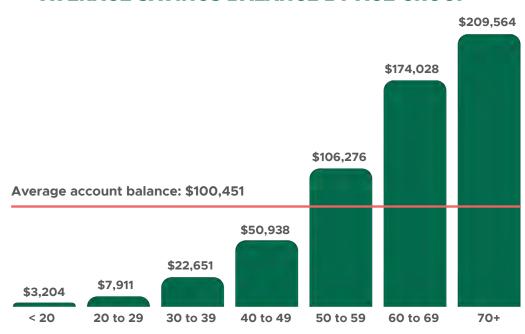
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AVERAGE SAVINGS RATE BY AGE GROUP



Data as of June 30, 2025

AVERAGE SAVINGS BALANCE BY AGE GROUP



Data as of June 30, 2025

PERS HEALTH INSURANCE PROGRAM INFORMATION

The PERS Health Insurance Program (PHIP) offers medical and dental insurance plans to eligible Tier One, Tier Two, and OPSRP retirees, their spouses, and dependents. Upon retirement, these insurance options become a choice available to all PERS retirees. While primarily serving our Medicare-eligible (age 65 and older) population, PHIP also offers insurance coverage options for those who are not yet Medicare-eligible.

PERS administers two statutory trust funds for PHIP that provide premium subsidies for eligible Tier One and Tier Two retirees or surviving spouses. These trusts are known as the Retirement Health Insurance Account (RHIA), serving all qualifying PERS Medicare-eligible retirees, and the Retiree Health Insurance Premium Account (RHIPA), serving qualifying state government non-Medicare retirees. Both trusts are funded from employer contributions on an actuarial basis.



PROGRAM ENROLLMENT (AS OF JUNE 30, 2025)

Medical Plans (four plans offered)	Totals	Medicare	Non-Medicare
Covered lives	49,370	48,572	798
Retirees (or surviving spouses)	40,559	40,049	510
Spouses/dependents	8,811	8,523	288
Average age of enrolled retirees	77	77	56
Dental Plans (two offered)	35,058		

STATUTORY HEALTH INSURANCE PREMIUM SUBSIDIES

Retirees receiving RHIA (trust fund held by PERS*)	37,738
Retirees receiving RHIPA (trust fund held by PERS**)	377
RHIA monthly payment total	\$2,264,280.00
RHIPA monthly payment total	\$231,932.30

^{*}The RHIA subsidy is \$60 per month for Medicare-eligible retirees.

Employer rates (effective July 1, 2025): RHIA: 0.00%; RHIPA (state government only): 0.00%

Unfunded actuarial liability (as of December 31, 2024): \$434 million (RHIA); \$51 million (RHIPA)

^{**}The RHIPA subsidy is for state of Oregon non-Medicare retirees only and varies depending on the employee's years of state service, from \$327.31 (8 years) to \$654.62 (30+ years) per month for plan year 2024.

History of key PERS benefits enhancements, caps, and reductions

Investment Risk Allocation Action: Decreased assumed earnings rate 2014 from 8.0% to 7.75%. Affected: Tier One **Supplementary Payments** Action: Supplementary payments invalidated 2015 by Oregon Supreme Court. Affected: Retirees **Cost-of-Living Adjustment** Action: Annual COLA of up to 2% restored for service time accrued before October 2015 1, 2013. COLA for service time after that date uses a lower rate. Service time accrued in both periods is "blended." **Investment Risk Allocation** Affected: All Action: Decreased assumed earnings rate 2016 from 7.75% to 7.50%. Affected: Tier One **Investment Risk Allocation** 2017 Action: Decreased assumed earnings rate from 7.50% to 7.20%. Affected: Tier One **Investment Risk Allocation** Action: Oregon Investment Council changes 2017 IAP investment strategy to target-date funds, intended to reduce investment risk and **Administrative** volatility as members age. Note: Senate Bill (SB) 1049 made substantial Affected: All 2019* changes to benefit administration, details of which can be found on our SB 1049 webpage. **Administrative** Action: Alternate method to calculate death 2019 benefit for certain Tier One and Tier Two members who die before retirement. Affected: Tier One/Tier Two **Benefit Calculation/Formula** Action: Reduces member contributions to 2019 IAP. Establishes limit on salary used for benefit calculations. Affected: All **Investment Risk Allocation** 2021 Action: Decreased assumed earnings rate from 7.20% to 6.90%. Affected: Tier One **Benefit Calculation/Formula** Action: Changed definition of salary to 2021 include income that is or would be taxable under Oregon state income tax. Affected: OPSRP **Benefit Calculation/Formula** Action: Increased death benefits from 50% 2021 of actuarially determined value to 100%. Affected: All **Retirement Age/Benefit Calculation** Action: House Bill (HB) 4045 decreased OPSRP Police and Firefighter normal retirement age for members with less than 25 years of 2024 service from 60 to 55. Created new OPSRP * neither enhancement nor reduction member classification - Hazardous Position with increased benefits above General Service members. Benefit enhancement Affected: OPSRP

Go to Appendix E for further history of key legislative changes to PERS.

Benefit cap or reduction



THE PERS FUNDING EQUATION



At the end of each calendar year, the PERS actuaries calculate the system's funded status using the following basic equation:

В

I

BENEFITS

Present value of earned benefits (set by Oregon Legislature)

CONTRIBUTIONS

Employer and member funds to pay pension benefits (set by PERS Board)

EARNINGS

Future returns on invested funds (managed by Oregon Investment Council and Oregon State Treasury)

Every two years, the PERS Board adjusts contribution rates so that, over time, contributions will be sufficient to fund the benefits earned, if earnings follow assumptions.

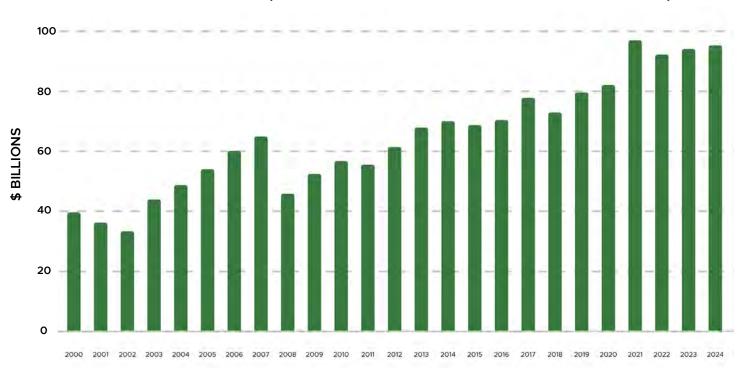
FUNDED STATUS (AS OF DECEMBER 31, 2024)

The Oregon Public Employees Retirement Fund (OPERF or the PERS Fund) is invested under the oversight and direction of the Oregon Investment Council, with staff support from the Investment Division of Oregon State Treasury.

As of December 31, 2024, PERS was 73% funded (77%, including employer side accounts). Side accounts hold deposits from PERS employers of pension obligation bond proceeds and other lump-sum deposits that are amortized to offset that employer's contribution.

As of December 31, 2024, the unfunded actuarial liability (UAL) was \$29.2 billion (\$24.8 billion, including side accounts). The UAL fluctuates based on various factors, including investment returns, board reserving policies, statutory plan design changes, and litigation outcomes.

PERS FUND VALUE (CALENDAR YEARS ENDING DECEMBER 31)



SYSTEM FUNDING LEVEL AND STATUS

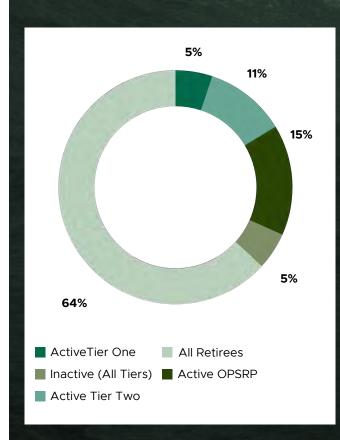
UNFUNDED ACTUARIAL LIABILITY (UAL) HISTORY AND FUNDED RATIO¹

Valuation ²		le Accounts³ ig in 2002)	Without S	ide Accounts
Date	UAL (\$M)	Funded Ratio (%)	UAL (\$M)	Funded Ratio (%)
2000	1,545	96.4	1,545	96.4
2001	-2,031	105.4	-2,031	105.4
2002	3,204	92.0	3,983	89.9
2003	1,751	96.1	6,227	86.0
2004	2,122	95.6	7,678	84.0
2005	-1,751	104.0	4,919	91.0
2006	-5,019	109.7	2,229	95.7
2007	-6,120	111.5	1,538	97.1
2008	10,998	80.0	16,133	70.4
2009	8,108	86.0	13,598	76.0
20104	7,700	87.0	13,300	78.0
2011	11,030	82.0	16,255	73.0
20125	5,600	91.0	11,100	82.0
2013	2,600	96.0	8,500	86.0
2014 ⁶	12,100	84.0	18,000	76.0
2015	16,200	79.0	21,800	71.0
2016	19,911	75.4	25,300	68.8
2017 ⁷	16,700	80.0	22,300	73.0
2018	21,800	75.0	27,000	69.0
2019	19,100	79.0	24,600	72.0
2020	22,900	76.0	28,000	71.0
2021	13,400	86.0	20,000	80.0
2022	21,800	79.0	28,000	73.0
2023	24,000	77.0	29,400	72.0
2024	24,800	77.2	29,200	73.1

- 1. Includes RHIA/RHIPA.
- 2000 03 UALs were calculated using actuarial value of assets (AVA) based on yearto-year changes in asset values smoothed over four-year periods. All other UALs since 1997 were calculated using an AVA based on fair market value.
- The official PERS valuation UAL and funded ratio are based on accepted actuarial standards and methodologies. These methodologies are subject to review and revision every two years. A negative UAL amount represents a surplus.
- 2010 and after includes the OPSRP pension plan; 2000-09 reflects only Tier One/Tier Two.
- Includes liability reductions from Senate Bills 822 and 861 and board-adopted actuarial assumptions/methods from the 2012 Experience Study.
- Includes the Moro decision and board-adopted actuarial assumptions and methods from the 2014 Experience Study.
- Includes board-adopted actuarial assumptions and methods from prior year experience studies.

ACTUARIAL ACCRUED LIABILITIES (AS OF DECEMBER 31, 2024)

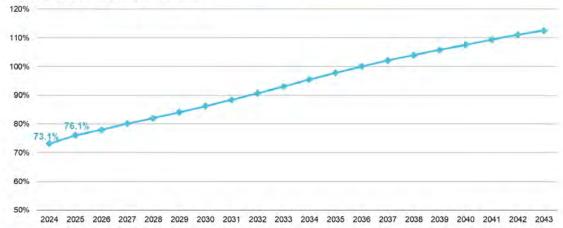
About 69% of PERS' total accrued liability is for members who are no longer working in PERS-qualifying employment (64% retirees and 5% inactives).



PROJECTED SYSTEM-FUNDED STATUS (INCLUDING SIDE ACCOUNTS)

System Funded Status (Excluding Side Accounts)





- 2025 funded status increases due to estimated year-end 2025 investment returns and contributions
- In steady +6.9% return scenario, funded status projected to reach 100% in 2036

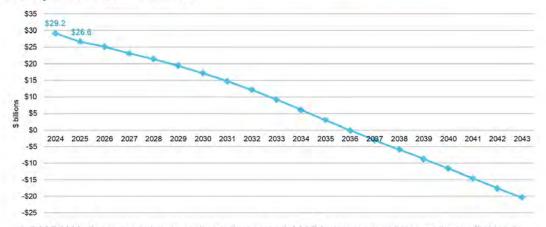
Milliman

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PROJECTED UAL (UNFUNDED ACTUARIAL LIABILITY) EXCLUDING SIDE ACCOUNTS

