



# OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

## BOARD MEETING AGENDA

<b>Friday December 1, 2023 9:00 a.m.</b>		<b>PERS 11410 SW 68<sup>th</sup> Parkway Tigard, OR</b>	
ITEM		PRESENTER	
<b>A. Administration</b>			
1.	<a href="#">September 29, 2023, PERS Board Meeting Minutes</a>	SHENOY	
2.	<a href="#">Director's Report</a>	OLINECK	
	a. <a href="#">Forward-Looking Calendar</a>		
	b. <a href="#">OPERF Investment Report</a>		
	c. <a href="#">Budget Execution Report</a>		
3.	<a href="#">Agency Strategic Plan update</a>	OLINECK	
4.	<a href="#">Board Scorecard Report on agency performance measures</a>	RICKARD	
<b>B. Administrative rulemaking</b>			
1.	<a href="#">Notice of Rulemaking for rules to implement 2023 legislation</a>	CHANDLER, VU, VAUGHN	
2.	<a href="#">Adoption of Reemployment of a Retired Member of the OPSRP Pension Program Rule</a>	VU, VAUGHN	
<b>C. Action and discussion items</b>			
1.	<a href="#">SB 1049 Implementation update</a>	ELLEDGE-RHODES	
2.	<a href="#">Contingency Fund request</a>	HORSFORD	
3.	<a href="#">2022 Valuation update and financial modeling results</a>	MILLIMAN	
4.	<a href="#">Adoption of Actuarial Equivalency Factor Tables</a>	OLINECK	

*The PERS Board members, meeting presenters, and the public have the option to attend this meeting in person or remotely. Public testimony or comment will be taken on action items at the Chair's discretion. All written testimony/comment and requests to provide oral testimony/comment should be submitted three days or more in advance of the meeting.*

Visit <https://www.oregon.gov/pers/Pages/Board/PERS-Board-Information.aspx> to register to attend remotely or to submit public comment or testimony. A video recording of the meeting will be available on the PERS website following the meeting.

<http://www.oregon.gov/PERS/>

**2024 Meetings: February 2, April 1\*, May 31, July 26\*, October 4, December 6\***

\*Audit Committee planned for post-board meeting

December 1, 2023  
PERS Board meeting agenda

## Administration

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4. Board Scorecard Report on agency performance measures

# OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM BOARD MEETING MINUTES

September 29, 2023

## **Board members present:**

Chair Sadhana Shenoy, Stephen Buckley, Jardon Jaramillo, and Suzanne Linneen attended in the PERS Boardroom. John Scanlan attended remotely.

## **Staff present:**

Kevin Olineck, Heather Case, Katie Brogan, Richard Horsford, Stephanie Vaughn, Anne Marie Vu, Melanie Chandler, Brandon Armatas, John Lockwood, and Sam Paris attended in the PERS Boardroom.

Akiko Yoshida, Ann Gabourel, Ben Cecka, Chris Geier, Colin Campi, Daniel Rivas, Elizabeth Rossman, Ethan Erickson, Janice Ness, Jonathan Yost, Jordan Masanga, Susie Bodman, Karen Herrold, Katie Davis, Katie Ramsdell, Laurel Galego, Matthew Graves, Melissa Piezonka, Michael Duren, Phuongnam Tran, Shane Perry, Tim Tate, and Yong Yang attended virtually.

## **Others present:**

Matt Larrabee, Scott Preppernau, and Rex Kim attended in the PERS Boardroom.

Anita Gurule, Audrey Roberson, Carol Samuels, David Larson, David Randall, Debra Day, Holly Winston, Ian Peterson, Jaime Alvarez, Jan Lewis, Jeff Gudman, Jennifer Jones, Jeremy Whittlesey, Joe Ebisa, Jonathan Geertsen, Karl Koenig, Katie Kicza, Kevin Graine, Kottur Vasanth, Kristi Jenkins, Maurizio Bottalico, Nate Carter, Robert Burket, Ruth Nelson, Shauna Tobiasson, Steven Demarest, Todd Schwartz, and Twylla Miller attended virtually.

Chair Shenoy called the meeting to order at 9:01 a.m.

## **ADMINISTRATION**

### **A.1. MEETING MINUTES OF JULY 28, 2023**

Vice Chair Buckley moved to approve the minutes from the July 28, 2023, PERS Board meeting with one suggested change to page 1, section A.1., sentence 1: the words "as presented" are in the sentence twice; the first instance should be struck. Board Member Linneen seconded the approval of the minutes with the suggested change. The motion passed unanimously.

### **A.2. DIRECTOR'S REPORT**

Director Kevin Olineck presented the Director's Report, which is a summary of items for the board to be aware of, and the forward-looking calendar. He noted that the agency recently went through the results from the employee engagement survey hosted by Gallup. There were positive increases in 10 of the 13 questions with no significant decreases on the other questions. The forward-looking calendar lists the 2024 PERS Board meeting dates.

The Oregon Public Employees Retirement Fund (OPERF) returns, for the period ending July 31, 2023, were 3.79%.

Operating expenditures for July, August, and preliminary expenditures for September are \$4,032,239, \$4,913,348, and \$10,285,122 respectively.

Through September 8, 2023, the agency has expended a total of \$8,945,587 or 6.6%, of PERS' legislatively approved operations budget of \$135,781,649. At this time, the agency's projected variance is \$6,992,755 or 5.2%.

Olineck reviewed the meeting agenda. He noted that public testimony was received regarding the assumed rate. They are available in the meeting packet.

Chair Shenoy acknowledged that the management team has been working to improve employee engagement and that the Gallup survey results show their efforts are working.

### A.3. BOARD SELF-EVALUATION SURVEY VERBAL UPDATE

Sadhana Shenoy, PERS' Board Chair, presented. In June, the board approved two self-assessments. These allow the board to share areas of improvement with the chair. The primary feedback is that the board is mostly satisfied with the work being done at PERS. Some areas of interest include employee engagement, the modernization plan, and communication with members.

## **ADMINISTRATIVE RULEMAKING**

### B.1. NOTICE OF REEMPLOYMENT OF A RETIRED MEMBER OF OPSRP RULES

Stephanie Vaughn, the Policy, Analysis and Compliance Section (PACS) Manager, and Anne Marie Vu, PACS' Research Policy Coordinator, presented notice of Rulemaking for Reemployment of a Retired Member of the Oregon Public Service Retirement Plan (OPSRP) Pension Program Rule, OAR 459-075-0300, Reemployment of a Retired Member of the OPSRP Pension Program.

A rulemaking hearing will be held remotely on October 24, 2023, at 2:00 p.m. The public comment period ends October 31, 2023, at 5:00 p.m.

No board action was required.

### B.2. NOTICE OF RETIREMENT BENEFIT RULES

Stephanie Vaughn, PACS' Manager, and Melanie Chandler, PACS' Research Policy Coordinator, presented adoption of Retirement Benefits Rules, OAR 459-013-0060, Payment of Retirement Benefits, and OAR 459-075-0170, Payment of OPSRP Pension Program Benefits.

A rulemaking hearing was held remotely on August 22, 2023, at 2:00 p.m. No members of the public attended. The public comment period ended September 5, 2023, at 5:00 p.m. No public comment was received.

Board Member Linneen moved to adopt the changes to Retirement Benefits Rules as presented. Board Member Jaramillo seconded the motion. The motion passed unanimously.

## **ACTION AND DISCUSSION ITEMS**

### C.1. PERS MODERNIZATION PROGRAM UPDATE

Rebecca Craven, Modernization Program Director, presented.

Craven reviewed the background and current activities of the program. Current program activities are focused on detailed planning for 2023-25 priorities and continued refinement of the program road map through 2031. Recent key accomplishments and areas of progress were reviewed.

No board action was required.

### C.2. PERS MEMBER AND EMPLOYER SURVEY RESULTS

John Lockwood, Member Services Manager, Brandon Armatas, Data Services Manager, and Elizabeth Rossman, Enterprise Communications Manager, presented the results of the 2023 Member and Employer Satisfaction surveys.

Overall, PERS' 2023 results for members increased 1% over last year's 86%.

No board action was required.

### C.3. OREGON SAVINGS GROWTH PLAN ADMINISTRATIVE FEE INCREASE

Richard Horsford, Chief Financial Officer, presented. He provided an overview and background of Oregon Savings Growth Plan (OSGP) fees. Current fees are insufficient to cover actual costs. Total administrative fees charged to OSGP were \$2.7M in 2019 and increased steadily over several years (based on the increasing net asset value times the rate) to \$3.6M in 2022.

Board Member Jaramillo moved to approve an increase in total administrative fees of 0.015% from the current 0.12% rate to the 0.135% of net assets value proposed rate, as presented. Vice Chair Buckley seconded the motion. The motion passed unanimously.

### C.4. FINAL ADOPTION OF VALUATION METHODS AND ASSUMPTIONS INCLUDING ASSUMED RATE OF RETURN

Kevin Olineck, Director, presented.

At the July 28, 2023 meeting, the board approved the preliminary adoption of the recommended changes to the actuarial methods and assumptions as presented by Milliman in the 2022 Experience Study.

Board Member Buckley moved to adopt, on a final basis, the recommended actuarial methods and assumptions, as presented by Milliman in the 2022 Experience Study. Board Member Jaramillo seconded. The motion passed unanimously.

### C.5. ADOPTION OF ASSUMED RATE OAR

Stephanie Vaughn, PACS' Manager, presented adoption of Assumed Rate Rule: OAR 459-007-0007, Assumed Rate

A rulemaking hearing was held remotely on August 22, 2023, at 2:00 p.m. The public comment period ended September 5, 2023, at 5:00 p.m. Public comment was received August 30, 2023, from Steven Demarest via email.

Board Member Linneen moved to adopt the changes to Assumed Rate Rule as presented. Board Member Jaramillo seconded. The motion passed unanimously.

### C.6. BOARD FUNDING POLICY REVIEW

Kevin Olineck, Director, presented.

The Board Funding Policy incorporates the entire rate setting policy, including rate collaring. The policy was originally adopted at the October 2020 board meeting. The policy has been updated by management to incorporate the latest valuation methods and assumptions.

Board Member Jaramillo moved to adopt the Board Funding Policy, as presented. Board Member Linneen seconded. The motion passed unanimously.

### C.6. DECEMBER 31, 2022 SYSTEM-WIDE VALUATION RESULTS

Scott Preppernau and Matt Larrabee of Milliman presented.

The presentation reviewed valuation results that form the basis for advisory rates for 2025-27. Formal, detailed results will be issued in the December 31, 2022 System-Wide Actuarial Valuation Report. Milliman will return to the December 1, 2023 board meeting with detailed advisory employer contribution rates and funded status projections along with the System-Wide Actuarial Valuation Report.

Chair Shenoy adjourned the PERS Board meeting at 10:45 a.m.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Kevin Olineck". The signature is written in a cursive style with a large initial "K".

Kevin Olineck, Director

December 1, 2023  
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# Director's Report

## OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

Kevin Olineck, Director



## Overview

This Director's Report tries to encapsulate, at a high level, noteworthy changes that have taken place since the last board meeting. I want to highlight where PERS' staff have not only made great progress with standard operational undertakings but have also made significant advancements on strategic initiatives.

**Another PERS Expo is in the books!** The 2023 PERS Expo was a resounding success! As of October 24, 2023, the expo had 6,849 members attend, a 30.6% increase over the 2022 event. With an all-new theme, creative graphics incorporating the diverse landscapes of Oregon, and revamped presentations and partner resources, our

members were given the best expo yet. Of note is that this was the first expo for 72% of the attendees.

The 20+ sessions offered by Member Services, the Oregon Savings Growth Plan, and the PERS Health Insurance Program teams saw over 19,000 visits, averaging just under three sessions per member. Once again, PERS offered downloadable resources including checklists for those in their first five years of PERS employment, midcareer members, and for those nearing retirement. These resources were downloaded or saved over 12,000 times.

These incredible results are a testament to the tireless efforts of the PERS Expo planning team and the staff presenting sessions and answering our members' questions.







**School District Unfunded Liability Fund (SDULF)**

**update** Senate Bill 1566 (codified in Oregon Revised Statute 105 Oregon Laws 2018) was enacted during the 2018 Regular Session and contained language pertaining to estate taxes. Section 15 directs the Office of Economic Analysis to calculate the rate of change in estate taxes during the five biennia preceding the 2019-21 biennium, and to use that trend to produce a forecast for 2019-21. If actual estate tax collections exceed that forecast, the Department of Revenue is to transfer this surplus to the School Districts Unfunded Liability Fund (SDULF). A transfer was anticipated to be made this year.

The statute is somewhat ambiguous about how the trend forecast should be calculated; consequently, the Department of Administrative Services (DAS) reached out to the Attorney General's (AG) Office for clarification. The AG's interpretation was that DAS may reasonably use one of two methods for the calculation since it was not clearly specified in the bill itself.

During the review, another provision of the law (§ 15(4)) was brought to the attention of DAS by the Department of Justice (DOJ) that offsets the transfer in the event of a large enough personal income tax kicker credit:

The Department of Revenue shall transfer an amount equal to the amount of any excess calculated under subsection (3) of this section, *less*

*any amount required to be returned to taxpayers under ORS 291.349, to the School Districts Unfunded Liability Fund.*

Given the large kicker credit generated during the 2019-21 biennium, no transfer should be made. What this means in practical terms is that instead of receiving a transfer of between \$60 and \$90 million dollars, PERS did not receive any transfer of estate taxes. We requested and received a formal DOJ letter to support this interpretation. Currently, PERS has a balance of approximately \$47 million in the SDULF.

## Highlights

### Agency initiatives and accomplishments

**Cybersecurity Awareness Month** This October marked the 20th anniversary of Cybersecurity Awareness Week. Each week during October, PERS, in collaboration with DAS' Cybersecurity Services, dove into different topics in greater detail, providing advice and resources to put

these security best practices into action and build a culture of security awareness. Our Information Security Team, Shane Perry and Ben Cecka, hosted a lunch-and-learn session that was well attended. Topics covered included the following:

- Use strong passwords and a password manager.
- Turn on multifactor authentication.
- Recognize and report phishing.
- Update your software.

Additionally, DAS Cyber Security Services provided staff with a host of information items including:

- Video modules.
- Interactive training modules.
- Webinars covering:
  - Ransomware.
  - A discussion on “security culture” by Joanna Huisman, Senior Vice President of Strategic Insight and Research, KnowBe4.
- A discussion entitled “It’s Easy to Stay Safe Online” by Lisa Plaggemier, Executive Director, National Cybersecurity Alliance.

**A triple triumph** PERS’ communications efforts have been recognized by the Public Relations Society of America (PRSA), Oregon Chapter with the awarding of three wins at the PRSA Oregon Spotlight Awards in Portland. These awards celebrate the outstanding



Senior Marketing and Communications Specialist Jonathan Yost accepts three Public Relations Society of America (PRSA) awards on behalf of PERS.

communications channels, tactics, and campaigns that we have been diligently working on improving.

The awards are for the agency’s redeveloped PERS website; for *Vested*, our new digital internal newsletter; and for the campaign strategy and communications contributions for the 2022 PERS Expo. Winning these awards has been a source of immense pride for the Communications Section, who appreciated the opportunity to be celebrated by communications peers from around the state, including PERS members from multiple state and local government agencies who attended the ceremony.

**NCPERS Roundtable** In October, Senior Marketing and Communications Specialist Jonathan Yost spoke to nearly four dozen pension communicators at the National Conference of Public Employee Retirement Systems (NCPERS) roundtable about PERS’ recently redeveloped and deployed website.

NCPERS staff recognized the efforts of the Communications Section at PERS and felt that the new website rose to the level of being shared with pension communicators across the country. They asked us to share our process around our research and planning, as well as our efforts in implementation and evaluation. The conversation was well received, and so far, one agency has reached out to ask additional questions as they prepare to update their own website.

**PERS Annual Comprehensive Financial Report (ACFR)**

Our 2023 PERS Annual Comprehensive Financial Report is scheduled to be published mid-December. The ACFR represents a significant effort by the agency as it truly lives up to its descriptor: “comprehensive.” The agency is proud to win, for the 22nd year running, the 2023 Public Pension Standards Award for Funding and Administration related to our 2022 ACFR, as recognized by the Public Pension Coordinating Council, a confederation of the National Association of State Retirement Administrators (NASRA), the National Conference on Public Employee Retirement Systems (NCPERS), and the National Council on Teacher Retirement (NCTR). Additionally, for the 32nd



consecutive year, we were awarded a Certificate of Achievement for Excellence in Financial Reporting from the Government Finance Officers Association for the 2022 ACFR.

**PERS By the Numbers** An ambitious re-envisioning of the layout and organization of *PERS by the Numbers* (PBTN) began in February, involving input and buy-in from stakeholders across the agency. The new PBTN project involved keeping the same information as previous editions, but redesigning it to be more narrative, in order to better share PERS' story.

Keeping in mind the importance of PBTN for educating stakeholders, which include the media, legislators, and PERS members, on annual updates, the Communications Section created a format that moves static information to the end of the document, to refocus attention on what changes we have seen over the course of the year. This format also allows us to better relay trends over both the short and long term. This new layout also includes new infographics, branded colors, and breakout

boxes to call attention to information that we believe is particularly impactful to our major stakeholders.

**PERS 2023 Manager of the Year** Staff were encouraged to nominate a manager whose efforts impressed them by best exemplifying the attributes of the ideal manager through demonstrating the following:

- Commitment.
- Clear communication.
- Problem solving.
- Flexibility.
- Innovation.
- Productive feedback.
- Support.
- Consistency.

**PERS 2023 Employee of the Year** Staff were also encouraged to nominate a fellow employee who is a master team builder who embodies characteristics and attributes that set them apart and who is:

- An innovator: Focuses on creative ways to improve work or processes within the context of



modernization or in general.

- Collaborative: Works as part of a team and across teams, with a focus on making the collaboration productive and successful.
- A problem solver: Perseveres to solve problems in a streamlined way, working to resolve conflicts professionally and equitably.
- A motivator: An active listener who promotes connectivity and teamwork, this person understands both the task and the group dynamic, making everyone feel valued and inspired.
- A creative visionary: Focuses on the bigger picture and actively initiates projects or tasks to support the goals of their team, section, division, or the agency; looks at creative ways to tackle undertakings.
- Adaptable: Able to follow directions and adapt to changing situations while still staying on track and making progress on efforts.



Nominees and winners of both the Manager and Employee of the Year will be announced at the all-staff meeting on December 12.

My gratitude to the Employee Recognition Work Group of April Sabbe, Heather Swientek, Johnna Bergman, Matt Bryan, Rachel Baskin, Rebecca Acosta-Castro, and Yvette Elledge-Rhodes who coordinated these recognition efforts.

**Update on Governor's Expectations** As noted in prior meetings, Governor Kotek released a set of eleven expectations that she wants all agencies to work towards meeting. This work is overseen by the Department of Administrative Services Strategic Initiatives and Enterprise Accountability Section. The following is the status of our agency in meeting these expectations and will be provided to the board on a semi-annual basis (December, June).

1. *Performance Reviews for Agency Directors*

A 360-degree assessment was conducted in June to evaluate the Director's performance for the past fiscal year. Going forward, in even number years, the board will continue to do an annual performance review, while in odd-numbered years going forward, PERS will engage with a vendor to conduct the 360-degree assessment with revised questions to ensure consistency across all stage agencies.

2. *Performance Feedback for Employees*

PERS' managers are expected to conduct quarterly Performance Assessment and Feedback (PAF) sessions with all staff. While the expectation is to have 90% of these assessments completed on a quarterly basis, in the past two quarters, PERS' managers have completed 100% of the PAFs.

3. *Measuring Employee Satisfaction*

DAS has established a statewide agreement with Gallup Inc. to perform surveying services. This enables cross-agency comparisons and trend analysis. PERS conducted the employee survey in August and the results were published in the September Director's Report.

4. *Supporting Strategic Planning and Measuring Agency Performance*

PERS submitted our current 2023-28 PERS Strategic Plan to DAS. As it meets the newly established criteria, PERS will not have to update the plan but will provide DAS the same annual progress reports as we provide to the board at this board meeting.

5. *Managing Information Technology Process*

PERS updated our Information Technology (IT) Strategic Plan to align with the new enterprise IT Strategic Plan template and provided a copy to DAS in November.

6. *Succession Planning for the Workforce*

As noted in the June *Director's Report*, PERS recently

finalized our PERS Succession Plan, and we are actively engaged in actioning the tactics within the plan. We provided a copy of our plan to DAS.

7. *State Government Commitment to Diversity, Equity, and Inclusion*

PERS is working to develop and submit a full PERS Diversity, Equity, Inclusion and Access Plan by the end of February. We are leveraging our PERS Diversity Committee to assist in this effort. Additionally, we submitted our affirmative action plan earlier in the year.

8. *Agency Emergency Preparedness*

This expectation requires agencies to have in place, and update annually, a continuity of operations plan (COOP). Agencies were required to submit a copy of their current plan to the Oregon Department of Emergency Management no later than Sept. 30, 2023, which PERS did.

9. *Agency Hiring Practices*

The expectation is that agencies should work within a recruiting cycle of 50 days. The start is calculated from the date the position posts in Workday. The clock stops on the date the offer is accepted or the filled date, whichever is first. Our Human Resources (HR) Section is working with our management team to refine all the steps, as the 50-day cycle can only work where there is total synchronization throughout the process. In the last quarter, the recruiting cycle for PERS averaged 57 days.

10. *Audit Accountability*

Agencies are required to report to DAS on audit recommendation status twice a year, May 31 and November 30, with our first report having been due November 30, 2023. DAS asked agencies to report information about the status of each open recommendation and their sub status (in progress, not yet started) and closed recommendations and their sub status (implemented, agency accepts risk, agency disagrees). The internal audit group coordinated the reporting and submission of this information prior to November 30.

11. *Developing New Employees and Managers*

There are three components to this expectation:

1. Agencies will have their new managers complete the DAS Foundational Training Program and enroll into a cohort within five business days of their position start date.
2. Agencies must have a new employee orientation (NEO) program. All agencies must be able to demonstrate that 100% of their new employees participate in the agency NEO program within 60 days of hire. Additionally, agencies need to submit to DAS their agency NEO program for approval. We received approval on our NEO in August.
3. Agencies will have their new employees participate in the DAS Customer Service Training within 60 days of hire. This is a new training module designed to ensure consistent customer service for all agencies.

Our HR Section is engaged in ensuring that we comply with all three components. PERS has established and run a NEO program for years and had our program approved by DAS this past quarter.

## Supporting our community

**Charitable Fund Drive** PERS' staff are ardent supporters of the Oregon Employees' Charitable Fund Drive (CFD), a cross-governmental, annual fundraising initiative. Staff are engaged in supporting the CFD through direct monetary pledges and other fundraising activities. By raising over \$13,360, we continue to be one of the top governmental fundraising entities for similar sized organizations.