UAL (Unfunded Actuarial Liability) Excluding Side Accounts

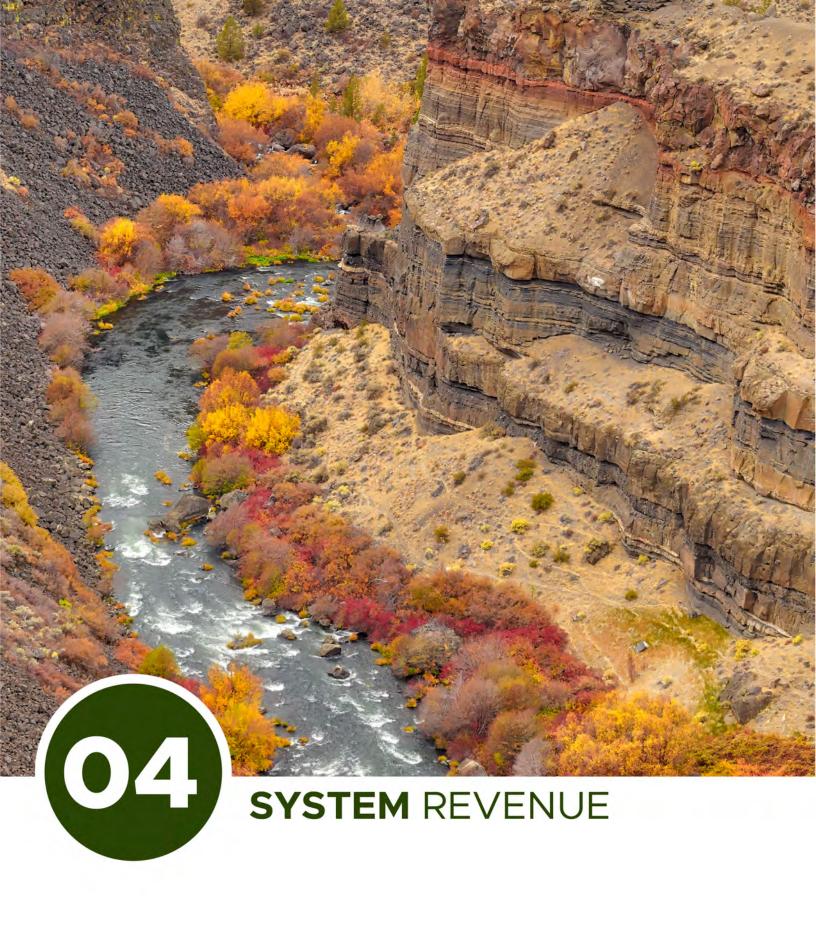
Steady 6.9% return scenario



- 2025 UAL decreases due to estimated year-end 2025 investment returns and contributions
- At steady +6.9% return, UAL declines steadily, reaching \$0 at year-end 2036

Milliman

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MEMBER AND EMPLOYER CONTRIBUTIONS AND INVESTMENT INCOME FOR CALENDAR YEARS

Senate Bill 849 (2025) directed funds from School District Unfunded Liability Fund (SDULF) to be distributed as a one-time relief to school district employers' 2025-27 contribution rates.

Year	Member Contributions (\$M)	Employer Contributions (\$M)	Amortization of Employer Side Accounts (\$M)*	Total Employers (\$M)	Net Investment and Other Income (\$M)
1995	287	427	N/A	427	4,110
1996	296	463	N/A	463	4,358
1997	291	473	N/A	473	4,582
1998	318	488	N/A	488	3,978
1999	347	577	N/A	577	7,463
2000	359	654	N/A	654	143
2001	385	689	N/A	689	-2,708
2002	398	725	8	733	-3,460
2003	405	582	97	679	8,866
2004	371**	408	278	686	5,933
2005	434	504	357	861	6,179
2006	456	637	474	1,111	8,163
2007	468	633	466	1,099	5,808
2008	484	669	541	1,210	-17,235
2009	515	561	540	1,101	8,053
2010	502	435	558	993	6,444
2011	510	627	509	1,136	1,935
2012	513	915	443	1,358	7,859
2013	561	942	448	1,390	9,458
2014	524	994	472	1,466	4,819
2015	611	1,185	542	1,727	1,380
2016	610	1,021	628	1,649	4,840
2017	628	1,241	653	1,894	10,663
2018	649	1,808	663	2,471	166
2019	698	2,062	739	2,802	9,936
2020	707	2,108	815	2,923	5,996
2021	773	2,569	893	3,462	16,644
2022	814	1,850	993	2,843	-2,159
2023	888	1,590	813	2,403	5,504
2024	968	1,368	1,292	2,660	5,488

^{*}PERS' methodology to track amortization of side accounts began in 2002. Side accounts hold deposits by employers of pension obligation bond proceeds and other lump-sum payments that are amortized to offset that employer's PERS contributions.

**Since January 1, 2004, member contributions have been placed in the Individual Account Program (IAP) instead of the legacy Tier One/Tier Two member accounts.

FINAL 2024 CREDITING AND RESERVING (ALL DOLLAR AMOUNTS IN MILLIONS)

Reserve/Account	Balance Before 2024 Crediting	Final 2024 Crediting	Final Ending Reserve Balance	Crediting Rates
Tier One Member Regular Accounts	1,730.0	119.4	1,849.4	6.90%
Tier One Rate Guarantee Reserve	740.1	11.5	751.6	1.55%
Tier Two Member Regular Accounts	960.2	50.8	1,011.0	5.29%
Benefits-In-Force Reserve	12,373.4	655.8	13,029.2	5.29%
Employer Reserves	45,902.1	2,433.1	48,335.2	5.29%
Tier One/ Two Employee Pension Stability Account	342.6	18.7	361.3	5.29%
OPSRP Pension	14,068.1	760.3	14,828.4	5.40%
OPSRP Employee Pension Stability Account	344.7	18.9	363.6	5.40%
IAP Accounts, as a whole	13,399.7	841.7	14,241.4	6.28%
*UAL Lump-Sum Pmt. Side Accounts	4,123.9	276.4	4,400.3	Various
Contingency Reserve	50.0	-	50.0	N/A
Total	\$94,034.8	\$5,186.6	\$99,221.4	

Tier One Rate Guarantee Reserve: This reserve is used to credit the assumed rate on Tier One member regular accounts in years when the fund earns below the assumed rate and to hold excess earnings from the years when the fund earns more than the assumed rate (currently 6.9%).

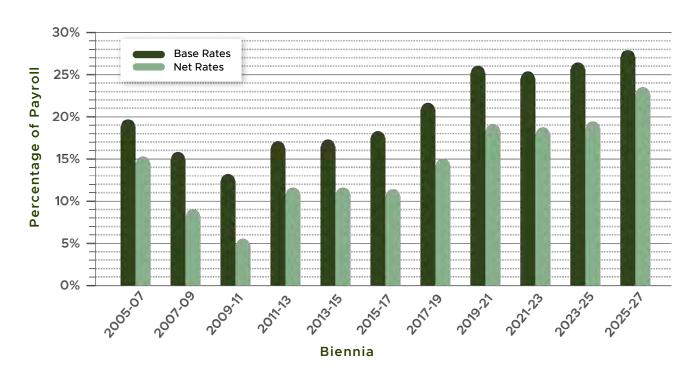
Benefits-in-Force Reserve: This reserve is used to pay retired members' benefits and annuities. It is funded by earnings and fund transfers from member accounts and employer reserves associated with retirements processed during a calendar year.

Employer Reserves: Funds from these reserves are moved to the Benefits-in-Force Reserve when a benefit is due to a member.

*Side account earnings rates for lump sums on deposit vary depending on when the deposit was made within the calendar year and are not affected by board reserving or crediting decisions.

Contingency Reserve: This reserve can be used for any purpose the board determines is appropriate so long as the use of the funds furthers the trust's purpose. It is funded in years that investment income exceeds the assumed rate (currently 6.9%). The reserve is capped at \$50 million.

SYSTEM-WIDE AVERAGE EMPLOYER CONTRIBUTION RATES AS A PERCENT OF COVERED SALARY (NET RATES INCLUDE SIDE ACCOUNT OFFSETS)



- Base rates are system-wide average employer contribution rates without side account offsets.
- Net rates are system-wide average employer contribution rates including side account offsets.
- Excludes member contributions and RHIA/RHIPA healthcare contributions.
- Includes Tier One, Tier Two, and OPSRP.
- Rates for 2025 27 reflect actuarial assumptions adopted by the PERS Board in 2022 and investment returns for 2022 and 2023. The rates also include the effects of the member redirect offset from SB 1049 (2019).

2027 - 29 EMPLOYER CONTRIBUTION RATE INCREASE PROJECTIONS (2024 VALUATION DATA)

(\$ millions)	Projected 2025-27 Payroll*	(A) Projected 2025-27 Contribution	Projected 2027-29 Payroll*	(B) Projected 2027-29 Total Contribution	(B) - (A) Projected Contribution Increase
State Agencies	\$10,820	\$2,610	\$11,570	\$3,200	\$600
School Districts	\$10,980	\$2,330	\$11,740	\$3,020	\$690
All Others	\$12,680	\$3,150	\$13,550	\$3,450	\$290
Total	\$34,480	\$8,090	\$36,860	\$9,670	\$1,580

^{*} Assumes total payroll grows at 3.40% annually based on the 12/31/2024 active member census. The collared net rate applied to this payroll reflects the projected change over time in payroll composition as new OPSRP members are hired to replace retiring Tier One/Tier Two members.

EMPLOYER SIDE ACCOUNTS

When an employer makes a lump-sum payment to prepay its pension obligations, the money is placed in a "side account." This account reduces the paying employer's pension contribution rates.

Administrative costs for side accounts are limited by statute. PERS assesses \$1,500 per side account in the first year and \$500 annually thereafter, regardless of the size of the side account.

As of December 31, 2024, 232 employers have side accounts. Of these, 86 employers have multiple side accounts: seven counties, seven cities, eight special districts, seven community colleges, and 57 school districts. Additionally, four state agencies each have their own side accounts in addition to the State Government Side Account.



Side accounts established prior to December 31, 2009, are amortized through December 31, 2027. For side accounts established after this date, the fixed amortization period ends 18 years after the first rate-setting valuation following its creation. However, with the adoption of Senate Bill 1566 by the 2018 Oregon Legislature, employers making a lump-sum payment of at least \$10 million dollars now have the option of selecting a shorter amortization schedule of six years, 10 years, 16 years, or 20 years for new side accounts. Using this option does not affect the amortization period of the employer's UAL.

Side account rate offsets are recalculated every two years, taking into consideration how much of the side account has been used, what earnings have been credited, and changes to the individual employer's payroll.

Side Accounts by Employer Type as of December 31, 2024

Employer Type	Number with Side Account(s)
Independent Locals (not a member of a pool)	17
State Govt. (all, including universities)	5
Pooled Counties	16
Pooled Cities	29
Pooled Special Districts	23
Community Colleges	17
School Districts	125

Side Accounts Balance by Employer Type as of December 31, 2024

Employer Type	Balance (Millions)
Independent	\$350.1
State Govt.	\$697.5
Pooled Counties	\$208.6
Pooled Cities	\$54.5
Pooled Special Districts	\$166.6
Community Colleges	\$574.5
School Districts	\$2,348.4





SIDE ACCOUNT EARNINGS

Side accounts are invested in the PERS Fund and receive the fund's actual earnings or losses. These earnings or losses are posted to side accounts at the end of each year.

Average Side Account Earnings 2007 to 2024

Calendar Year	Average Earnings/Loss
2007	10.22%
2008	-27.83%
2009	19.52%
2010	13.13%
2011	2.96%
2012	15.39%
2013	16.67%
2014	7.79%
2015	2.25%
2016	7.65%
2017	16.71%
2018	0.56%
2019	13.92%
2020	7.18%
2021	18.93%
2022	-1.85%
2023	6.34%
2024	6.70%

ASSUMED EARNINGS RATE AND HISTORICAL EARNINGS CREDITING

In determining plan funding, the actuary must project future earnings of the PERS Fund. This is called the "assumed earnings rate."



		Earnings Crediting by Account (%)			
Year	OPERF Earnings (%)	Tier One	Tier Two	Variable Account	IAP
2003	23.79	8.00	22.00	34.68	N/A
2004	13.80	8.00	13.27	13.00	12.77
2005	13.04	8.00	18.31*	8.29	12.80
2006	15.57	8.00	15.45	15.61	14.98
2007	10.22	7.97**	9.47	1.75	9.46
2008	-26.96	8.00	-27.18	-43.71	-26.75

04 SYSTEM REVENUE

continued from page 34

		Earnings Crediting by Account (%)			
Year	OPERF Earnings (%)	Tier One	Tier Two	Variable Account	IAP
2009	19.41	8.00	19.12	37.57	18.47
2010	12.62	8.00	12.44	15.17	12.13
2011	2.22	8.00	2.21	-7.80	2.15
2012	14.29	8.00	14.68	18.43	14.09
2013	15.59	8.00	15.62	25.74	15.59
2014	7.29	7.75	7.24	4.29	7.05
2015	2.11	7.75	1.87	-1.61	1.85
2016	6.88	7.50	7.15	8.76	7.13
2017	15.39	7.50	15.23	26.48	14.72
2018	0.48	7.20	0.23	-10.03	-
2019	13.56	7.20	13.27	28.80	_
2020	7.66	7.20	7.18	11.77	-
2021	20.05	7.20	20.14	18.88	<u> </u>
2022	-1.55	6.90	-1.91	-21.52	-
2023	5.98	6.90	5.52	21.37	_
2024	5.71	6.90	5.29	14.60	_

OPERF earnings for calendar years 2008 - 21 have been clarified to reflect Performance and Holdings data as published by Oregon State Treasury.

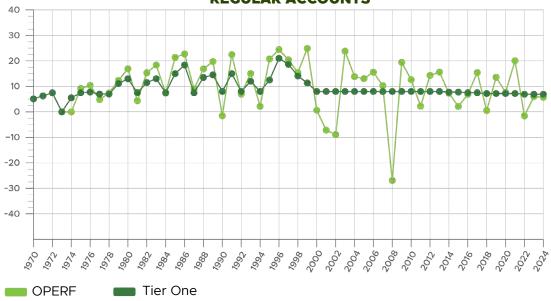
^{*}Tier Two regular account crediting, based solely on earnings, was 13.74%. However, the PERS Board deployed \$9 million from the Capital Preservation Reserve and \$17 million from the Contingency Reserve that was added to Tier Two earnings. As a result, Tier Two was credited with a total of 18.31%. The dollars allocated from the reserves were originally withheld from Tier Two regular account earnings.

^{**}After crediting Tier One accounts with the assumed rate of 8%, member attorney fees in the *Strunk* case were deducted by order of the Oregon Supreme Court, resulting in an effective crediting rate of 7.97%.

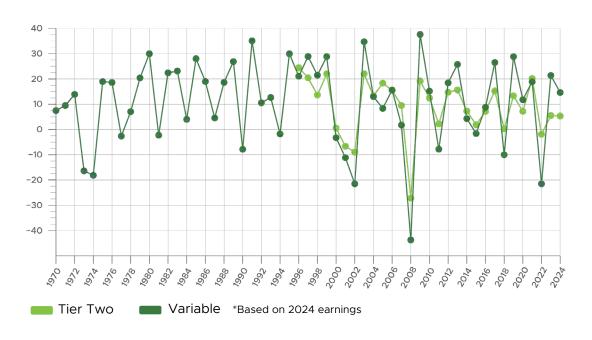
TIER ONE/TIER TWO EARNINGS CREDITING

Before January 1, 2004, Tier One/Tier Two member contributions were made to member accounts used to pay for part of their pension. These accounts continue to accrue annual earnings and losses until the member retires. Tier One member accounts receive the assumed earnings rate on an annual basis.

REGULAR ACCOUNT EARNINGS AVAILABLE FOR CREDITING AND ACTUAL EARNINGS CREDITING TO TIER ONE MEMBER REGULAR ACCOUNTS



ACTUAL EARNINGS CREDITING TO TIER TWO MEMBER REGULAR ACCOUNTS AND TO TIER ONE/TIER TWO MEMBER VARIABLE ACCOUNTS (INVESTED IN AN EQUITY-ONLY PORTFOLIO)*







ECONOMIC IMPACT OF PERS IN 2024

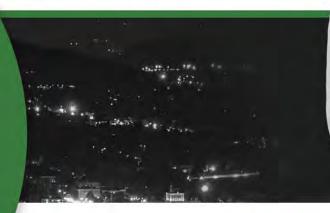


55 \$4.88 billion*

PERS benefits paid to Oregonians



Total increase in Oregon economic output





Wages of Oregon jobs supported

\$1.60 billion**



32,126 **
Oregon

Oregon jobs supported

> \$302 million ***

Taxes paid by PERS retirees in Oregon

^{*} From PERS internal systems.

^{**} Data derived from calculations based on factors provided by the US Department of Commerce's Bureau of Economic Analysis.

^{***} Data provided by the Department of Revenue.

MONEY FOR PERS RETIREMENT COMES FROM THREE SOURCES (1970-2024)

1

Employer Contributions

23.6% \$44.59 B*

2

Member Contributions

EBTS IS LEG.

3.9% \$7.29 B*

3

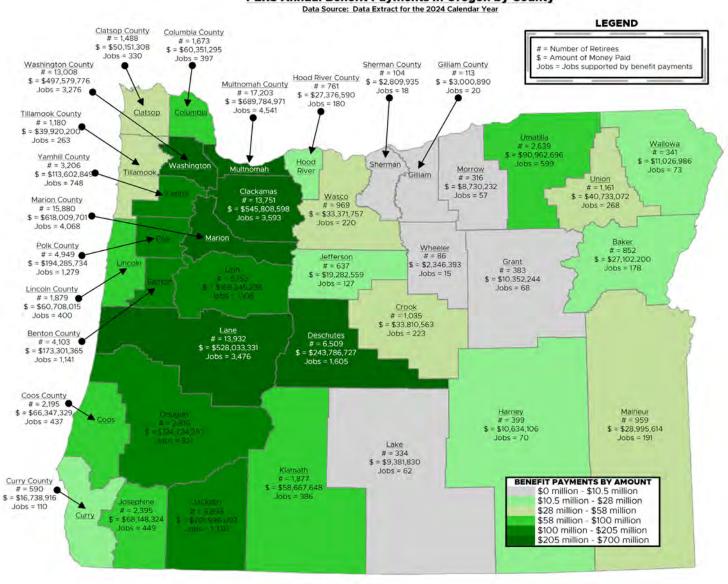
Investment Income

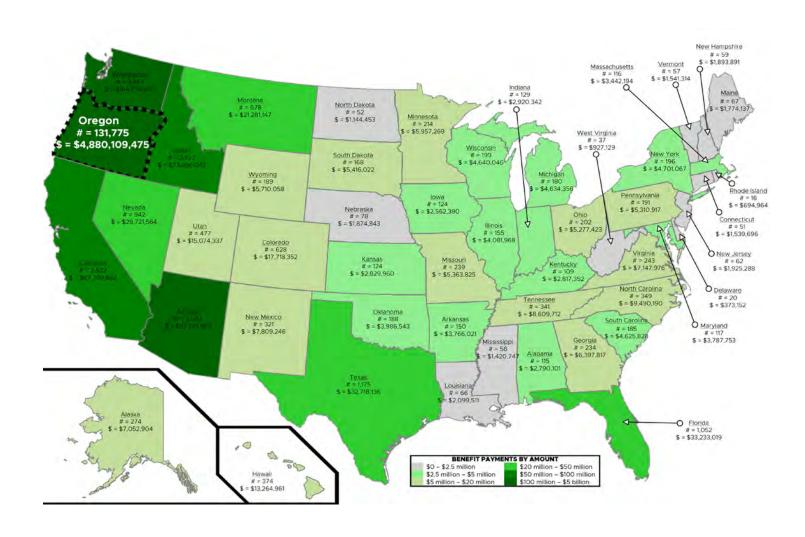
72.5% \$137.19 B*

*B = billion

Source: Oregon PERS Annual Comprehensive Financial Reports (1970 - 2024)

PERS Annual Benefit Payments in Oregon by County







06 PENSION SYSTEM TERMS

GLOSSARY OF PENSION TERMS

Actuarial Accrued liability (AAL): The net present value of projected future benefits allocated to service already completed 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 a smoothing method.

Actuarial assumptions: Assumptions as to the occurrence of future events affecting pension costs, such as mortality, withdrawal, disablement, retirement, and rates of investment earnings. Actual experience will vary from assumption, and at times the variance will be substantial.

Actuarial cost method: A technique used by actuaries to allocate the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial liability (UAL). Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Base employer contribution rates: Consists of the normal cost rate plus the UAL rate. This is paid by a combination of employer contributions and side account transfers. Base rates do not reflect the effects of side account rate offsets.

Combined valuation payroll: Projected payroll for the calendar year following the valuation date for Tier One, Tier Two, and Oregon Public Service Retirement Plan (OPSRP) active members. This payroll is used to calculate UAL rates.

Funded ratio or funded status: The actuarial value of assets expressed as a percentage of the accrued liability.

Individual Account Program (IAP): An account-based benefit that contains member contributions made on or after January 1, 2004.

Net employer contribution rates: The rate funded by employer contributions, consisting of the base employer contribution rate minus the effect of side account rate offsets.

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

Oregon Public Service Retirement Plan (OPSRP): The pension plan covering members hired after August 28, 2003.

Rate collar: A methodology that limits the maximum allowable period-to-period change in employer contribution rates. The width of the rate collar is determined by the current contribution rate and funded status.

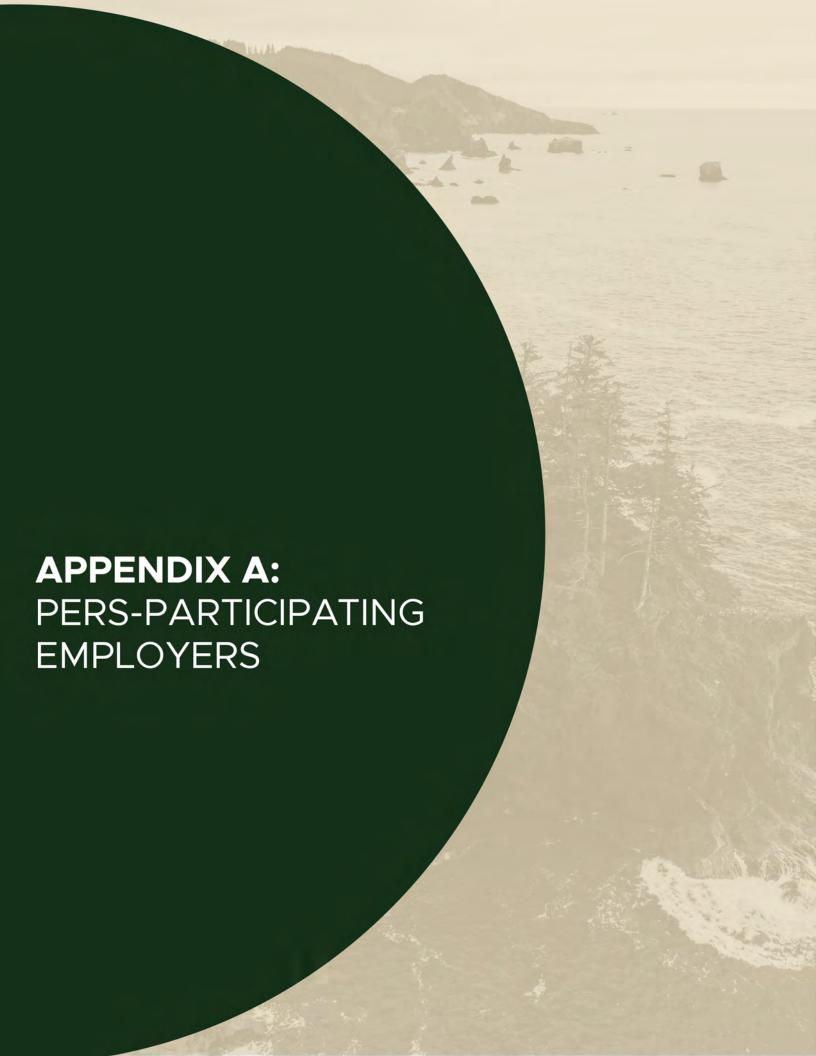
Side accounts: Side accounts are established for employers who make supplemental payments (a lump-sum payment in excess of the required employer contribution). For State and Local Government Rate Pool (SLGRP) employers, this supplemental payment is first applied toward the employer's transition liability, if any, with the remainder going into a side account. Side accounts are treated as prepaid contributions. Employer contribution rates are first determined excluding side accounts (base employer contribution rate). Then, an amortized portion of the side account is used to offset the contribution otherwise required for each individual employer that has a side account (net employer contribution rate). While side accounts are excluded from valuation assets in determining contribution rates for pools and nonpooled employers, side accounts are included in valuation assets for financial reporting purposes such as the reporting of funded status.

Total liability: The net present value of all projected future benefits attributable to all anticipated service (past and future) for current active and inactive members.

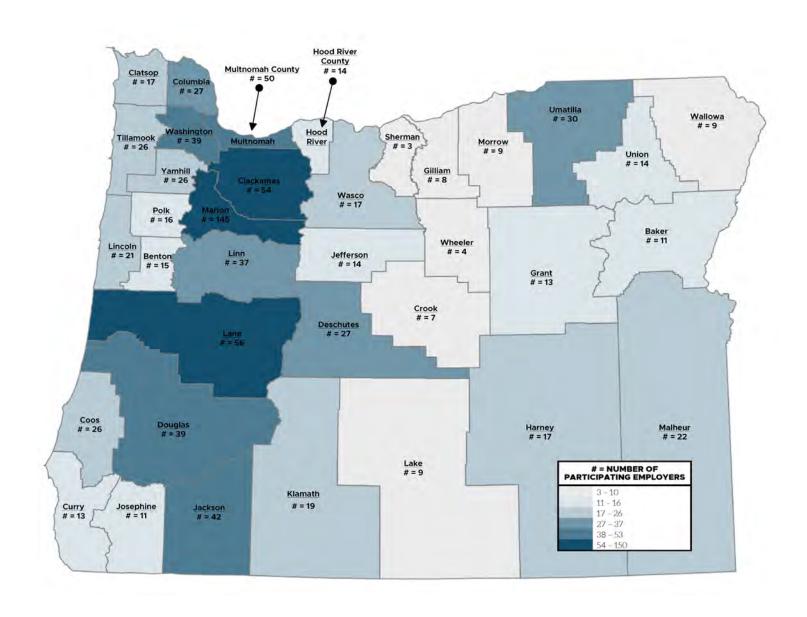
Tier One: The pension program covering members hired before January 1, 1996.