**Children's Transitional School Halloween** For over twenty-five years, PERS has hosted an annual Halloween event for the children from the Community Transitional School (CTS). PERS used to host students at our headquarters location to participate in judging our Halloween Costume Parade, view decorated offices and cubicles, have lunch with staff, and trick-or-treat. For the

third year in a row, given we couldn't host this event in person, staff decided to participate in a drive to provide CTS with both Halloween treats as well as much needed classroom supplies, which allow them to continue their great work. We also had a representative from CTS

do a lunch-and-learn session to highlight to staff that they can support the school monetarily as they are an organization to whom we can pledge money as part of the CFD. Finally, we hosted a virtual costume contest with proceeds going to CTS.



*Clockwise from upper left: Alex Gaub and family, Melissa Tominaga's children, Sarah Triplett's pooch, Holly Effenberger, Deepthi Ramadugu's children, Jessica Giron, and Shane Wallis.*

# PERS BOARD MEETING FORWARD-LOOKING CALENDAR

## **Friday, February 2, 2024**

BoardSmart 3.0 overview  
PERS Modernization Program update  
Preliminary earnings crediting  
2024 legislative preview and 2025 legislative concepts

## **Monday, April 1, 2024\***

Senate Bill 1049 update  
Final earnings crediting  
Board approval to file 2025 legislative concepts  
Agency Budget preview  
Oregon Investment Council annual review  
Oregon Savings Growth Plan report out

## **Friday, May 31, 2024**

PERS Modernization Program update  
Agency Budget development  
Board Scorecard Report on agency performance measures  
PERS Health Insurance Program (PHIP) renewals and rates  
PHIP report out  
Review Board Education Policy and training

## **Friday, July 26, 2024\***

Senate Bill 1049 update  
Approval to submit Agency Request Budget  
CEM Benchmarking presentation

## **Friday, October 4, 2024**

PERS Modernization Program update  
Board adoption of Actual Employer Rates  
Legislative update (if needed)  
PERS Strategic Plan update  
Member and Employer Survey results

## **Friday, December 6, 2024\***

Senate Bill 1049 update  
Presentation of legislative concept drafts before filing  
Board Scorecard Report on agency performance measures

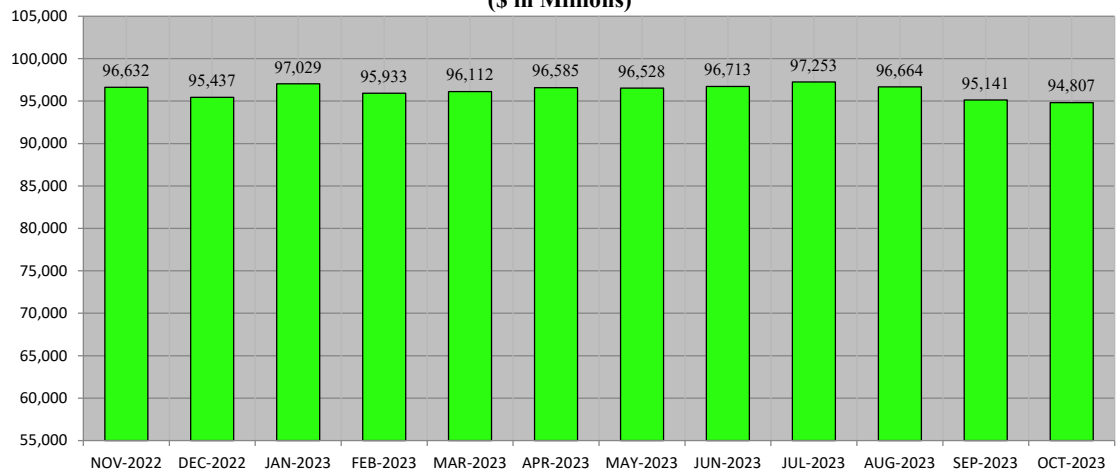
*\*Audit and Risk Committee planned for post-board meeting*



OPERF	Regular Account				Historical Performance (Annual Percentage)							
	Policy <sup>1</sup>	Target <sup>1</sup>	\$ Thousands <sup>2</sup>	Actual	Year-To-Date <sup>3</sup>	1 YEAR	2 YEARS	3 YEARS	4 YEARS	5 YEARS	7 YEARS	10 YEARS
<b>TOTAL OPERF Regular Account</b>			\$ 91,175,929		2.30	3.95	1.53	9.20	7.49	7.91	8.35	7.53
<i>OPERF Policy Benchmark</i>					5.25	6.67	(1.33)	6.31	6.44	7.17	7.91	7.48
<b>Value Added</b>					(2.96)	(2.72)	2.86	2.89	1.05	0.74	0.43	0.04
<i>Oregon Reference Portfolio</i>					3.09	6.62	(6.88)	2.86	3.51	5.19	5.77	5.06
<b>Public Equity</b>	22.5-32.5%	27.5%	\$ 13,604,017	14.9%	4.94	9.57	(4.15)	8.54	6.53	7.39	8.48	6.97
<i>MSCI ACWI IMI Net</i>					5.75	9.43	(6.56)	6.45	5.92	7.11	8.10	6.61
<b>Private Equity</b>	17.5-27.5%	20.0%	\$ 26,267,608	28.8%	5.61	5.66	4.37	16.92	14.71	14.59	15.35	13.86
<i>Russell 3000+300 Bps Qtr Lag</i>					26.16	22.99	3.71	15.71	14.91	13.93	16.08	15.58
<b>Total Equity</b>	45.0-55.0%	47.5%	\$ 39,871,625	43.7%								
<b>Total Fixed</b>	20-30%	25.0%	\$ 20,964,927	23.0%	(0.25)	2.08	(5.83)	(3.86)	(1.41)	0.84	0.70	1.34
<i>Oregon Custom Fixed Income Benchmark</i>					(2.77)	0.36	(8.01)	(5.31)	(2.62)	(0.20)	(0.13)	0.62
<b>Real Estate</b>	9.0-16.5%	12.5%	\$ 13,509,617	14.8%	(7.55)	(6.60)	9.02	10.62	8.34	7.89	8.46	9.08
<i>Oregon Custom Real Estate Benchmark</i>					(11.64)	(11.46)	5.54	6.76	5.30	5.28	5.91	7.55
<b>Real Assets</b>	2.5-10.0%	7.5%	\$ 9,235,505	10.1%	6.04	8.57	13.66	15.08	10.34	7.65	7.84	5.48
<i>CPI +4%</i>					7.10	7.36	9.67	9.93	8.73	8.15	7.63	6.90
<b>Diversifying Strategies</b>	2.5-10.0%	7.5%	\$ 4,888,617	5.4%	2.60	1.49	12.19	11.42	3.93	2.89	2.08	3.02
<i>HFRI FOF: Conservative Index</i>					3.24	4.30	1.68	5.47	4.69	4.34	4.01	3.37
<b>Opportunity Portfolio</b>	0-5%	0%	\$ 2,656,204	2.9%	9.69	13.15	6.85	13.31	11.43	9.49	9.41	8.21
<i>Opportunity Custom Benchmark</i>					4.07	4.50	8.71	9.64	8.78	8.39	8.10	7.53
<b>Cash w/Overlay</b>	0-3%	0%	\$ 49,432	0.1%	4.24	5.09	2.32	1.62	1.67	2.01	1.87	1.53
<i>91 Day Treasury Bill</i>					4.06	4.77	2.76	1.85	1.61	1.77	1.61	1.16
<b>Target Date Funds</b>			\$ 3,418,885									
<b>TOTAL OPERF Variable Account</b>			\$ 212,539		5.88	9.55	(6.29)	6.75	6.21	7.41	8.44	6.96

Total OPERF NAV  
(includes Variable Fund assets)  
One year ending OCT-2023

(\$ in Millions)



<sup>1</sup>OIC Policy revised April 2023.

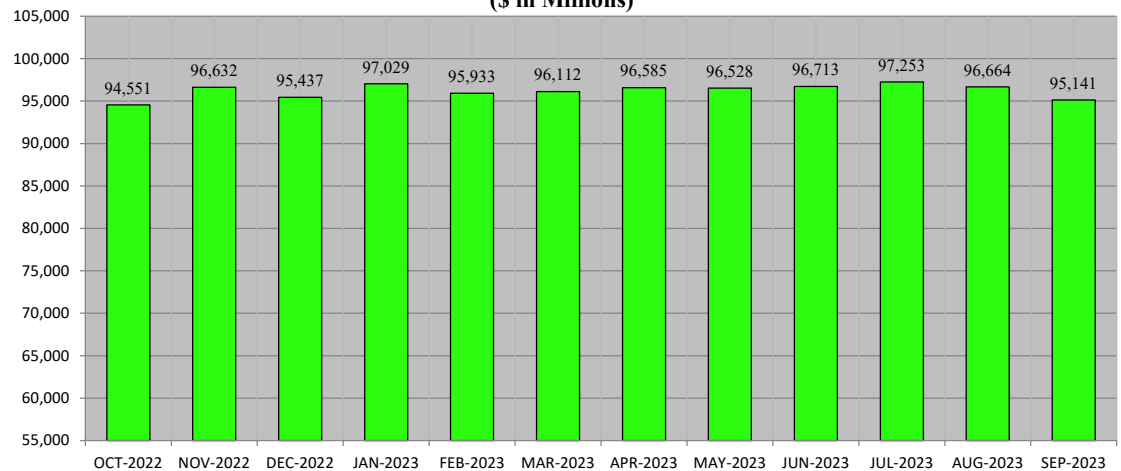
<sup>2</sup>Includes impact of cash overlay management.

<sup>3</sup>For mandates beginning after January 1 (or with lagged performance), YTD numbers are "N/A". Performance is reflected in Total OPERF. YTD is not annualized.