Tier Two: The pension program covering members hired from January 1, 1996, through August 28, 2003.

Unfunded actuarial liability (UAL): The excess of the actuarial accrued liability over the actuarial value of assets. The UAL is amortized over a fixed period of time to determine the UAL rate component of employer contribution rates.



PERS-PARTICIPATING EMPLOYERS AS OF FISCAL YEAR ENDING **JUNE 30, 2025, BY MAILING ADDRESS**



PERS-PARTICIPATING EMPLOYERS BY COUNTY, ACCORDING TO **MAILING ADDRESS (907)**

Baker (11)

Baker City, City of Baker County Baker County Library District Baker School District #5J Baker Valley Irrigation District Baker Web Academy Burnt River High School Burnt River Irrigation District Huntington School District #16J Huntington, City of Pine-Eagle School District #61

Benton (15)

Adair RFPD Adair Village, City of Alsea School Benton County Corvallis School District #509J Corvallis, City of Kings Valley Charter School Monroe Fire Department Monroe School District #1J Monroe, City of Muddy Creek Charter School Oregon State University Philomath Fire Department Philomath School District #17J Philomath, City of

Clackamas (54)

Alliance Charter Academy Canby Fire District Canby School District Canby Utility Board Canby, City of Cascade Heights Public Charter School City County Insurance Services Clackamas Community College Clackamas County Clackamas County ESD Clackamas County Fair Clackamas County Fire District 1 Clackamas County Vector Control District Clackamas Middle College Clackamas River Water Clackamas River Water Providers Clackamas Web Academy Colton Fire Department Colton School District #53 Estacada Cemetery Maintenance District Estacada Fire Department Estacada School District #108

Estacada, City of

Gladstone School District #115 Gladstone, City of Happy Valley, City of Harmony Academy Hoodland Fire District #74 Housing Authority of Clackamas County Lake Oswego School District Lake Oswego, City of Milwaukie, City of Molalla RFPD #73 Molalla River Academy Molalla River School District Molalla, City of Mulino Water District #23 North Clackamas County Water Commission North Clackamas School District #12 Oak Lodge Water Services District Oregon City School District #62 Oregon City, City of Oregon Trail School District #46 Sandy, City of South Clackamas Transportation District South Fork Water Board Springwater Environmental Sciences School Summit Learning Charter Sunrise Water Authority Three Rivers Charter School Virtual Preparatory Academy of Oregon West Linn School District West Linn, City of Wilsonville, City of

Clatsop (17)

Arch Cape Water/Sanitary District Astoria, City of Cannon Beach Academy Cannon Beach RFPD Cannon Beach, City of Clatsop Community College Clatsop County Clatsop County School District #1C Gearhart, City of Jewell School District #8 Knappa School District #4 Knappa Svensen Burnside RFPD Port of Astoria Seaside Schools Warrenton, City of Warrenton-Hammond School District Wickiup Water District

Columbia (27)

Clatskanie Library District Clatskanie People's Utility District Clatskanie RFPD Clatskanie School District #6J Clatskanie, City of Columbia City, City of Columbia County Columbia County 911 Communications District Columbia Drainage Vector Control District Columbia River Fire and Rescue Columbia River People's Utility District Greater St. Helens Aquatic District Mist-Birkenfeld RFPD Port of Columbia County Rainier Cemetery District Rainier School District #13 Rainier, City of Scappoose Public Library Scappoose RFPD Scappoose School District Scappoose, City of South Columbia Family School St. Helens School District #502 St. Helens, City of Vernonia Fire Vernonia School District Vernonia, City of

Coos (26)

Bandon School District

Bandon, City of Central Coos Fire and Rescue Charleston RFPD Coos Bay School District #9 Coos Bay, City of Coos County Coos County Airport District Coquille School District #8 Coquille, City of Lakeside Water District Lakeside, City of Myrtle Point School District #41 Myrtle Point, City of North Bay RFPD North Bend City Housing Authority North Bend Public Schools North Bend, City of Oregon Dungeness Crab Commission Oregon Virtual Academy Port of Coos Bay Powers School District Powers, City of South Coast ESD Region #7 Southwestern Oregon Community College The Lighthouse School

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Crook (7)

Crook County
Crook County RFPD 1
Crook County School District
Insight School of Oregon Painted Hills
Ochoco Irrigation District
Powell Butte Community Charter
School
Prineville, City of

Curry (13)

Brookings, City of
Brookings-Harbor School District #17C
Central Curry School District #1
Chetco Community Public Library
Board
Curry County
Curry Public Library
Gold Beach, City of
Harbor Water People's Utility District
Nesika Beach-Ophir Water District
Oregon Trawl Commission
Port Orford Public Library District
Port Orford, City of
Port Orford-Langlois School District
#2CJ

Deschutes (27)

Bend International School Bend Parks and Recreation Bend, City of Bend-La Pine Schools Black Butte Ranch Police Black Butte Ranch RFPD Central Oregon Community College Central Oregon Intergovernmental Council Central Oregon Irrigation District Central Oregon Regional Housing Authority Cloverdale RFPD **Deschutes County** Deschutes Public Library District Desert Sky Montessori High Desert Education Service District Jefferson County Soil and Water Conservation District La Pine RFPD Oregon Family School Redmond Area Parks and Recreation District Redmond Fire and Rescue Redmond Proficiency Academy Redmond School District #2J Redmond, City of Sisters and Camp Sherman RFPD Sisters School District Sisters, City of Sunriver Service District

Douglas (39)

Camas Valley School District #21 Canyonville, City of Days Creek School District #15 **Douglas County** Douglas County ESD Douglas County Soil and Water Conservation District Drain, City of Elkton School District #34 Elkton, City of Glendale School District #77 Glide Fire Department Glide School District #12 Myrtle Creek, City of North Douglas County Fire and EMS North Douglas School District #22 Oakland School District Oakland, City of Reedsport School District Reedsport, City of Riddle Fire Protection District Riddle School District Riddle, City of Roseburg Public Schools Roseburg Urban Sanitary Authority Roseburg, City of South Umpqua School District Sutherlin School District #130 Sutherlin Water Control District Sutherlin, City of The Phoenix School Tri-City Water and Sanitary Authority Umpqua Community College Winchester Bay Sanitary District Winston, City of Winston-Dillard Fire District Winston-Dillard Schools Winston-Dillard Water District Yoncalla School District #32 Yoncalla, City of

Gilliam (8)

Arlington Public Schools
Condon Admin. School District #25J
Condon, City of
Gilliam County
Gilliam County Fire Services
North Central ESD
North Gilliam County Health District
North Gilliam County RFPD

Grant (13)

Canyon City, Town of Dayville School District #16J Grant County Grant County Emergency Communications Agency Grant County ESD John Day School District John Day, City of Long Creek Schools Monument School District #8 Mount Vernon, City of Oregon Connections Academy at Prairie City Prairie City School District #4 Prairie City, City of

Harney (17)

Burns, City of Crane Elementary School Crane Union High School Diamond School District #7 Double O School District Drewsey School Frenchglen School District Harney County Harney County School District #3 Harney ESD Region #17 Harney Hospital High Desert Parks and Recreation District Hines, City of Pine Creek School Silvies River Web Academy South Harney School District #33 Suntex School District

Hood River (14)

Cascade Locks, City of
Crystal Springs Water District
East Fork Irrigation District
Farmers Irrigation District
Hood River County
Hood River County School District
Hood River, City of
Ice Fountain Water District
Odell Sanitary District
Parkdale Fire District
Port of Cascade Locks
Port of Hood River
West Side Fire District
Wy'East Fire District

Jackson (42)

Applegate Valley RFPD #9 Armadillo Technical Institute Ashland Parks Commission Ashland Public Schools Ashland, City of Butte Falls School District Butte Falls, Town of Central Point School District #6 Central Point, City of Crater Lake Charter Academy Eagle Point School District #9 Eagle Point, City of Evans Valley Fire District #6 Gold Hill, City of Housing Authority of Jackson County Jackson County

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Jackson County Fire District #3 Jackson County Fire District #4 Jackson County Fire District #5 Jackson County Vector Control Jacksonville, City of Logos Public Charter School Madrone Trail Public Charter School Medford Irrigation District Medford School District #549C Medford Water Commission Medford, City of Phoenix, City of Phoenix-Talent School District #4 Pinehurst School **Prospect School District** River's Edge Academy Charter School Rogue River Fire District Rogue River School District Rogue River Valley Irrigation District Rogue River, City of Shady Cove, City of Southern Oregon ESD Southern Oregon University Talent Irrigation District Talent, City of The Valley School of Southern Oregon

Jefferson (14)

Ashwood School
Black Butte School District
Crooked River Ranch RFPD
Culver School District #4
Culver, City of
Deschutes Valley Water District
Jefferson County
Jefferson County ESD
Jefferson County Fire & EMS
Jefferson County Library District
Lake Chinook Fire and Rescue District
Madras School District
Madras, City of
Metolius, City of

Josephine (11)

Cave Junction, City of
Grants Pass Irrigation District
Grants Pass School District
Grants Pass, City of
Illinois Valley Fire District
Josephine County
Kalmiopsis Community Arts High School
Rogue Community College
Sunny Wolf Charter School
Three Rivers School District
Woodland Charter School

Klamath (19)

Central Cascades Fire & EMS Chiloquin, City of Chiloquin-Agency Lake RFPD Crescent RFPD Horsefly Irrigation District Keno RFPD Klamath Community College Klamath County Klamath County Emergency Communications District Klamath County Fire District #1 Klamath County School District Klamath Falls City Schools Klamath Falls, City of Klamath Housing Authority Klamath Vector Control District Malin, City of Merrill, City of Oregon Institute of Technology South Suburban Sanitary District

Lake (9)

Adel School District #21
Lake County
Lake County ESD
Lake County Library District
Lake County School District #7
Lakeview, Town of
North Lake School District #14
Paisley School District
Plush School District

Lane (56)

Bethel School District Blachly School District Coburg Community Charter School Coburg RFPD Coburg, City of Cottage Grove, City of Creswell School District #40 Creswell, City of Crow-Applegate-Lorane School District #66 Dexter RFPD Dunes City, City of Eugene School District #4J Eugene Water and Electric Board Eugene, City of Fern Ridge Community Library Fern Ridge School District Florence, City of Junction City Fire Department Junction City School District #69 Junction City, City of Lane Community College Lane Council of Governments Lane County Lane County ESD Lane Fire Authority Lane Regional Air Protection Agency Lowell RFPD Lowell School District Lowell, City of Mapleton School District Mapleton Water District Marcola School District #79 McKenzie Fire and Rescue

McKenzie School District Mohawk Valley Fire Oakridge School District Oakridge, City of Pleasant Hill Goshen RFPD Pleasant Hill School District Rainbow Water District Ridgeline Montessori Siuslaw Public Library Siuslaw School District #97J South Lane County Fire and Rescue South Lane School District Springfield School District #19 Springfield, City of **TEACH-NW** The Village School University of Oregon Veneta, City of West Lane Technical Learning Center Western Lane Fire and EMS Authority Westfir, City of Whitmore Academy Willamette Leadership Academy

Lincoln (21)

Rescue District Depoe Bay RFPD Depoe Bay, City of Eddyville Charter School Kernville-Gleneden Beach-Lincoln Beach Water District Lincoln City, City of Lincoln County Lincoln County School District Newport, City of North Lincoln Fire and Rescue District #1 Oregon Coast Community College Port of Newport Seal Rock RFPD Seal Rock Water District Siletz RFPD Siletz Valley School Southwest Lincoln County Water District Toledo, City of Waldport, City of Yachats RFPD

Central Oregon Coast Fire and

Linn (37)

Yachats, City of

Albany, City of Brownsville RFPD Central Linn School District #552C Community Services Consortium Greater Albany Public Schools #8J Halsey, City of Halsey-Shedd RFPD Harrisburg Fire and Rescue Harrisburg School District #7 Harrisburg, City of Lebanon Aquatic District

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Lebanon Community School District Lebanon Fire District Lebanon, City of Linn County Linn-Benton Community College Linn-Benton Housing Authority Linn-Benton-Lincoln ESD **Lourdes Charter School** Lyons Fire District Lyons, City of Mill City RFPD Mill City, City of Millersburg, City of Oregon Cascades West Council of Governments Oregon Charter Academy Sand Ridge Charter School Santiam Canyon School District Scio Fire District Scio School District #95C Sweet Home Cemetery Maintenance District Sweet Home Charter School Sweet Home Fire and Ambulance District Sweet Home School District #55 Sweet Home, City of Tangent RFPD