OPERF	Regular Account				Historical Performance (Annual Percentage)							
	Policy <sup>1</sup>	Target <sup>1</sup>	\$ Thousands <sup>2</sup>	Actual	Year-To-Date <sup>3</sup>	1 YEAR	2 YEARS	3 YEARS	4 YEARS	5 YEARS	7 YEARS	10 YEARS
<b>TOTAL OPERF Regular Account</b>			\$ 91,529,794		2.65	5.73	2.55	9.26	7.82	7.34	8.24	7.78
<i>OPERF Policy Benchmark</i>					6.94	10.07	0.43	6.80	7.20	6.95	8.02	7.86
<b>Value Added</b>					(4.29)	(4.34)	2.12	2.47	0.62	0.39	0.22	(0.09)
<i>Oregon Reference Portfolio</i>					6.02	13.94	(3.98)	3.25	4.76	4.54	5.95	5.67
<b>Public Equity</b>	22.5-32.5%	27.5%	\$ 14,226,878	15.5%	8.07	20.80	(0.99)	8.90	7.98	6.32	8.66	7.70
<i>MSCI ACWI IMI Net</i>					9.39	20.16	(2.68)	6.88	7.55	6.09	8.32	7.39
<b>Private Equity</b>	17.5-27.5%	20.0%	\$ 26,175,916	28.6%	5.41	5.13	5.18	17.77	14.79	14.60	15.32	13.84
<i>Russell 3000+300 Bps Qtr Lag</i>					27.24	22.48	4.26	17.27	15.33	14.71	16.22	15.68
<b>Total Equity</b>	45.0-55.0%	47.5%	\$ 40,402,794	44.1%								
<b>Total Fixed</b>	20-30%	25.0%	\$ 21,255,016	23.2%	0.88	2.39	(5.33)	(3.65)	(1.08)	0.93	0.78	1.60
<i>Oregon Custom Fixed Income Benchmark</i>					(1.21)	0.64	(7.29)	(4.97)	(2.20)	(0.01)	0.00	0.91
<b>Real Estate</b>	9.0-16.5%	12.5%	\$ 13,439,292	14.7%	(7.39)	(6.36)	10.00	10.76	8.37	7.96	8.27	9.16
<i>Oregon Custom Real Estate Benchmark</i>					(11.01)	(10.73)	7.02	7.04	5.59	5.56	6.02	7.63
<b>Real Assets</b>	2.5-10.0%	7.5%	\$ 8,903,572	9.7%	3.08	5.44	12.69	13.87	9.51	7.00	7.36	5.20
<i>CPI +4%</i>					6.79	7.83	10.14	9.96	8.81	8.19	7.66	6.87
<b>Diversifying Strategies</b>	2.5-10.0%	7.5%	\$ 4,841,742	5.3%	1.62	6.15	11.91	10.73	3.43	1.96	1.94	2.97
<i>HFRI FOF: Conservative Index</i>					3.66	5.16	2.21	5.72	4.84	4.10	4.11	3.51
<b>Opportunity Portfolio</b>	0-5%	0%	\$ 2,693,679	2.9%	10.25	12.45	7.93	14.01	11.82	9.63	9.42	8.67
<i>Opportunity Custom Benchmark</i>					5.74	7.03	10.26	10.38	9.38	8.86	8.43	7.72
<b>Cash w/Overlay</b>	0-3%	0%	\$ (6,302)	0.0%	3.77	4.78	2.06	1.48	1.62	1.95	1.82	1.49
<i>91 Day Treasury Bill</i>					3.60	4.47	2.53	1.70	1.55	1.72	1.55	1.11
<b>Target Date Funds</b>			\$ 3,384,897									
<b>TOTAL OPERF Variable Account</b>			\$ 225,883									
					9.54	20.30	(2.40)	7.19	7.85	6.41	8.66	7.73

**Total OPERF NAV**  
(includes Variable Fund assets)  
One year ending SEP-2023  
(\$ in Millions)



<sup>1</sup>OIC Policy revised April 2023.

<sup>2</sup>Includes impact of cash overlay management.

<sup>3</sup>For mandates beginning after January 1 (or with lagged performance), YTD numbers are "N/A". Performance is reflected in Total OPERF. YTD is not annualized.



# Oregon

Tina Kotek, Governor

## Public Employees Retirement System

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December 1, 2023

TO: Members of the PERS Board  
 FROM: Gregory R. Gabriel, Budget Officer  
 SUBJECT: December 2023 Budget Report

### 2023-25 OPERATING BUDGET

Operating expenditures for September, October, and preliminary expenditures for November are \$4,774,504, \$9,878,087, and \$4,744,248 respectively. Final expenditures for November will close in the Statewide Financial Management System on December 15 and will be included in the February 2024 report to the board.

- Through November 12, 2023, the agency has expended a total of \$23,703,729 or 17.5% of PERS' legislatively approved operations budget of \$135,781,649.
- At this time, the agency's projected variance is \$2,145,428 or 1.6%.
- Core Retirement Systems Applications (CRSA) expenditures for September, October, and preliminary expenditures for November are \$1,138,777, \$499,479, and \$501,187 respectively. As of November 12, the agency has expended \$2,548,176 or 8.6% of the legislatively approved budget of \$29,704,845.
- At this time, the CRSA projected variance is \$7,108,044 or 24.0%.

### 2021-23 OPERATING BUDGET

Operating expenditures paid July through November 2023 were \$2,875,391. The current projected positive variance is \$6,665,139 or approximately 5.3% of the operations budget.

To date, the agency has expended a total of \$119,931,223 or 94.7% of PERS' legislatively approved operations budget of \$126,596,362. PERS will continue to pay invoices for goods received and for services rendered as of June 30, 2023 through December 31, 2023.

### 2023-25 NON-LIMITED BUDGET

The adopted budget includes \$13,523,120,517 in total estimated non-limited expenditures. Non-limited expenditures include benefit payments, health insurance premiums, and third-party administration payments for both the PERS Health Insurance Program (PHIP) and the Individual Account Program (IAP).

- Non-Limited expenditures through November 12, 2023 are \$2,725,033,753.

*A.2.c. Attachment – 2021-23, 2023-25 CRSA, Agency-wide Budget Execution Summary Analysis*

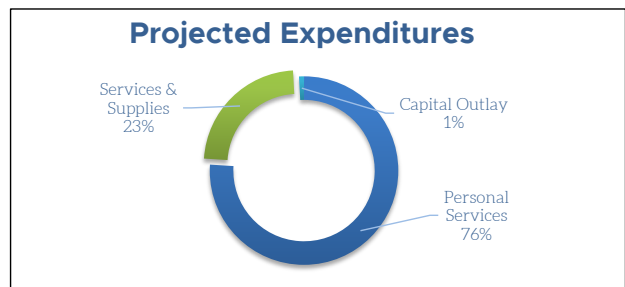
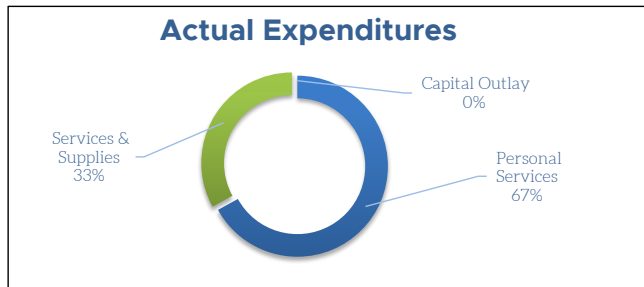
# PERS Monthly Budget Report

2023-25 Agency-Wide Budget Execution  
Preliminary for the Month of November 2023

## Limited - Operating Budget

### 2023-25 Biennial Summary

Category	Actual Exp. To Date	Projected Expenditures	Total Est. Expenditures	2023-25 LAB	Variance
Personal Services	15,878,876	83,561,763	99,440,639	98,372,912	(1,067,727)
Services & Supplies	7,824,853	25,429,729	33,254,582	35,770,734	2,516,152
Capital Outlay	0	941,000	941,000	1,638,003	697,003
<b>Total</b>	<b>23,703,729</b>	<b>109,932,492</b>	<b>133,636,221</b>	<b>135,781,649</b>	<b>2,145,428</b>



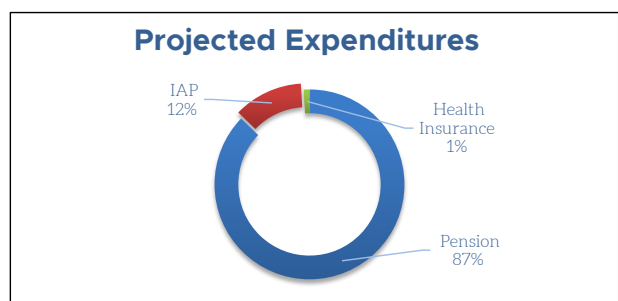
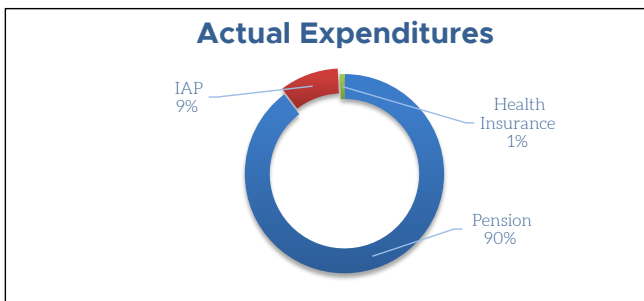
### Monthly Summary

Category	Actual Exp.	Projections	Variance	Avg. Monthly Actual Exp.	Avg. Monthly Projected Exp.
Personal Services	3,942,671	4,085,670	142,998	3,175,775	4,397,988
Services & Supplies	801,577	830,650	29,072	1,564,971	1,338,407
Capital Outlay	0	0	0	0	49,526
<b>Total</b>	<b>4,744,248</b>	<b>4,916,319</b>	<b>172,071</b>	<b>4,740,746</b>	<b>5,785,920</b>

## Non-Limited Budget

### 2023-25 Biennial Summary

Programs	Actual Exp To Date	Projected Expenditures	Total Est. Expenditures	Non-Limited LAB	Variance
Pension	2,443,341,094	9,260,771,947	11,704,113,041	11,823,032,167	118,919,126
IAP	260,980,501	1,324,149,315	1,585,129,816	1,482,829,663	(102,300,153)
Health Insurance	20,712,158	112,121,306	132,833,464	217,258,687	84,425,223
<b>Total</b>	<b>2,725,033,753</b>	<b>10,697,042,568</b>	<b>13,422,076,321</b>	<b>13,523,120,517</b>	<b>101,044,196</b>



# PERS Monthly Budget Report

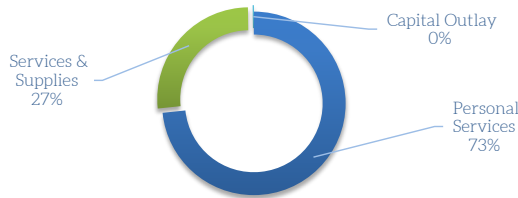
## 2021-23 Agency-Wide Budget Execution Summary for 2021 - 2023

### Limited - Operating Budget

#### 2021-23 Biennial Summary

Category	Actual Exp. To Date	Projected Expenditures	Total Est. Expenditures	2021-23 LAB	Variance
Personal Services	87,978,718	0	87,978,718	91,033,361	3,054,643
Services & Supplies	31,717,592	0	31,717,592	34,094,093	2,376,501
Capital Outlay	234,913	0	234,913	1,468,908	1,233,995
Unscheduled				0	0
<b>Total</b>	<b>119,931,223</b>	<b>0</b>	<b>119,931,223</b>	<b>126,596,362</b>	<b>6,665,139</b>

#### Actual Expenditures



#### Projected Expenditures



#### Fiscal Year 2024 To Date

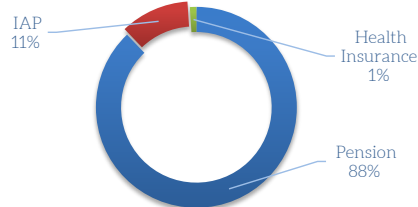
Category	Actual Exp.	Projections	Variance	Avg. Monthly Actual Exp.	Avg. Monthly Projected Exp.
Personal Services	84,572	83,435	(1,137)	3,620,435	3,966,667
Services & Supplies	2,577,350	2,558,055	(19,296)	1,318,502	1,259,021
Capital Outlay	213,469	73,271	(140,198)	1,129	75,000
<b>Total</b>	<b>2,875,391</b>	<b>2,714,761</b>	<b>(160,631)</b>	<b>4,940,066</b>	<b>5,300,688</b>

### Non-Limited Budget

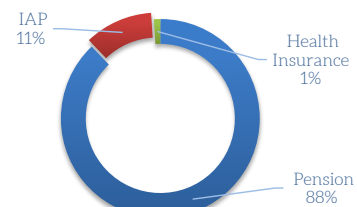
#### 2021-23 Biennial Summary

Programs	Actual Exp To Date	Projected Expenditures	Total Est. Expenditures	Non-Limited LAB	Variance
Pension	11,232,480,112	0	11,232,480,112	11,215,517,678	(16,962,434)
IAP	1,417,603,192	0	1,417,603,193	1,298,603,848	(118,999,345)
Health Insurance	132,492,364	0	132,492,364	372,492,067	239,999,703
<b>Total</b>	<b>12,782,575,668</b>	<b>1</b>	<b>12,782,575,669</b>	<b>12,886,613,593</b>	<b>104,037,924</b>