Willamette Connections Academy

Malheur (22)

Adrian School District #61 Annex Elementary School Arock School District #81 Four Rivers Community School Harper School District #66 Jordan Valley School District #3 Jordan Valley, City of Juntura Grade School Malheur County Malheur ESD Region #14 Nyssa Road Assessment District #2 Nyssa School District #26 Nyssa, City of Ontario School District #8C Ontario, City of Owyhee Irrigation District Rural Road Assessment District #3 Rural Road District #4 Treasure Valley Community College Vale School District #84 Vale, City of Valley View Cemetery Maintenance District

Marion (145)

Appraiser Certification and Licensure Board Aumsville RFPD Aumsville, City of Aurora RFPD

Aurora, City of Board of Accountancy **Board of Architect Examiners Board of Chiropractic Examiners** Board of Examiners for Engineering and Land Surveying **Board of Geologist Examiners** Board of Optometry Board of Parole and Post-Prison Supervision Board of Pharmacy Bureau of Labor and Industries Cascade School District #5 Chemeketa Community College Commission on Indian Services Commission on Judicial Fitness and Disability Construction Contractors Board Department of Administrative Services Department of Agriculture Department of Aviation Department of Consumer and Business Services Department of Corrections Department of Early Learning and Care Department of Education Department of Energy Department of Environmental Quality Department of Human Services Department of Justice Department of Land Conservation and Development Department of Military-Federal **Employees** Department of Revenue Department of State Lands Department of State Police Department of Transportation Department of Veterans' Affairs District Attorneys Department Eagle Charter School **Employment Department Employment Relations Board** Forestry Department Frontier Charter Academy Geology and Mineral Industries Gervais School District #1 Gervais, City of Health Related Licensing Boards **Higher Education Coordinating** Commission Howard Street Charter School, Inc. **Hubbard RFPD** Hubbard, City of Idanha-Detroit RFPD Jefferson RFPD Jefferson School District #14CJ Jefferson, City of Judges PERS Judicial Department Keizer RFPD Keizer, City of

Land Use Board of Appeals

League of Oregon Cities

Landscape Contractors Board

Legislative Administration Committee Legislative Assembly Legislative Committees Legislative Fiscal Office Legislative Policy and Research Committee Long Term Care Ombudsman Marion Area Multi-Agency Emergency Telecom Center Marion County Marion County Fire District #1 Marion County Housing Authority Mental Health Regulatory Agency Military Department Mount Angel Fire District Mount Angel School District #91 Mount Angel, City of North Marion School District #15 North Santiam School District #29J NorthWest Senior and Disability Services Office of Legislative Counsel Office of the Governor Office of the Public Records Advocate Office of the State Treasurer Oregon Advocacy Commissions Office Oregon Board of Dentistry Oregon Board of Massage Therapists Oregon Board of Medical Examiners Oregon Business Development Department Oregon Commission for the Blind Oregon Community College Association Oregon Corrections Enterprises Oregon Criminal Justice Commission Oregon Department of Emergency Management Oregon Department of Fish and Wildlife Oregon Forest Resources Institute Oregon Government Ethics Commission Oregon Health Authority Oregon Hop Commission Oregon Housing and Community Services Oregon Liquor & Cannabis Commission Oregon Municipal Electric Utilities Association Oregon Parks and Recreation Department Oregon Patient Safety Commission Oregon Racing Commission Oregon School Boards Association Oregon State Board of Nursing Oregon State Fire Marshal Oregon State Library Oregon Watershed Enhancement Board Oregon Youth Authority Psychiatric Security Review Board Public Defense Services Commission Public Employees Retirement System Public Safety Standards and Training Public Utility Commission Real Estate Agency Salem Housing Authority Salem, City of Salem-Keizer Public Schools Secretary of State

APPENDIX A

PERS-PARTICIPATING EMPLOYERS

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Silver Falls Library District Silver Falls School District Silverton RFPD #2 Silverton, City of St. Paul School District State Accident Insurance Fund State Board of Clinical Social Workers State Board of Tax Practitioners State Lottery Commission State Marine Board Stayton RFPD Stayton, City of Sublimity RFPD Suburban East Salem Water District **Teacher Standards and Practices** Commission Travel Information Council Turner Fire District Turner, City of Valley Inquiry Charter School Water Resources Department Willamette ESD Woodburn Fire District Woodburn School District Woodburn, City of

Morrow (9)

Boardman RFPD
Boardman, City of
Heppner, City of
Irrigon, City of
Morrow County
Morrow County Schools
North Morrow Vector Control District
Oregon Trail Library District
West Extension Irrigation District

Multnomah (50)

Arthur Academy Charter School Centennial School District #28 Center for Advanced Learning Corbett School District #39 Corbett Water District David Douglas School District Fairview, City of Gresham, City of Gresham-Barlow School District #10 **HOLLA School** Home Forward Kairos PDX Knova Learning Oregon Le Monde French Immersion Public Charter School Lupine Community Montessori Charter School Metro Metro East Web Academy Mount Hood Community College Multnomah County Multnomah County Drainage District Multnomah County RFPD #14

Multnomah ESD

Multnomah Learning Academy

Oregon Beef Council Oregon Film and Video Oregon Health and Science University Oregon Potato Commission Oregon Tourism Commission Oregon Utility Notification Center Oregon Wheat Commission Parkrose School District Physical Therapist Licensing Board Port of Portland Portland Community College Portland Public Schools Portland State University Portland Village School Portland, City of Prosper Portland Reynolds School District Riverdale School Rockwood Water People's Utility District Sauvie Island School The Cottonwood School of Civics and The Emerson School The Ivy School Troutdale, City of Urban Flood Safety & Water Quality District

Polk (16)

Conservation District

Wood Village, City of

Central School District #13J Dallas Community School Dallas School District Dallas, City of Falls City School District Falls City, City of Independence, City of Luckiamute Valley Charter School Monmouth, City of Perrydale School District #21 Polk County Polk County Fire District #1 Polk Soil and Water Conservation District Southwestern Polk County RFPD West Valley Housing Authority

West Multnomah Soil and Water

Sherman (3)

Moro, City of Sherman County Sherman County School District

Western Oregon University

Tillamook (26)

Bay City, City of Fairview Water District Garibaldi, City of Manzanita, City of

Neah-Kah-Nie School District Nehalem Bay Fire and Rescue Nehalem Bay Wastewater Agency Neskowin Regional Sanitary Authority Neskowin Regional Water District Nestucca RFPD Nestucca Valley School District #101 Netarts Water District Netarts-Oceanside RFPD Netarts-Oceanside Sanitary District Port of Garibaldi Port of Tillamook Bay Rockaway Beach, City of Tillamook Bay Community College Tillamook County Tillamook County Emergency Communications District Tillamook County Soil and Water Conservation District Tillamook Fire District Tillamook People's Utility District Tillamook Public Schools Tillamook, City of Wheeler, City of

Umatilla (30)

Athena, City of Athena-Weston School District #29RJ Blue Mountain Community College Echo School District Echo, City of Helix School District Hermiston School District #8R Hermiston, City of InterMountain ESD Ione School District Milton-Freewater Unified School District Milton-Freewater, City of Nixyaawii Community School Pendleton School District #16R Pendleton, City of Pilot Rock School District #2R Pilot Rock, City of Port of Umatilla Stanfield School District Stanfield, City of Ukiah School **Umatilla County** Umatilla County Fire District #1 Umatilla County Soil and Water District Umatilla County Special Library District Umatilla Fire Department Umatilla School District #6R Umatilla, City of Umatilla-Morrow Radio and Data District Weston, City of

Union (14)

Cove School District Eastern Oregon University Elgin School District #23 Elgin, City of Imbler RFPD

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Imbler School District
Imbler, City of
La Grande Public Schools
La Grande, City of
North Powder School District
North Powder, City of
Northeast Oregon Housing Authority
Tri-County Cooperative Weed
Management Area
Union County School District

Wallowa (9)

Enterprise School District #21 Enterprise, City of Joseph School District #6 Joseph, City of Troy School District #54 Wallowa County Wallowa County Region #18 ESD Wallowa School Wallowa, City of

Wasco (17)

Columbia Gorge Community College Columbia Gorge ESD **Dufur Schools** Dufur, City of Maupin, City of Mid-Columbia Center for Living Mid-Columbia Fire and Rescue Mosier Community School Mosier Fire District North Central Public Health District North Wasco County Parks and Recreation North Wasco County School District #21 Northern Oregon Corrections Port of The Dalles South Wasco County School District #1 Wasco County Wasco County Soil and Water Conservation District

Washington (39)

Arco Iris Spanish Immersion Charter School
Banks Fire District #13
Banks School District
Banks, City of
Beaverton School District
Beaverton, City of
City View Charter School
Clean Water Services
Cornelius, City of
Durham, City of
Forest Grove Community School
Forest Grove, City of
Gaston Public Schools

Gaston RFPD Gaston, City of Hillsboro School District #1J Hillsboro, City of Hope Chinese Charter School King City, City of Metropolitan Area Communication Commission MITCH Charter School North Plains, City of Northwest Regional ESD Oregon Dairy Products Commission Oregon State Bar Oregon State Bar Professional Liability Fund Sherwood Charter School Sherwood School District #88J Sherwood, City of Tigard, City of Tigard-Tualatin School District #23J Tualatin Valley Fire and Rescue Tualatin Valley Irrigation District Tualatin Valley Water District Tualatin, City of Washington County Washington County Consolidated Communications Agency West Slope Water District

Wheeler (4)

Fossil School District #21J Fossil, City of Mitchell School Spray School District #1

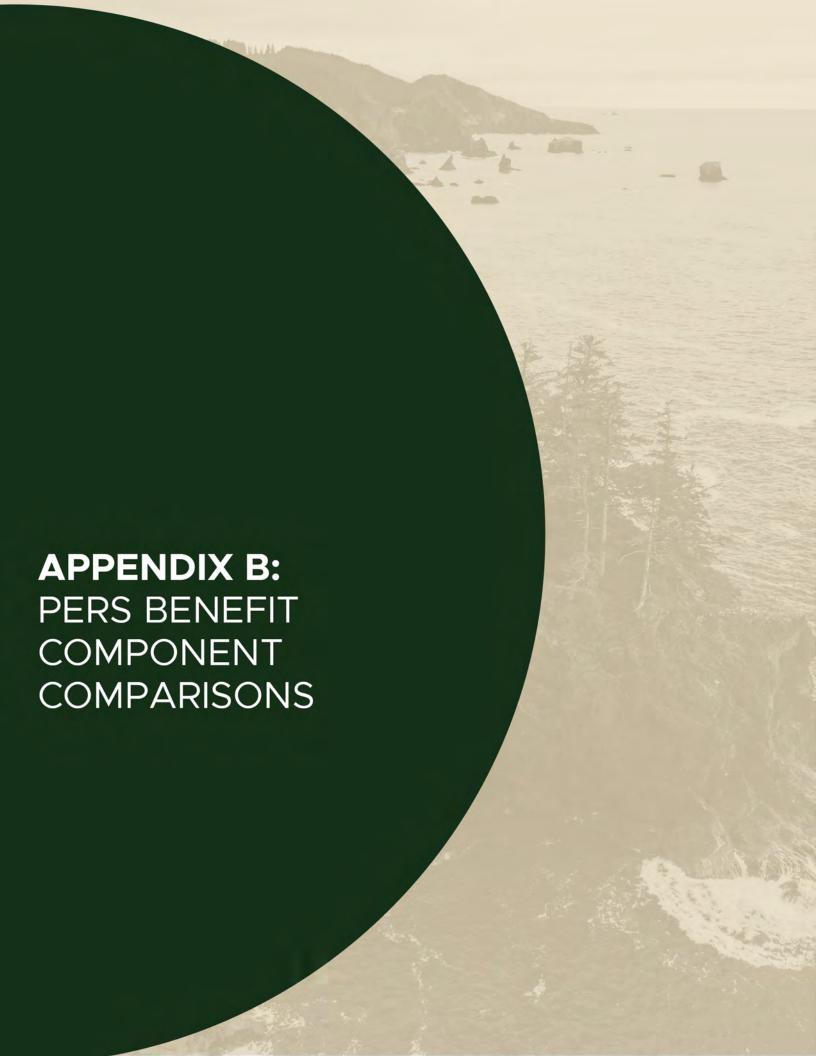
Yamhill (26)

Amity Fire District Amity School District Amity, City of Carlton, City of **Dayton Public Schools** Dayton, City of Dundee, City of Lafayette, City of McMinnville Fire District McMinnville Schools McMinnville Water and Light Department McMinnville, City of New Carlton Fire District Newberg School District #29JT Newberg, City of Sheridan AllPrep Academy Sheridan Fire District Sheridan School District #48J Sheridan, City of Willamina School District #30J Willamina, City of Yamhill Communications Agency Yamhill County Yamhill Fire Protection District

Yamhill, City of Yamhill-Carlton School District #1

Key Acronyms

RFPD = Rural Fire Protection District ESD = Education Service District



PERS PENSION PLANS

The primary components and differences among the PERS Tier One and Tier Two programs, the Oregon Public Service Retirement Plan (OPSRP) pension program, and the Individual Account Program (IAP) are shown on the next page.