#### Actual Expenditures



#### Projected Expenditures



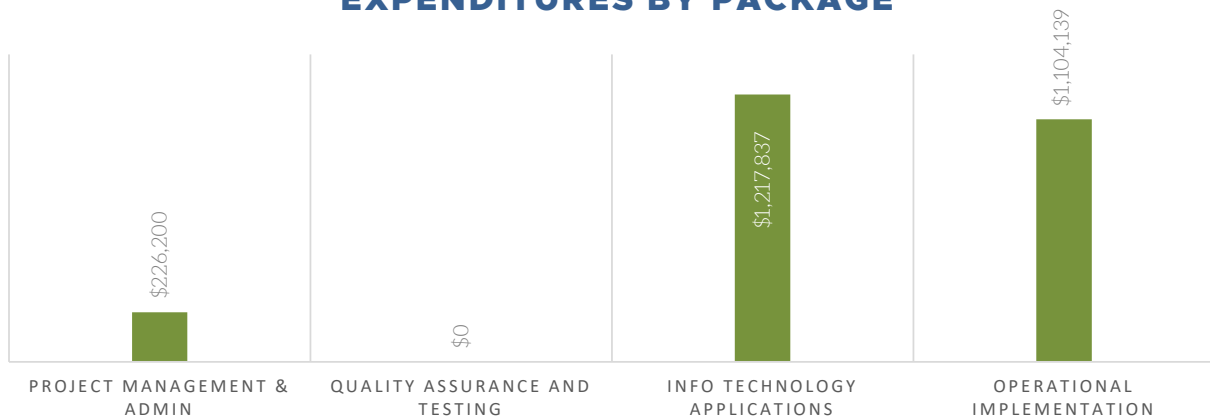
# Core Retirement Systems Application

Summary Budget Analysis  
Preliminary for the Month of November 2023

## Biennial Summary

Category	Actual Exp. To Date	Projected Expenditures	Total Est. Expend.	2023-25 LAB	Variance
Personal Services	913,584	6,901,667	7,815,251	6,866,475	(948,776)
Services & Supplies	1,634,592	13,146,958	14,781,550	22,838,370	8,056,820
Capital Outlay					
<b>Total</b>	<b>2,548,176</b>	<b>20,048,625</b>	<b>22,596,801</b>	<b>29,704,845</b>	<b>7,108,044</b>

## EXPENDITURES BY PACKAGE



## EXPENDITURES BY PROJECT



December 1, 2023  
PERS Board meeting agenda

## Administration

1. September 29, 2023, PERS Board Meeting Minutes
2. Director's Report
  - a. Forward-Looking Calendar
  - b. OPERF Investment Report
  - c. Budget Execution Report
3. Agency Strategic Plan update
4. Board Scorecard Report on agency performance measures



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Tina Kotek, Governor

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December 1, 2023

TO: Members of the PERS Board  
 FROM: Kevin Olineck, Director  
 SUBJECT: 2023-28 PERS Strategic Plan Update

### BACKGROUND

The current PERS Strategic Plan covers the 2023-2028 timeframe. Now in effect for just one year, we are providing the board with a strategic plan update on progress made to date. Many of the initiatives are still under development, given the early stages of implementation cycle. Additionally, there are goals and objectives that will be integrated into modernization efforts.

The board will also note a lack of progress on the strategic plan pillar, "Risk Management." We were unable to make progress on this pillar, as PERS did not receive funding in our 2023-25 Legislatively Approved Budget to fund either the requested position or consultant funds. We will be submitting another request for this funding for the 2025-27 biennium.

At the bottom of the update, specific "compliance" areas have been added to show these compliance activities which require our attention and commensurate resourcing.

No board action is required.

A.3. Attachment 1 – *Strategic Plan 2023-28*

A.3. Attachment 2 – *Strategic Plan Update*



# OREGON PERS

PUBLIC EMPLOYEES RETIREMENT SYSTEM



## 2023-2028 **Strategic Plan**

## MISSION STATEMENT



We serve the people of Oregon by administering public employee benefit trusts to pay the right person the right benefit at the right time.

## SHARED VISION

Honoring your public service through secure retirement benefits.

## CORE VALUES

### **Service-focus**

We work together to meet the needs of others with dependability, professionalism, and respect.

### **Accountability**

We take ownership for our decisions, actions, and outcomes.

### **Integrity**

We inspire trust through transparency and ethical, sound judgment.

## OPERATING PRINCIPLES

### **Professional**

We are responsive, respectful, and sensitive to the needs of our members, employers, and staff.

### **Accurate**

We ensure data integrity and provide consistent, dependable information and benefits.

### **Judicious**

We use sound judgment and prudent, principled decision-making in upholding our fiduciary responsibility.

### **Vigilant**

We are constantly vigilant and take ownership in the basic tenets of information security: confidentiality, integrity, and availability.

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# STRATEGIC PLAN INTRODUCTION

This strategic plan looks to a five-year horizon and answers the question: If we are to become better at delivering on our mission, where will we, as an agency, be able to improve over this time?

Moving into this five-year planning cycle, we recognize that we must reimagine how we evolve and deploy our business capabilities via our people, processes, and technologies. This evolution is necessary to meet our member and PERS-participating employer needs into the future. Members and employers have a desire for more personalized and updated service delivery such that they can be informed, interact, and transact with PERS at the time of their choosing, using the channel of their choosing.

The plan articulates ambitious goals to achieve through 2028 within these focus areas, with specific, achievable goals and objectives related to each. The plan also links our objectives to the core outcome and process measures documented in PERS' Fundamentals Map, a key artifact in our PERS Outcome Based Management System.

Our tactics to achieve these goals and objectives leverage the resources any organization must affect change – people, process, and technology – but unifies and prioritizes the allocation of these resources to assure that they are directed consistently and productively on the highest purposes we can achieve.

Achieving the goals outlined in this strategic plan depends upon successful execution of the tactics identified, as well as regular monitoring our progress, and tactical decisions during plan implementation on how to further our progress. As such, this strategic plan is a living document, and we anticipate that changes may be necessary to achieve the goals we set forth.

PERS will use its existing strategic and operational planning function to prioritize and allocate resources for each of the strategies identified. Strategies will be implemented through a variety of approaches, including problem solving, project management, and integration into core business practices. Specific performance metrics will be identified for tracking our progress as part of strategy initiation.

Certain strategies depend on additional funding. We developed and submitted corresponding policy option packages with the agency's budget requests, for the 2023-25 budget cycle.

# ORGANIZATIONAL MANAGEMENT AND DEVELOPMENT

## Introduction

This strategic priority includes goals related to three organizational management and development focus areas: workforce development, organizational communications, and PERS' Outcome Based Management System (POBMS).

PERS' success in delivering upon our mission depends on having a highly skilled and diverse workforce supported by leadership that sets clear policies, procedures, and performance expectations. The plan's workforce development goals and strategies recognize this can only be achieved through continued investments in staff development.

Recognizing the importance of recruiting a talented and diverse workforce, we will create relationships with universities, colleges, and community workforce placement programs to support marginalized groups and students with opportunities to gain workforce experience through internships.

Through staff and leadership collaboration, we will strengthen our performance management goals, make investments in staff education to include diversity, equity and inclusion efforts, coach and implement leadership best practices, and implement our agency succession plan.

Enhancing organizational communications is also priority for PERS. Access to timely, accurate, and relevant internal information helps ensure that we, as an agency, communicate effectively with our members, employers, stakeholders, and staff.

This priority was identified by staff in PERS' employee engagement survey. Survey results indicate many staff would like greater transparency and different content regarding information relevant to their jobs; staff also noted the desire for more information on decisions and policies that could affect them.

The third focus area relates to the work of fully integrating POBMS. The agency initiated POBMS in 2012 to improve operations and processes by engaging employees through an outcome-based approach, allowing those closest to the work to drive the improvement. Completing the integration and normalization of POBMS is important to continuing to improve performance outcomes. Employees support and benefit from POBMS because it provides a clear line of sight and a transparent approach to connect to the agency's goals and objectives and staff's role in meeting them.

# Focus Area: Workforce Development

## GOAL

Develop and support a diverse workforce that satisfies employees' essential needs to achieve their full potential.

### Objective 1

Through intentional acts of inclusion, define and implement leadership practices that are consistent with strategic priorities.

#### Tactics

1. Identify, document, and implement a leadership training plan to reach the desired workforce competencies.
2. Develop and support a leadership culture of workforce excellence that thrives in diversity, equity, and inclusion practices.
3. Measure outcomes and adjust plans as needed.

#### Related measure

SP 5: Managing and Developing the Workforce

### Objective 2

Document and implement employee development plans that help employees achieve their professional goals.

#### Tactics

1. Record and monitor employee stretch and development activities.
2. Motivate, inspire, and collaborate with employees to validate their abilities to reach growth goals.
3. Provide a safe and supportive environment for employees to communicate concerns and overcome barriers.

#### Related measures

OM2: Employee Engagement

SP5: Managing and Developing the Workforce

## Focus Area: Organizational Communication

### GOAL

Foster and enhance transparency and relevancy in messaging to improve employee engagement with internal communications and promote an informed workforce.

### Objective 1

Continue to implement an internal communications strategy that engages and meets the needs of a diverse workforce.

#### Tactics

1. Consider and implement various communication methods to reach a diverse population of employees. This includes evolving our support for organizational change management communications.
2. Implement tools and processes that are flexible.
3. Strategically maximize all communication channels, including the intranet.

#### Related measures

OM2: Employee Engagement

SP1: Communicating Internally and Externally

SP5: Managing and Developing the Workforce



# Focus Area: PERS Outcome Based Management System (POBMS)

## GOAL

Complete POBMS integration throughout the agency.

### Objective 1

Fully develop team scorecards to measure performance and drive strategic, tactical and operational decisions.

#### Tactics

1. Train the remaining staff in measures development and POBMS.
2. Complete scorecard development for divisions that do not have them at the team level.
3. Leverage PowerBI to enhance reporting capabilities.

### Related measure

SP6: Strategic and Operational Planning

### Objective 2

Normalize Portfolio and Project Management organizational methods.

#### Tactics

1. Put a structure in place to support initiation and implementation of projects and their alignment with the strategic plan.
2. Leverage Enterprise Portfolio Management to prioritize and properly resource agency initiatives and ensure enterprise is focused on priority projects.

### Related measure

SP6: Strategic and Operational Planning

# MEMBER SERVICES AND COMMUNICATIONS

## Introduction

PERS administers public employee benefit trusts to provide retirement benefits and services to our members. In fact, all of PERS' strategic priorities ultimately support our ability to provide the services needed by members and to ensure we “pay the right person, the right benefit, at the right time.”

As a strategic priority, enhancing member services and communications addresses two focus areas: member relations, and quality delivery methods.

PERS' member education and outreach has focused primarily on those who are within two years of their effective retirement date. This just-in-time focus does not provide members with a full understanding of the need to financially prepare for retirement over their entire career. PERS recognizes that providing members with useful tools, resources, and education earlier, and throughout their careers, will better support our goal of having engaged and educated stakeholders.

A key component of this education will be the need for members to augment their PERS retirement with other means, such as deferred compensation and personal savings. Additionally, efforts will be taken to better integrate communications alignment, such that members understand their PERS benefits [Tier One, Tier Two, Oregon Public Savings Retirement Plan (OPSRP), and Individual Account Program (IAP)], as well as benefits offered under the Oregon Savings Growth Plan (OSGP) and the PERS Health Insurance Plan (PHIP).

Engaging and supporting our members in making informed retirement decisions creates a broader role for PERS as a retirement education and planning resource. To be that resource, we must support members by providing the information and easy-to-use tools to track their retirement benefits.

Our current tool set needs to be more accessible and include a broader array of relevant content: not only account and benefit information, but transaction status tracking. This is what our quality delivery methods goals aim to accomplish.

## Focus Area: Member Engagement

### GOAL

Engage members throughout their careers so they are better prepared for retirement.

#### Objective 1

Develop member journeys with relevant accessible resources for different life and career stages.

##### Tactics

1. Enhance existing journey maps online – linked resources on PERS website.
2. Member surveys – provide post-service surveys to ensure sufficient and accessible resources are being provided and improved, to ensure accessibility.

#### Related measures

OM1: Clear/Concise Communication  
OM7: Member Satisfaction  
OM10: Informed Retirement Decisions  
SP1: Communicating Internally and Externally

#### Objective 2

Brand PERS as their retirement education and planning resource.

##### Tactics

1. Enhance marketing of services that PERS offers members.
2. Provide annual PERS Retirement Expo.

#### Related measures

OM1: Clear/Concise Communication  
OM7: Member Satisfaction  
OM10: Informed Retirement Decisions  
SP1: Communicating Internally and Externally

## Focus Area: Omni-channel Service Delivery

### GOAL

Improve members' satisfaction with PERS.

#### Objective 1

Enhance and modernize account accessibility and capabilities for members to self-serve.

##### Tactics

1. Modernize and secure Online Member Services (OMS), providing more accessibility, member-specific information, and electronic transaction capabilities.
2. Modernize and update the PERS website to allow easier navigation and search capabilities.
3. Integrate OSGP and PHIP to better inform and educate members with a complete PERS picture.

#### Related measures

OM1: Clear, Concise Communication

OM7: Member Satisfaction

OM10: Informed Retirement Decisions

SP1: Communicating Internally and Externally

#### Objective 2

Launch new education tools and resources valuable to the member journey from hire to retire.

##### Tactics

1. Send communication to new members.
2. Send communication when vested.
3. Send communication when nearing retirement eligibility.

#### Related measures

OM1: Clear/Concise Communication

OM7: Member Service Satisfaction

OM10: Informed Retirement Decisions

SP1: Communicating Internally and Externally

# DATA CONSISTENCY

## Introduction

Data is the cornerstone of PERS' mission to “pay the right person the right benefit at the right time.” Good, reliable data can be compromised by many factors: changes in determinations of service credit, contributions, and other key retirement data elements over a member’s career; changes in employer reporting and recordkeeping systems as well as retroactive changes to member data by employers; and changes in technology.

Further, PERS is a complex plan, with data terms that confuse members and employers alike. These factors result in data that may be incomplete, inconsistent, or missing, which in turns erodes confidence and trust in PERS by our members, employers, and the public.

To improve data consistency, PERS will take a multipronged approach. First, we will explore and implement a data and analytics program to create a structure that allows for the agency to be an insight driven organization. By doing so, decisions will be heavily influenced by data and analytics. As a result, the directions the agency will take will be based on logic, historical trends, future forecasting, and a thorough data analysis, among others. Additionally, this data and analytics program will provide an architecture that is nimble and accessible.

Second, via the Modernization Program and other corresponding efforts, PERS will look to implement improved technologies that assist with validating inbound data. This approach will result in a more stable and accurate data reporting platform that moves agency processes away from manual data manipulation to technologically automated validations.

Third, PERS will continue to look for and implement processes and efforts to address the legacy data issues. Having access to good, reliable data is important for PERS staff, and our current data management structure presents many challenges that result in data that is difficult to access or inconsistent.

Data management practices that contribute to internal data inconsistencies include different methodologies used to access data, data sources are not mapped, lacking common data definitions and business context descriptions, and the need for an integrated structure to leverage existing data expertise in the agency. The above referenced efforts, which will partly be addressed by the Modernization Program, will have a positive impact on helping assist with the clean-up of lingering legacy data issues.

Additionally, a collection of agency staff is currently collaborating to identify and prioritize legacy data issues. This inventory will help set the stage for staff to actively work the highest priority legacy data issues currently present.

The fourth effort will be an exploration to how PERS can work towards reducing and, ultimately, preventing the need to modify data after it has been submitted. Currently, there are a magnitude of reasons for why data must be modified after transmitted. Reasons include but are not limited to misreported data, inaccurate data, and gaps in reported data. A great deal of resources including time and money is spent in modifying data. By preventing this, resources can be redirected towards other needs, consequently, PERS could provide better services to stakeholders.

# Focus Area: Data Analytics

## GOAL

Use data analytics to enhance operational efficiency, process management, reporting, and insight.

### Objective 1

Improve employer reporting validations to minimize manual review and corrections to data.

#### Tactics

1. Identify validation gaps in EDX.
2. Create new validations in EDX as part of modernization efforts.
3. Improve employer education program.

#### Related measures

OP1: Managing Client Data and Services  
OM9: Timely Benefit Payments  
OM8: Effective Employer Partnerships  
OM10: Informed Retirement Decisions  
OM11: Accurate Benefit Calculations

### Objective 2

Use technology, including data validations where appropriate, to reduce manual processes.

#### Tactics

1. Develop an inventory of manual and inefficient processes.
2. Identify and propose actions that could reduce manual processes or inefficiencies.
3. Provide feedback and input to modernization planning so that technological solutions to these processes can be included.

#### Related measures

OP1: Managing Client Data and Services  
OM9: Timely Benefit Payments  
OM10: Informed Retirement Decisions  
OM11: Accurate Benefit Calculations

## Focus Area: Data Integrity

### GOAL

Resolve legacy data issues.

#### Objective 1

Identify legacy data issues and prioritize cleanup efforts to improve data quality.

##### Tactics

1. Create a workgroup to identify and prioritize data issues for resolution.
2. Develop a plan, including resources, to resolve data issues.
3. Provide feedback and input to modernization planning so that technological solutions to these processes can be included.

##### Related measures

OP1: Managing Client Data and Services  
OP2: Collecting Contributions  
OP4: Processing Benefit Applications  
OP5: Calculating Benefits

#### Objective 2

Minimize need to change data after receipt from employers.

##### Tactics

1. Create policies and procedures that eliminate multiple reviews.
2. Create member data locking processes.
3. Communicate with and educate employers and members on data locking impacts.

##### Related measures

OP1: Managing Client Data and Services  
OP2: Collecting Contributions  
OP4: Processing Benefit Applications  
OP5: Calculating Benefits  
OM8: Effective Employer Partnerships  
OM10: Informed Retirement Decisions



## Focus Area: Data Utilization

### GOAL

Use data and analytics to help drive and support agency decisions.

#### Objective 1

Become an insight-driven organization.

#### Tactics

1. Reduce the amount of manual data manipulation currently performed to get the desired insights.
2. Enable the right tools and policies, coupled with removing offline tools, to enhance data integrity and quality.
3. Provide feedback and input to modernization planning so that technological solutions to these processes can be included.

#### Related measures

OP1: Managing Client Data and Services

OM3: Operating Effectiveness

# INFORMATION TECHNOLOGY

## Introduction

PERS' information technology (IT) system provides the foundational data and information management necessary to “pay the right person the right benefit at the right time.” Our primary IT system is the Oregon Retirement Information Online Network (ORION).

ORION needs to be continuously maintained and enhanced to provide necessary business functionality due to changes initiated both internally and by outside stakeholders. PERS must continuously work to optimize controls over the change management process, as it impacts efficiency and responsiveness in meeting evolving business needs.

# Focus Area: ORION System Modernization

## GOAL

Improve IT efficiency and responsiveness to business operational changes.

### Objective 1

Re-architect core applications in ORION as independent, discrete business services.

#### Tactics

1. Resolve key issues affecting ORION administration, performance, maintainability, and sustainability to prepare for modernization
2. Restructure nightly jClarety batch processes to improve maintainability and efficiency and reduce batch durations.
3. Redesign logging, monitoring, and error-handling functionality of jClarety batch processes and other ORION core applications to improve supportability.
4. Create an application-programming interface (API) ecosystem to allow ORION to loosely integrate between applications, commercial-off-the-shelf (COTS) solutions, and external services.
5. Analyze opportunities to leverage COTS solutions when beneficial to the agency.
6. Redesign current infrastructure to use Hybrid Cloud (on premises and in cloud).

#### Related measures

SP3: Leveraging Technology

OM1: Clear, Concise Communication

### Objective 2

Architect, plan, and design the PERS Backup Data Center Services for Disaster Recovery (DR) to support business continuity.

#### Tactics

1. Research and explore opportunities between the SDC and private cloud providers as architected by the ORION Modernization Program.
2. Complete the Backup Data Center project.

#### Related measures

SP3: Leveraging Technology

OP1: Managing Client Data and Services

OM1: Clear, Concise Communication

# Focus Area: IT Workforce Development

## GOAL

Improve workforce environment and prepare for and attract the next generation of technical talent.

### Objective 1

Transform Information Services Division (ISD) working environment to encourage collaboration and innovation.

#### Tactics

1. Deploy innovative and collaborative tools for effective real-time communication to support telecommuting between staff, outside contractors, and other partners.
2. Reduce functional silos within ISD by using virtual collaborative platforms and optimizing the Development Operations team.

#### Related measures

SP3: Leveraging Technology

SP5: Managing and Developing the Workforce

# FINANCIAL MANAGEMENT

## Introduction

As the financial world continues to evolve with a focus on greater transparency and ease of use for consumers, so too must PERS develop strategies to keep pace with these changes and meet member expectations.

This level of responsiveness and transparency requires investing in an enhancement to our financial management tools, resources, and knowledge. Since 2003, PERS has been required to provide multiple pension plan options and enhancements, and the increasing demands appear likely to continue.

To meet these and future needs, we need to create a financial management strategy that allows greater flexibility to pivot when legislation or members demand it. To succeed, we need to enhance and integrate our financial management systems as well as invest in professional and organizational development.

Our current financial management systems require intense manual oversight, which exposes us to quality control and duplicative work. As a result, we spend an inordinate amount of time not only verifying staff work but also verifying the data we receive. Enhancing our systems promotes efficiency, limits manual oversight, and streamlines workflows.

Additionally, we need to invest in our Financial Services Division's professional development. As we invest in technology upgrades, we must ensure our workforce is able to meet the demands of new programs and be educated on the most up-to-date processes. This group will influence and inform the implementation of our financial strategy and we need to ensure we invest the same amount of attention in their development as we have in the technology meant to assist them.

## Focus Area: Technology Upgrades and System Integration

### GOAL

Enhance and improve productivity, reduce manual processes, and accurately and quickly respond to legislative and stakeholder needs.

#### Objective 1

Increase efficiency, improve communications, and reduce manual work.

##### Tactics

1. Develop an inventory of manual or inefficient processes.
2. Identify and propose actions that could be taken to reduce manual and inefficient processes.
3. Provide feedback and input to modernization planning so that technological solutions to these processes can be included.

#### Related measure

OP6a: Manual Checks

#### Objective 2

Standardize financial data organization and reduce manual reconciliation between systems to improve accuracy and responsiveness to legislative and stakeholder needs.

##### Tactics

1. Engage Central Data Management to improve data gathering and reporting.
2. Actively participate with the Modernization Program to identify where modernization work can reduce manual processes and increase efficiency.