Tier One covers members hired before January 1, 1996; Tier Two covers members hired between January 1, 1996, and August 28, 2003; and OPSRP covers members hired after August 28, 2003. The IAP is an account-based benefit that includes member contributions plus annual earnings and losses, made on and after January 1, 2004. Starting July 1, 2020, Senate Bill (SB) 1049 requires that members earning more than the current monthly salary threshold have a portion of their 6% IAP contributions redirected to a new Employee Pension Stability Account (EPSA). The money in each member's EPSA is used to pay for part of their future pension benefit.



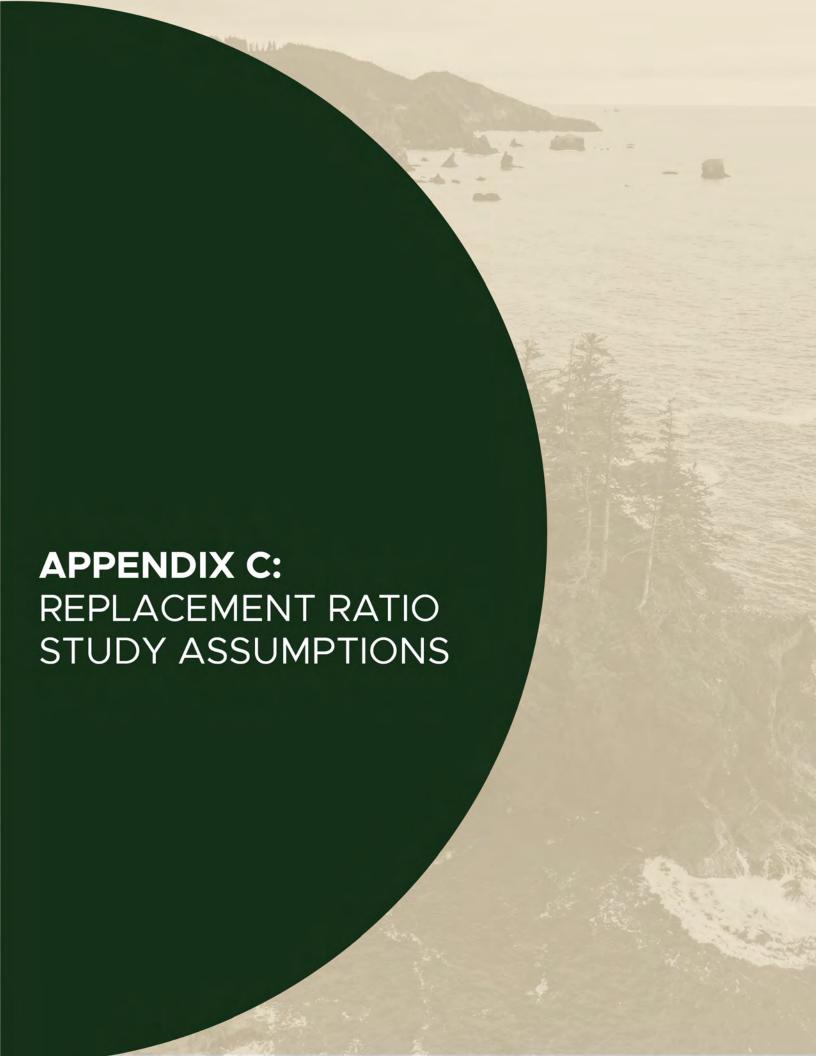
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PERS BENEFIT COMPONENT COMPARISON

	Tier One Pension	Tier Two Pension	OPSRP Pension	IAP
Normal retirement age	58 (or 30 yrs.) P&F: age 55 or 50 w/25 yrs.	60 (or 30 yrs.) P&F: age 55 or 50 w/25 yrs.	65 (58 w/30 yrs.) P&F: age 55 (review P&F five-year requirement below) or 53 w/25 yrs.	Members retire from IAP when they retire from Tier One, Tier Two, or OPSRP
Early retirement	55 (50 for P&F)	55 (50 for P&F)	55. 50 w/5 years of continuous service in a P&F position immediately preceding effective retirement date.	Members retire from IAP when they retire from Tier One, Tier Two, or OPSRP
Regular account earnings	Guaranteed assumed rate annually (currently 6.9% as of 1/1/2022)	No guarantee; market returns	N/A; no account balance. Member contributions are held in the IAP account.	No guarantee; Target-Date Fund returns
Variable account earings	Market returns on 100% global equity portfolio	Market returns on 100% global equity portfolio	N/A; no member account	N/A
Retirement calculation methods	Money Match, Full Formula, or Formula + Annuity (if eligible)	Money Match or Full Formula	Formula	Various account payout options or rollover
Full Formula benefit factor	1.67% general; 2.00% P&F	1.67% general; 2.00% P&F	1.50% general; 1.80% P&F	N/A
Formula + Annuity benefit factor	1.00% general; 1.35% P&F	N/A	N/A	N/A
Oregon state income tax remedy	Payable to eligible benefit recipients who pay Oregon state income tax because they reside in Oregon.	No tax remedy provided	No tax remedy provided	No tax remedy provided
IAP contributions are paid on lump-sum vacation payouts	Yes	Yes	No	Yes for Tier One and Tier Two; no for OPSRP
Lump-sum vacation payouts included in FAS	Yes	No	No	N/A
Unused sick leave included in FAS	Yes, if employer participates in the unused sick leave program	Yes, if employer participates in the unused sick leave program	No	N/A
Vesting	Active member in each of 5 calendar years	Active member in each of 5 calendar years	5 calendar years w/ at least 600 hours qualifying service or normal retirement age	Immediate upon receiving account contributions
COLA (after retirement)	Each pension plan offers October 1, 2013, and a bl	N/A; no COLA provided		

P&F = police and firefighters; FAS = final average salary; COLA = cost-of-living adjustment; N/A = not applicable

Note: PERS uses three methods to calculate Tier One retirement benefits: Full Formula, Formula+Annuity (for members who made contributions before August 21, 1981), and Money Match. PERS uses two methods to calculate Tier Two retirement benefits: Full Formula and Money Match. PERS uses the method (for which a member is eligible) that produces the highest benefit amount. OPSRP Pension Program benefits are based only on a formula method. *Beginning January 1, 2020, SB 1049 changed the definition of "salary" for PERS purposes and created new limitations on annual "subject salaries," which may affect how PERS calculates a member's pension and contributions. Beginning January 1, 2022, Senate Bill 111 changed the definition of "subject salary" for OPSRP members to include amounts that are or would be subject to Oregon state income tax.



REPLACEMENT RATIO STUDY EXCLUSIONS AND ASSUMPTIONS

The Replacement Ratio Study population consists of 130,096 Tier One and Tier Two retirements from January 1990 through December 2024 and covers retired members who selected comparable monthly benefit options. The replacement ratio calculated in this study is a ratio of a retiree's monthly gross benefit amount to their monthly final average salary, expressed as a percentage. The techniques used in the 2024 PERS Replacement Ratio Study are generally consistent with the techniques used in previous studies.

The calculations do not include federal Social Security benefits that a retiree may be eligible for based on the retiree's work history and do not include Individual Account Program (IAP) benefits that retiree may be receiving. The calculations do include the effects of the Strunk/Eugene benefit adjustments, which will generally impact retirements occurring in 2000 – 2004 and reduce the reported replacement ratios for those periods by up to several percentage points.

EXCLUSIONS

Job Class Exclusions

The study is limited to PERS plan retirees in the General Service and Police and Fire job classes from January 1990 through December 2024.

Job class 1 (General Service) includes job class 9 (School Teachers), and job class 2 includes only Police and Fire.

Excluded job classes are:

- Job class 3, Police/Fire Unit (able to buy service units)
- Job class 4, TIAA/CREF
- Job class 5, Judge Member
- Job class 6, Legislators
- Job class 7, TRFA
- Job class 8, Elected/Appointed Officials
- Job class A, A-Election

Beneficiaries and alternate payees were also excluded, as the inclusion of these populations would skew the results due to the wide range of payout scenarios related to death and divorce benefits.

Retirement Option Exclusions

Within job classes 1 and 2 additional records were excluded based upon retirement option. All lump-sum benefit options were excluded due to the distorting effect of significant payouts at one time on replacement ratio results. These excluded retirement option codes are:

- L1 Lump-Sum Option 1: Refund of Account plus life annuity
- L2 Lump-Sum Option 2: Refund of Account Balance plus 100% joint and survivor (J/S)
- L3 Lump-Sum Option 3: Refund of Account Balance plus 50% J/S
- L7 Total Lump-Sum: Refund of employee and employer dollars
- L2A Lump-Sum Option 2A: Refund of Account Balance plus Pop-up or 100% J/S
- L3A Lump-Sum Option 3A: Refund of Account Balance plus Pop-up or 50% J/S

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Other Exclusions

- Any record that fell outside the January 1990 December 2024 retirement date range
- Any record that had a greater than one year gap between termination date and retirement date
- Any record that fell within the January 1990 December 2024 retirement date range where the retiree selected a monthly benefit option but received a lump sum payment as provided under ORS 238.315

ASSUMPTIONS

For the purposes of this study, the following assumptions were used:

- Any account with a variable balance at the date of retirement was considered a variable account member.
- For final average salary (FAS), we used monthly FAS from the member's actual benefit calculation when available.
 - When monthly FAS from the actual benefit calculation could not be obtained, we used the
 average salary of the three high calendar years of a member's career. This definition of
 FAS may not match the definition under which the member's actual benefit was calculated.
- Monthly gross benefit amounts include HB 3349 and/or SB 656 benefits for qualifying retirees.

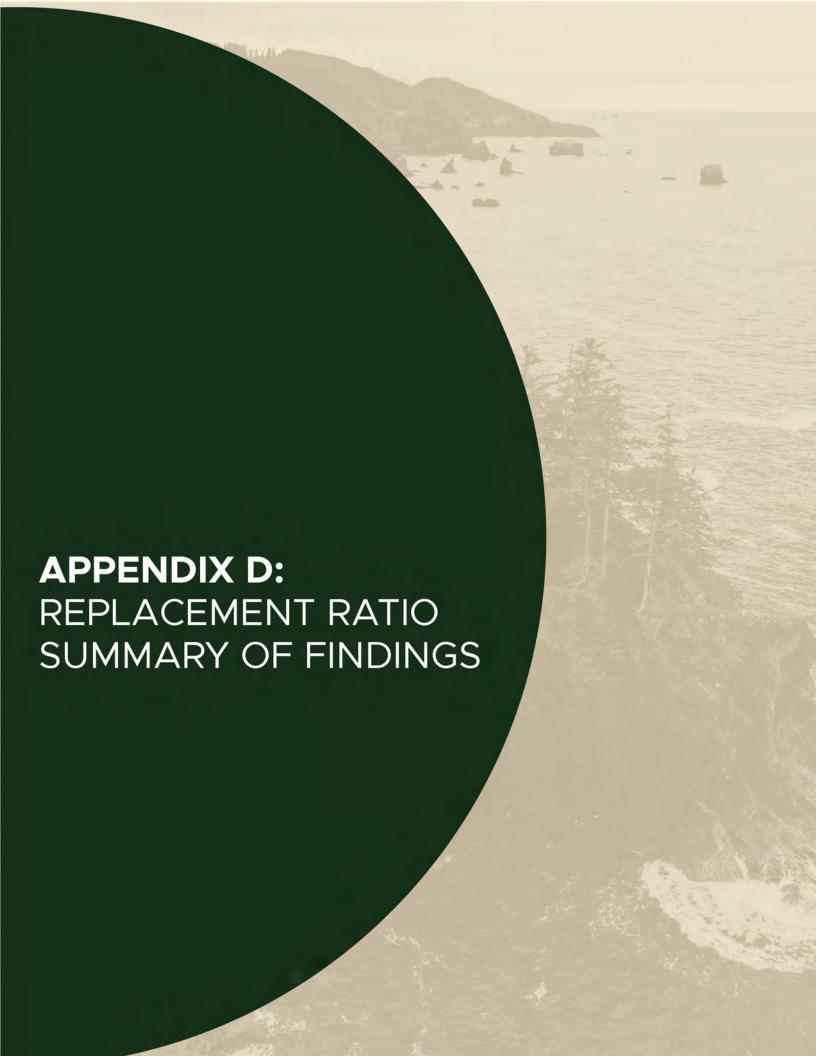
SPECIAL NOTES

The averages and percentages displayed on the Replacement Ratio sheets are based upon the respective actual source data. The calculations on each Replacement Ratio sheet are not directly derived from one another. For instance, if the Average Monthly Gross benefit column is divided by the Average Monthly Salary column, it will not equal the Average Replacement Ratio column because the Average Replacement Ratio is derived from the average of replacement ratios in the source data. This method avoids distortions resulting from averaging averages. This is also the case with the median calculations. This method of analyzing the data provides a more accurate picture of the actual dataset being used.