#### Related measure

OP6e: Tax Reporting

### **Objective 3**

**Evaluate and implement electronic filing and paperless processes to respond to inquiries effectively and promptly and efficiently process transactions.**

#### **Tactic**

1. Evaluate opportunities to transition remaining paper processes to electronic/paperless and implement these changes where feasible.

#### **Related measures**

OP6b: Direct Deposit

SP4d: Timely Payment Processing

# Focus Area: Financial Management Resource Development

## GOAL

Ensure PERS has both the appropriate staff resource and skill level to perform the financial accounting, reporting, budgeting, analysis, and forecasting required to be compliant and deliver exceptional service to our stakeholders.

### Objective 1

Ensure Financial Operations has appropriate staffing to provide timely and accurate service to all stakeholders.

#### Tactics

1. Update section managers' quarterly Performance, Accountability, and Feedback goals to include evaluation of section staffing.
2. Develop division-wide task/responsibility matrix to identify coverage, back up, and potential gaps.
3. Update staff responsibilities and staffing models to address timeliness and accuracy.

### Related measure

SP6: Strategic and Operational Planning



# RISK MANAGEMENT

## Introduction

Risk is defined as the “effect of uncertainty on objectives.” The consequences associated with a risk can enhance the achievement of objectives (i.e., positive consequences) or can limit or diminish the achievement of objectives (i.e., negative consequences). Management of risk, therefore, is an essential business activity required to help the agency achieve its core mission.

Enterprise Risk Management (ERM) is a process applied across the enterprise designed to identify potential events (risks) that may affect the agency and to manage risk to be within the agency’s risk appetite (tolerance), in order to provide reasonable assurance regarding the achievement of the agency’s objectives.

Information Security and Risk Section (SRS) is tasked with developing and implementing an Enterprise Risk Management program, designed to provide oversight, guidance, and monitoring activities for evaluating agency risk for business and technological activities necessary to achieve agency objectives. The agency’s Enterprise Risk Management program will focus on the following types of risk:

- Reputational Risk
- Operational Risk
- Financial Risk
- Strategic Risk
- Hazard Risk
- Compliance Risk

To this end, it is essential for agency staff to have a common understanding of risks associated with the decisions we make while performing our mission. Establishing an Enterprise Risk Management function will serve to guide management and staff during their decisions making process to ensure reducing agency risk is paramount when choosing one path over another.

Two of the largest risk management areas that must be specifically addressed relate to information security and business continuity. PERS is entrusted with the personal information of its members. The agency must ensure this information is adequately protected by employing safeguards as managed in the Information Security Program.

Additionally, retired members rely on the routine and timely monthly benefit payments. PERS must ensure that its members continue to receive their payments in the event of a business interruption. Through the agency’s Continuity Management Program, PERS can ensure that these payments will continue even in the event of a disaster.

# Focus Area: Risk Management

## GOAL

Establish an Enterprise Risk Management Program within the Security and Risk Section.

### Objective 1

Secure legislative support and funding to stand up an Enterprise Risk Management Program that meets industry standards.

#### Tactic

1. Submit the Policy Option Package for Enterprise Risk Management resources for the 2023 legislative session.

#### Related measure

SP2.6: Conducting enterprise risk management efforts

### Objective 2

Establish and implement an Enterprise Risk Management Program throughout the agency.

#### Tactic

1. Work with contractor to develop and implement an ERM program.

#### Related measure

SP2.6: Conducting enterprise risk management efforts

# Focus Area: Risk Management

## GOAL

Enhance the practices and controls of the Information Security Program.

### Objective 1

Strengthen the agency's Information Security Program in alignment with enterprise and industry best practices.

#### Tactics

1. Establish a risk appetite for the agency in alignment with its core mission.
2. Develop risk management policies and procedures, and train agency staff on those policies and procedures.
3. Monitor adherence to the policies and procedures.

#### Related measures

SP2.9: Developing and overseeing information security program

SP3.7: Implementing and maintaining system security

### Objective 2

Strengthen member and employer identity and access management practices and controls.

#### Tactics

1. Implement an industry-standard identity and access management solution and practices for PERS members, employers, and third-party administrators (TPA).
2. Implement industry identity-proofing solutions and practices for members and employers.

#### Related measures

SP2.9: Developing and overseeing information security program

SP3.7: Implementing and maintaining system security

OM7: Member Service Satisfaction

OM8: Effective Employer Partnerships

## Objective 3

Develop and implement a privacy initiative for members.

### Tactics

1. Develop and implement privacy policies, practices, and solutions to protect members' data.
2. Train agency personnel on the privacy practices, policies, and procedures.

### Related measures

SP2.9: Developing and overseeing information security program

SP3.7: Implementing and maintaining system security

OM7: Member Service Satisfaction

# Focus Area: Risk Management

## GOAL

Enhance practices and controls of the Continuity Management Program.

### Objective 1

Design and implement resilient systems and controls to support the agency's mission.

#### Tactics

1. Implement procedures and controls to ensure PERS can continue operations using its backup data center.
2. Regularly test the ability to restore operations using the backup data center to ensure resiliency.

#### Related measures

SP2.8: Ensuring continuity of operations

SP3.3: Ensuring system availability and performance

OM9: Timely Benefit Payments

### Objective 2

Mature the Continuity Management Program to include additional agency processes.

#### Tactics

1. Prioritize agency processes in alignment with business requirements.
2. Implement and test the additional business processes to ensure they meet PERS' mission.

#### Related measures

SP2.8: Ensuring continuity of operations

SP3.3: Ensuring system availability and performance

OM9: Timely Benefit Payments





# Strategic Plan Pillars

## 2023-2028

	Goals	Objectives	
<b>Organizational Management &amp; Development</b>	Goal 1 Objective 1	Develop and support a diverse workforce that satisfies employees' essential needs to achieve their full potential.	Through intentional acts of inclusion, define and implement leadership practices that are consistent with strategic priorities.
	Goal 1 Objective 2	Develop and support a diverse workforce that satisfies employees' essential needs to achieve their full potential.	Document and implement employee development plans that help employees achieve their professional goals.
	Goal 2 Objective 1	Foster and enhance transparency and relevancy in messaging to improve employee engagement with internal communications and promote an informed workforce.	Continue to implement an internal communications strategy that engages and meets the needs of a diverse workforce.
	Goal 3 Objective 1	Complete POBMS integration throughout the agency.	Fully develop team scorecards to measure performance and drive strategic and tactical decisions.
	Goal 3 Objective 2	Complete POBMS integration throughout the agency.	Normalize POBMS-related methods throughout the agency.
<b>Member Services &amp; Communications</b>	Goal 1 Objective 1	Engage members throughout their careers so they are better prepared for retirement.	Develop member journeys with relevant accessible resources for different life and career stages.
	Goal 1 Objective 2	Engage members throughout their careers so they are better prepared for retirement.	Brand PERS as their retirement education and planning resource.
	Goal 2 Objective 1	Improve members' satisfaction with PERS.	Enhance and modernize account accessibility and capabilities for members to self-serve.
	Goal 2 Objective 2	Improve members' satisfaction with PERS.	Launch new education tools and resources valuable to the member journey from hire to retire.
<b>Data Consistency</b>	Goal 1 Objective 1	Use data analytics to enhance operational efficiency, performance management, reporting, and insight.	Improve employer reporting validations to minimize manual review and corrections to data.
	Goal 1 Objective 2	Use data analytics to enhance operational efficiency, performance management, reporting, and insight.	Use technology, including data validations, where appropriate to reduce manual processes.
	Goal 2 Objective 1	Resolve legacy data issues.	Identify legacy data issues and prioritize clean-up efforts to improve data quality.
	Goal 2 Objective 2	Resolve legacy data issues.	Minimize need to change data after receipt from employers.
	Goal 3 Objective 1	Utilize data and analytics to help drive and support agency decisions.	Become an insight-driven organization.
<b>Information Technology</b>	Goal 1 Objective 1	Improve IT efficiency and responsiveness to business operational changes.	Re-architect core applications in ORION as independent, discrete business services.
	Goal 1 Objective 2	Improve IT efficiency and responsiveness to business operational changes.	Architect, plan, and design the PERS Backup Data Center Services (DR) to support business continuity.
	Goal 2 Objective 1	Improve workforce environment and prepare for and attract the next generation of technical talent.	Transform Information Services Division (ISD) working environment to encourage collaboration and innovation.
	Goal 2 Objective 2	Improve workforce environment and prepare for and attract the next generation of technical talent.	Attract and retain IT talent at PERS.
<b>Financial Management</b>	Goal 1 Objective 1	Enhance and improve productivity, reduce manual processes, and accurately and quickly respond to legislative and stakeholder needs.	Increase efficiency, improve communications, and reduce manual work.
	Goal 1 Objective 2	Enhance and improve productivity, reduce manual processes, and accurately and quickly respond to legislative and stakeholder needs.	Standardize financial data organization and reduce manual reconciliation between systems to improve accuracy and responsiveness to legislative and stakeholder needs.
	Goal 1 Objective 3	Enhance and improve productivity, reduce manual processes, and accurately and quickly respond to legislative and stakeholder needs.	Evaluate and implement electronic filing and paperless processes to respond to inquiries effectively and promptly and efficiently process transactions.
	Goal 2 Objective 1	Ensure PERS has both the appropriate staff resource and skill level to perform the financial accounting, reporting, budgeting, analysis, and forecasting required to be compliant and deliver exceptional service to our stakeholders.	Ensure Financial Operations has appropriate staffing to provide timely and accurate services to all stakeholders.

	Goal 2 Objective 2	Ensure PERS has the appropriate level of professional staff to perform the financial accounting, reporting, budgeting, analysis, and forecasting required to be compliant and deliver exceptional service to our stakeholders.	Increase professional certification and training of Financial Operations staff to prepare them for potential shifts in expectations as our processes evolve, ensure compliance, and increase use of best practices.
<b>Risk Management</b>	Goal 1 Objective 1	Establish an Enterprise Risk Management Program within the Security & Risk Section.	Secure legislative support and funding to stand up an Enterprise Risk Management Program that meets industry standards.
	Goal 1 Objective 2	Establish an Enterprise Risk Management Program within the Security & Risk Section.	Establish and implement an Enterprise Risk Management Program throughout the agency.
	Goal 2 Objective 1	Enhance the practices and controls of the Information Security Program.	Strengthen the agency's Information Security Program in alignment with enterprise and industry best practices.
	Goal 2 Objective 2	Enhance the practices and controls of the Information Security Program.	Strengthen member and employer identity and access management practices and controls.
	Goal 2 Objective 3	Enhance the practices and controls of the Information Security Program.	Develop and implement a privacy initiative for members.
	Goal 3 Objective 1	Enhance practices and controls of the Continuity Management Program.	Design and implement resilient systems and controls to support the agency's mission.
	Goal 3 Objective 2	Enhance practices and controls of the Continuity Management Program.	Mature the Continuity Management Program to include additional agency processes.