Records for members who retired in previous years and then returned to work only to retire again later will be counted in the year of original retirement and again in the year of the second retirement if both retirements are applicable to this study based on the above criteria. Adjusting the historical record in these scenarios would otherwise distort year-over-year results.

Records for members who have retired with both Class 1 (General Service) and Class 2 (Police and Fire) job segments had the General Service job segment removed. Removing these records avoids double counting salaries and members.

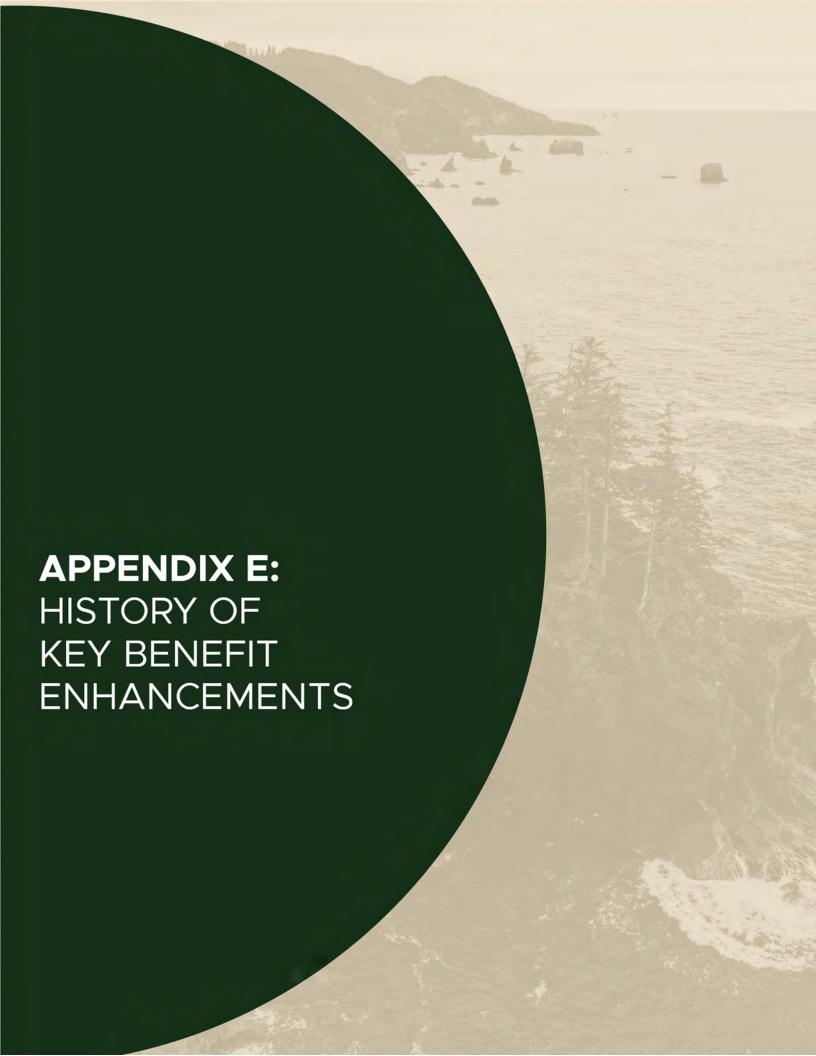
Approximately 3,607 records for members who retired after having a portion of their preretirement account balance awarded to an alternate payee, per a qualified domestic relations order, may reflect a reduced replacement ratio percentage in these results.



SUMMARY OF FINDINGS FROM PERS' TIER ONE/TIER TWO REPLACEMENT RATIO STUDY FOR 2024

		with 30 Years of Service	All Retirees in Study			Retirees with 31+ Years of Service
Calendar Year	Number of Retirees in Study	Average Replacement Ratio Based on FAS	Number of Retirees in Study	Average Replacement Ratio Based on FAS	Percentage of Retirees Receiving >100% of FAS	Number of Retirees in Study
1990	146	61%	1,866	44%	.0%	236
1991	217	61%	2,377	45%	.1%	261
1992	205	67%	2,432	48%	.5%	289
1993	289	66%	2,744	48%	.5%	319
1994	302	67%	3,298	49%	.3%	452
1995	304	66%	2,827	47%	1.0%	307
1996	281	70%	2,477	49%	1.4%	223
1997	295	83%	3,107	57%	7.5%	284
1998	465	89%	4,567	65%	12.0%	472
1999	548	93%	4,644	65%	14.0%	452
2000	273	100%	2,112	63%	15.8%	148
2001	391	99%	3,146	66%	16.5%	304
2002	670	96%	4,605	68%	17.4%	583
2003	942	93%	7,631	66%	14.4%	937
2004	471	84%	3,259	55%	5.5%	155
2005	393	84%	2,548	51%	4.4%	155
2006	347	83%	2,952	50%	4.3%	254
2007	372	84%	3,226	51%	4.9%	337
2008	417	80%	3,480	52%	5.0%	445
2009	432	77%	3,881	53%	6.2%	586
2010	414	75%	3,516	48%	4.3%	440
2011	464	74%	4,484	50%	5.3%	937
2012	272	70%	4,098	46%	4.3%	585
2013	389	69%	5,800	50%	5.6%	1,108
2014	262	66%	4,000	44%	2.8%	441
2015	430	57%	4,830	44%	2.6%	772
2016	324	52%	3,955	42%	2.0%	606
2017	423	53%	5,319	44%	1.5%	1089
2018	320	51%	3,642	42%	1.2%	549
2019	347	50%	4,004	42%	1.4%	758
2020	369	50%	3,926	44%	1.5%	799
2021	387	49%	3,992	44%	1.0%	844
2022	372	50%	3,588	44%	0.7%	777
2023	319	50%	3,086	45%	0.6%	733
2024	311	49%	2,779	45%	.4%	631
Total/Avg	13,163	73%	128,198	51%	5.3%	18,268

^{*}Includes monthly benefit payments for members retiring from active service within the preceding twelve months. Benefits related to inactive, lump-sum, judge, and legislator retirements are excluded.



HISTORY OF KEY BENEFIT ENHANCEMENTS

Year	Category	Action	Affected Members
1945	Administrative	The Public Employees Retirement System is signed into law and begins business July 1, 1946, as a money match retirement plan	All
1947	Retirement Age/Vesting	Requirement for employees to serve a six-month waiting period before becoming PERS members begins	All
1953	Administrative	By law, the PERS plan is terminated and immediately reopened the next day, allowing public employers to provide Social Security coverage	All
1967	Investment Risk Allocation	Legislature passes a bill that allows PERS to invest up to 10% of the retirement fund in common stock, creates the Oregon Investment Council, and establishes a defined benefit formula for employer-funded retirement benefits (formula plus annuity)	All
1969	Investment Risk Allocation	Participation in variable account program begins	All
1972	Cost-of-living adjustment (COLA)	Implemented ad hoc COLA increase (12% to 25% benefit increase)	Existing retirees
1972	Cost-of-living adjustment	Initiated an annual COLA with a 1.5% cap	All retirees
1973	Benefit Calculation/Formula	Increased Formula Plus Annuity pension factors (General Service: .67 to 1.00; Police and Fire: 0.92 to 1.35)	Tier One
1973	Cost-of-living adjustment	Annual COLA cap raised from 1.5% to 2%	All retirees
1973	Cost-of-living adjustment	Capped COLA at actual inflation rate or 2%, whichever is less	All retirees
1973	Final Average Salary	Added accrued sick leave to retirement benefit calculation for participating employers	Tier One/Tier Two
1974	Cost-of-living adjustment	Implemented ad hoc increase (0% to 25% benefit increase)	Existing retirees
1975	Investment Risk Allocation	Initiated member account assumed rate guarantee	Tier One
1975	Investment Risk Allocation	Increased assumed earnings rate from 5.5% to 7%	Tier One
1975	Investment Risk Allocation	Credited member regular accounts with more than the assumed earnings rate*	Tier One
1976	Investment Risk Allocation	Gain Loss Reserve established to "self-fund" assumed earnings rate crediting	Tier One
1979	Administrative	Employers allowed to "pick up" member 6% contribution	All
1979	Investment Risk Allocation	Increased assumed earnings rate from 7% to 7.5%	Tier One
1981	Benefit Calculation/Formula	Added Full Formula benefit calculation method	All
1981	Benefit Calculation/Formula	Consolidated member contributions from 1% to 7% salary-based sliding scale to universal 6%	All
1981	Benefit Calculation/Formula	Eliminated Formula Plus Annuity benefit calculation method	Tier One
1981	Cost-of-living adjustment	Implemented ad hoc COLA increase (4% to 11.4% benefit increase)	Existing retirees
1985	Cost-of-living adjustment	Implemented ad hoc COLA increase (3% to 7.28% benefit increase)	Existing retirees

Key:

Benefit enhancement

Benefit cap or reduction

^{*}Tier One regular accounts were credited with earnings in excess of the assumed rate in the following years: 1975, 1976, 1979, 1980, 1982, 1983, 1985, 1986, 1988, 1989, 1991, 1993, 1995, 1996, 1997, 1998, and 1999. In all other years subsequent to 1975, these accounts were credited at the effective assumed rate.

HISTORY OF KEY BENEFIT ENHANCEMENTS

Continued from page 61

Year	Category	Action	Affected Members
1987	Benefit Calculation/Formula	Members allowed to purchase six-month waiting period	All
1987	Benefit Calculation/Formula	New retirement benefit payout options added	All
1989	Cost-of-living adjustment	Implemented ad hoc COLA increase (0% to 25% benefit increase)	Existing retirees
1989	Investment Risk Allocation	Increased assumed earnings rate from 7.5% to 8%	Tier One
1989	Retiree Health Benefits	Established Medicare and state employee pre-Medicare insurance premium subsidies	Tier One/Tier Two
1989	Retiree Health Benefits	Capped Medicare premium subsidy at \$60 per month	Tier One/Tier Two
1989	Retirement Age/Vesting	Added "30 years of service" retirement regardless of age	Tier One/Tier Two
1991	Benefit Calculation/Formula	Imposed state income tax on PERS benefits	All
1991	Benefit Calculation/Formula	Established service time-based state income tax offset benefit of betwee 1% to 4% (SB 656)	een Tier One
1993	Administrative	Divorced spouses entitled to separate account from member's	All
1995	Benefit Calculation/Formula	Established state income tax offset benefit for pre-1991 service time (HE 3349)	Tier One
1995	Benefit Calculation/Formula	Eliminated tax remedy for anyone hired after July 14, 1995	All new hires
1996	Final Average Salary	Excluded lump-sum vacation payouts from final average salary	Tier Two
1996	Investment Risk Allocation	Eliminated guaranteed return on regular accounts for new members	Tier Two
1996	Retirement Age/Vesting	Increased normal retirement age for new members from 58 to 60 (Gene Service)	eral Tier Two
1997	Administrative	Married members must provide proof of spousal consent for retirement option choice	All
1997	Administrative	Reemployed retirees can work up to 1,040 hours for a PERS-covered employer without loss of benefits (up from 600 hours)	All
1997	Benefit Calculation/Formula	Out-of-state teaching service and some military purchases allowed	All
1999	Benefit Calculation/Formula	Locked in existing actuarial equivalency factor tables	Tier One
2000	Investment Risk Allocation	Eliminated "Last Known Rate" member account crediting guarantee	Tier One
2003	Benefit Calculation/Formula	Decreased Full Formula benefit pension factor (General Service: 1.67% to 1.5%; Police and Fire 2% to 1.8%)	OPSRP
2003	Benefit Calculation/Formula	Eliminated Money Match benefit calculation method	OPSRP
2003	Benefit Calculation/Formula	Redirected member contributions to freeze Money Match (MM) benefit levels $$	Prospective MM retirees
2003	Benefit Calculation/Formula	Required regularly updated mortality assumptions and actuarial factors	All
2003	Cost-of-living adjustment	Prorated first year COLA	OPSRP
2003	Cost-of-living adjustment	Eliminated COLA "bank" carryover	OPSRP
2003	Final Average Salary	Eliminated lump-sum vacation payouts from subject salary	OPSRP
2003	Final Average Salary	Eliminated accumulated sick leave from final average salary	OPSRP
2003	Investment Risk Allocation	Required members to self-fund guaranteed return on member accounts	Tier One