Strategic Plan Pillars	Objectives	Percentage Complete	Tactics
Organizational Management & Development	Goal 1 Objective 1	85% 80% 85%	Tactic 1: Identify, document, and implement a leadership training plan to reach the desired workforce competencies. Tactic 2: Develop and support a leadership culture of workforce excellence that thrives in diversity, equity, and inclusion practices. Tactic 3: Measure outcomes and adjust plans as needed.
	Goal 1 Objective 2	90% 75% 80%	Tactic 1: Record and monitor employee stretch and development activities. Tactic 2: Motivate, inspire, and collaborate with employees to validate their abilities to reach growth goals. Tactic 3: Provide a safe and supportive environment for employees to communicate concerns and overcome barriers.
	Goal 2 Objective 1	70% 70% 50%	Tactic 1: Consider and implement various communication methods to reach a diverse population of employees. This includes evolving our support for organizational change management. Tactic 2: Implement tools and processes that are flexible. Tactic 3: Strategically maximize all communication channels, including the intranet.
	Goal 3 Objective 1	75% 67% 0%	Tactic 1: Train the remaining staff in measures development and POBMS. Tactic 2: Complete scorecard development for divisions that do not have them at the team level. Tactic 3: Leverage PowerBI to enhance reporting capabilities.
	Goal 3 Objective 2	25% 25%	Tactic 1: Put a structure in place to support initiation and implementation of projects and their alignment with the strategic plan. Tactic 2: Leverage Enterprise Portfolio Management to prioritize and properly resource agency initiatives and ensure enterprise is focused on priority projects.
Member Services & Communications	Goal 1 Objective 1	20% 15%	Tactic 1: Enhance existing journey maps online - linked resources on PERS website. Tactic 2: Member surveys - provide post-service surveys to ensure sufficient and accessible resources are being provided and improved, to ensure accessibility.
	Goal 1 Objective 2	25% 50%	Tactic 1: Enhance marketing of services that PERS offers members. Tactic 2: Provide annual PERS Retirement Expo.
	Goal 2 Objective 1	0% 100% 10%	Tactic 1: Modernize and secure Online Member Services (OMS), providing more accessibility, member-specific information, and electronic transaction capabilities. Tactic 2: Modernize and update the PERS website to allow easier navigation and search capabilities. Tactic 3: Integrate OSGP and PHIP to better inform and educate members with a complete PERS picture.
	Goal 2 Objective 2	0% 0% 0%	Tactic 1: Send communication to new members. Tactic 2: Send communication when vested. Tactic 3: Send communication when nearing retirement eligibility.
Data Consistency	Goal 1 Objective 1	10% 10% 30%	Tactic 1: Identify validation gaps in EDX. Tactic 2: Create new validations in EDX as part of modernization efforts. Tactic 3: Improve employer education program.
	Goal 1 Objective 2	0% 0% 10%	Tactic 1: Develop an inventory of manual and inefficient processes. Tactic 2: Identify and propose actions that could reduce manual processes or inefficiencies. Tactic 3: Provide feedback and input to modernization planning so that technological solutions to these processes can be included.
	Goal 2 Objective 1	25% 15% 10%	Tactic 1: Create workgroup to identify and prioritize data issues for resolution. Tactic 2: Develop a plan, including resources, to resolve data issues. Tactic 3: Provide feedback and input to modernization planning so that technological solutions to these processes can be included.
	Goal 2 Objective 2	0% 5% 0%	Tactic 1: Create policies and procedures that eliminate multiple reviews. Tactic 2: Create member data locking processes. Tactic 3: Communicate with and educate employers and members on data locking impacts.
	Goal 3 Objective 1	0% 5% 10%	Tactic 1: Reduce the amount of manual data manipulation currently performed to get the desired insights. Tactic 2: Enable the right tools and policies, coupled with removing offline tools, to enhance data integrity and quality. Tactic 3: Provide feedback and input to modernization planning so that technological solutions to these processes can be included.
Information Technology	Goal 1 Objective 1	10% 0% 0% 5% 15% 20% 50% 50% 25%	Tactic 1: Resolve key issues affecting ORION administration, performance, maintainability, and sustainability to prepare for modernization. Tactic 2: Refactor nightly jClarety batch processes to improve maintainability and efficiency and reduce batch durations. Tactic 3: Redesign logging, monitoring, and error-handling functionality of jClarety batch processes and other ORION core applications to improve supportability. Tactic 4: Explore opportunities to externalize business rules from ORION core applications. Tactic 5: Create an application-programming interface (API) ecosystem to allow ORION to loosely integrate between applications, commercial-off-the-shelf (COTS) solutions, and other systems. Tactic 6: Analyze opportunities to leverage COTS solutions when beneficial to the agency. Tactic 7: Re-architect current infrastructure to be able to use solutions independently from on-premise data center. Tactic 8: Integrate M&E activities for ORION ancillary applications into ISD methodologies and processes. Tactic 9: Establish a single ORION ancillary applications technical platform that allows potential integration into jClarety.

	Goal 1 Objective 2	50% 75%	Tactic 1: Research and explore opportunities between the SDC and private cloud providers as architected by the ORION Modernization Program. Tactic 2: Complete the Backup Data Center project and conduct regular business continuity exercises on the PERS Disaster Recovery Warm Site.
	Goal 2 Objective 1	75% 55%	Tactic 1: Deploy innovative and collaborative tools for effective real-time communication to support telecommuting among staff, outside contractors, and other partners. Tactic 2: Reduce functional silos within ISD by using virtual collaborative platforms and optimizing the DevOps team.
	Goal 2 Objective 2	35% 10% 100%	Tactic 1: Build relationships and community outreach to state and community colleges to provide a clear path for IT careers at PERS and the state. Tactic 2: Initiate a formal internship program for graduating students as an entry into IT positions. Tactic 3: Develop and implement an IT workforce-development plan.
Financial Management	Goal 1 Objective 1	40% 40% 10%	Tactic 1: Develop an inventory of manual or inefficient processes. Tactic 2: Identify and propose actions that could be taken to reduce manual and inefficient processes. Tactic 3: Provide feedback and input to modernization planning so that technological solutions to these processes can be included.
	Goal 1 Objective 2	20% 10%	Tactic 1: Engage CDM to improve data gathering and reporting. Tactic 2: Actively participate with Modernization Project team to identify where modernization work can reduce manual processes and increase efficiency.
	Goal 1 Objective 3	20%	Tactic 1: Evaluate opportunities to transition remaining paper processes to electronic/paperless and implement these changes where feasible.
	Goal 2 Objective 1	0% 50% 60%	Tactic 1: Update section managers' quarterly Performance, Accountability, and Feedback goals to include evaluation of section staffing model. Tactic 2: Develop division-wide task/responsibility matrix to identify coverage, back up, and potential gaps. Tactic 3: Update staff responsibilities and staffing models to address timeliness and accuracy.
	Goal 2 Objective 2	90% 10%	Tactic 1: Incorporate training into quarterly Performance, Accountability, and Feedback goals. Tactic 2: Explore training opportunities specifically aimed at knowledge/skill gaps identified Goal 2, Objective 1, Tactic 2.
Risk Management	Goal 1 Objective 1	80%	Tactic 1: Submit the Policy Option Package for ERM resources for the 2025 legislative session.
	Goal 1 Objective 2	0%	Tactic 1 Work with contractor to develop and implement an ERM program.
	Goal 2 Objective 1	0% 50% 0%	Tactic 1: Establish a risk appetite for the agency in alignment with its core mission. Tactic 2: Develop risk management policies and procedures, and train agency staff on those policies and procedures. Tactic 3: Monitor adherence to the policies and procedures.
	Goal 2 Objective 2	25% 0%	Tactic 1: Implement an industry-standard identity and access-management solution and practices for PERS members, employers, and TPAs. Tactic 2: Implement industry identity-proofing solutions and practices for members and employers.
	Goal 2 Objective 3	0% 0%	Tactic 1: Develop and implement privacy policies, practices, and solutions to protect members' data. Tactic 2: Train agency personnel on the privacy practices, policies, and procedures.
	Goal 3 Objective 1	0% 0%	Tactic 1: Implement a backup data center that supports business requirements. Tactic 2: Implement procedures and controls to ensure PERS can continue operations using its backup data center.
	Goal 3 Objective 2	10% 0%	Tactic 1: Prioritize agency processes in alignment with business requirements. Tactic 2: Implement and test the additional business processes to ensure they meet PERS' mission.
Compliance	Internal Audit Work	100%	Internal Audit conducts regular reviews of outstanding audit recommendations and presents an updated Audit Plan annually.
	External Audit Work	95%	Secretary of State Audit released October 2018. As of September 30, 2022, 14 of 16 recommendations are complete and the remaining two are in progress.
	Budget Notes	100%	Three budget notes are being prepared and will be presented at the 2024 legislative session: SB 1049 Update, Modernization Update, PHIP review.

**NOTE:** This chart is part of the larger *PERS 2023-2028 Strategic Plan*; it is excerpted here to provide at-a-glance information for members of the PERS Board.

December 1, 2023  
PERS Board meeting agenda

## Administration

1. September 29, 2023, PERS Board Meeting Minutes
2. Director's Report
  - a. Forward-Looking Calendar
  - b. OPERF Investment Report
  - c. Budget Execution Report
3. Agency Strategic Plan update
4. Board Scorecard Report on agency performance measures



# Oregon

Tina Kotek, Governor

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December 1, 2023

TO: Members of the PERS Board  
 FROM: Matt Rickard, POBMS Council  
 SUBJECT: Board Scorecard Report on Agency Performance Measures

A key part of PERS' Outcome-Based Management System (POBMS) is a Quarterly Target Review of scorecards that evaluate our effectiveness in a number of outcome and process measures. These measures foster accountability and transparency in key operating areas. The scorecard results help direct strategic planning, resource allocation, and risk assessment.

The attached Board Scorecard Report for the third quarter 2023 focuses on several measures we currently track based on essential business operations. A targeted performance range is created for each measure:

- "Green" – performance is at or above targeted goals.
- "Amber" – performance is marginally below targeted goals.
- "Red" – performance is significantly below; corrective action should be directed.

The POBMS Council is continuing its effort to review and update our enterprise measures. While most of this work focuses on measures consistently underperforming versus the current targets, we are also looking at adding measures for unrepresented areas of our core processes. This has been the focus since our last board report in June, and we're working with a couple measure owners on additions to our enterprise scorecards. We will continue to keep the board informed of our progress to review and update our slate of measures.

Highlights of this report include:

- The Board Scorecard format has been updated to present more trending history with each of the measures.
- Fourteen consecutive quarters in the green range for both Estimates Completed and Eligibility Reviews Completed.
- Six consecutive quarters in the green range for System Uptime
- Three of the eight measures performing in the green ranges.
- One measure, Appeal Reversal Rate, was able to report data again after a broken reporting tool had inhibited data reporting during the previous six quarters.

The next report will be presented at the May 31, 2024 meeting, showing the scorecard results for the first quarter 2024.

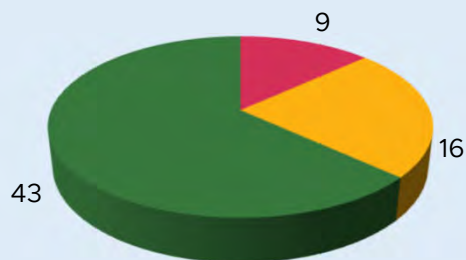
A.4 Attachment 1 – *Board Scorecard Report for Third Quarter 2023*

### PERS Board Scorecard Report: 2023-Q3 and historic annual performance

	Measure name	Measure calculation	Target	CY 2022	CY 2023		YTD	2021	2020	Legend
				Q4	Q1	Q2	Q3			
OP3c	<b>Estimate KPM</b>	% of estimate requests completed within 30 days of receipt.	95%	98.0%	98.0%	98.0%	99.0%	97.0%	98.2%	Realized risk / issue / incident
OP4a	<b>Eligibility review completed</b>	% of eligibility analysis completed within 30 days of the effective retirement date.	80%	97.0%	98.0%	99.0%	94.0%	100.0%	83.0%	Concerns / potential risk(s)
OP5b	<b>Accuracy of calculations</b>	% of sample calculations that are accurate within plus or minus \$5	100