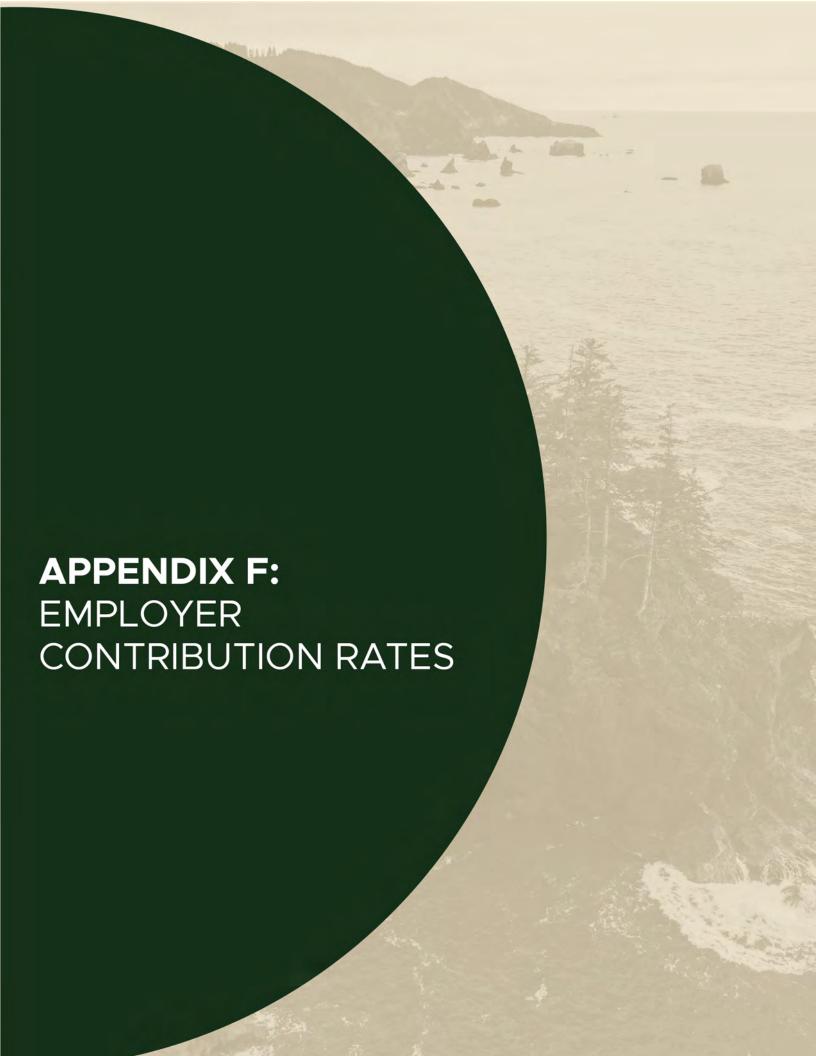
Key: Benefit enhancement Benefit cap or reduction

HISTORY OF KEY BENEFIT ENHANCEMENTS

Continued from page 62

Year	Category	Action	Affected Members
2013	Cost-of-living adjustment	1.5% in 2013; COLA in 2014 and beyond is 1.25% on the first \$60,000 of an annual benefit; 0.15% on amounts above \$60,000	All
2013	Supplementary Payments	Annual supplementary payments of 0.25% to all benefit recipients (up to \$150) through 2019. Second annual supplementary payment of 0.25% through 2019 if benefit is \$20,000 or less annually.	Retirees
2013	Benefit Calculation/Formula	Eliminated any tax remedy for retirees who do not pay income taxes in Oregon because they are not residents of Oregon	Tier One
2014	Investment Risk Allocation	Decreased assumed earnings rate from 8.0% to 7.75%	Tier One
2015	Supplementary Payments	Supplementary payments invalidated by Oregon Supreme Court	Retirees
2015	Cost-of-living adjustment	Annual COLA of up to 2% restored for service time accrued before October 1, 2013. COLA for service time after that date uses a lower rate. Service time accrued in both periods is "blended."	All
2016	Investment Risk Allocation	Decreased assumed earnings rate from 7.75% to 7.50%	Tier One
2017	Investment Risk Allocation	Decreased assumed earnings rate from 7.50% to 7.20%	Tier One
2017	Investment Risk Allocation	Oregon Investment Council changes IAP investment strategy to Target-Date Funds, intended to reduce investment risk and volatility as members age	All
2019	Administrative	Note: Senate Bill 1049 made substantial changes to benefit administration, details of which can be found on our <u>SB 1049</u> webpage	All
2019	Administrative	Alternate method to calculate death benefit for certain Tier One/Tier Two members who die before retirement	Tier One/Tier Two
2019	Benefit Calculation/Formula	Reduces member contributions to IAP. Establishes limit on salary used for benefit calculations	All
2021	Investment Risk Allocation	Decreased assumed earnings rate from 7.20% to 6.90%	Tier One
2021	Benefit Calculation/ Formula	Changed definition of salary to include income that is or would be taxable under Oregon state income tax	OPSRP
2021	Benefit Calculation/ Formula	Increased death benefits from 50% of actuarially determined value to 100%	All
2024	Retirement Age/ Benefit Calculation	House Bill (HB) 4045 decreased OPSRP Police and Firefighter normal retirement age for members with less than 25 years of service from 60 to 55. Created new OPSRP member classification — Hazardous Position — with increased benefits above General Service members.	OPSRP

Key:	Benefit enhancement	Benefit cap or reduction	Neither enhancement nor reduction



CONTRIBUTION RATE BY BIENNIUM

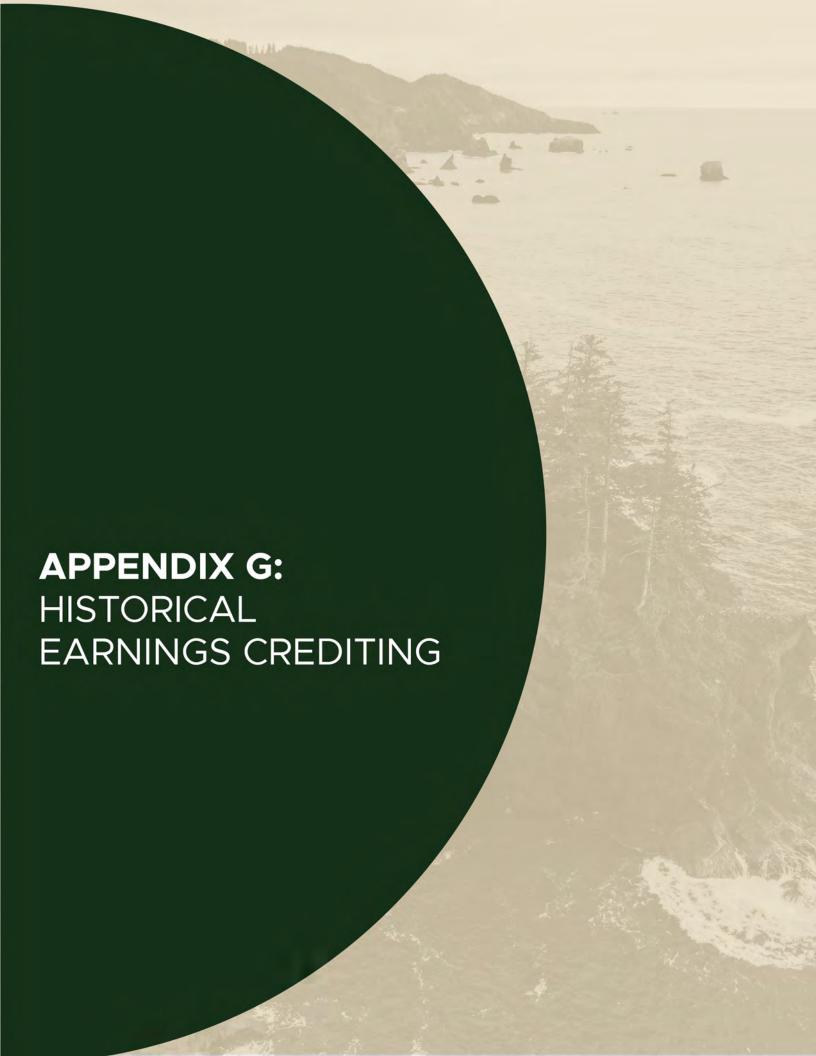
Valuation Year	Rate Effective Dates	Average Rate with Side Accounts (%)	Average Rate without Side Accounts (%)	Projected Biennium Payroll (\$M)
1975	Various	11.21	11.21	2,029.0
1977	Various	11.87	11.87	2,453.6
1979	Various	10.97	10.97	2,976.0
1982	Various	10.13	10.13	4,124.2
1985	Various	10.87	10.87	4,856.6
1987	Various	11.30	11.30	5,529.4
1989	Various	9.74	9.74	6,398.8
1991	Various	9.19	9.19	7,775.0
1993	Various	9.15	9.15	8,933.6
1995	Various	9.42	9.42	9,696.2
1997	Various	11.40	11.40	10,323.2
1999	7/1/01-6/30/03	10.74	10.74	11,353.2
2001	7/1/03-6/30/05	10.64	10.64	12,513.0
2003 ¹	7/1/05-6/30/07	14.47	18.89	12,497.0
2005 ²	7/1/07-6/30/09	8.22	15.01	13,584.0
2007	7/1/09-6/30/11	4.73	12.42	15,443.6
2009	7/1/11-6/30/13	10.80	16.30	17,024.0
2011 ³	7/1/13-6/30/15	10.80	16.50	17,200.0
2013	7/1/15-6/30/17	10.60	17.50	17,398.0
2015	7/1/17-6/30/19	14.23	20.85	20,200.0
2017	7/1/19-6/30/21	18.32	25.23	21,650.0
2019 4	7/1/21-6/30/23	17.93	24.57	24,715.0
2021 4	7/1/23-6/30/25	18.61	25.64	27,130.0

^{1:} December 31, 2003, rates were phased in. Actual rate paid averaged 10.58% with employer side accounts and 15.10% without employer side accounts.

^{2:} Includes weighted average rate for Tier One/Tier Two and OPSRP beginning in 2005.

^{3:} Includes liability reduction and rate deferral from Senate Bill 822 (2013).

^{4:} Includes member redirect offset from Senate Bill 1049 (2019).



EARNINGS CREDITING BY YEAR

		Distributions (%)			
Year	OPERF Earnings (%)	Tier One	Tier Two	Variable Account	IAP
1970	5.09	5.09	N/A	7.47	
1971	6.27	6.27	N/A	9.47	
1972	7.46	7.46	N/A	13.87	
1973	0.00	0.00	N/A	-16.39	
1974	0.00	5.50	N/A	-18.16	
1975	9.19	7.50	N/A	18.94	
1976	10.38	7.75	N/A	18.58	
1977	4.79	7.00	N/A	-2.62	
1978	7.37	7.00	N/A	7.03	
1979	12.32	11.09	N/A	20.40	
1980	16.92	13.00	N/A	29.94	
1981	4.37	7.50	N/A	-2.25	
1982	15.31	11.50	N/A	22.39	
1983	18.37	13.00	N/A	23.12	
1984	7.33	7.50	N/A	4.00	
1985	21.38	15.00	N/A	27.99	
1986	22.70	18.37	N/A	18.98	
1987	9.00	7.50	N/A	4.54	
1988	16.86	13.50	N/A	18.62	
1989	19.74	14.50	N/A	26.84	
1990	-1.53	8.00	N/A	-7.84	
1991	22.45	15.00	N/A	35.05	
1992	6.94	8.00	N/A	10.54	

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		Distributions (%)			
Year	OPERF Earnings (%)	Tier One	Tier Two	Variable Account	IAP
1993	15.04	12.00	N/A	12.65	N/A
1994	2.16	8.00	N/A	-1.76	N/A
1995	20.78	12.50	N/A	29.92	N/A
1996	24.42	21.00	24.42	21.06	N/A
1997	20.42	18.70	20.42	28.87	N/A
1998	15.43	14.10	13.63	21.45	N/A
1999	24.89	11.33	21.97	28.83	N/A
2000	0.63	8.00	0.54	-3.24	N/A
2001	-7.17	8.00	-6.66	-11.19	N/A
2002	-8.93	8.00	-8.93	-21.51	N/A

Earnings for 2003 - 2024 are available on pages 34 and 35.

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM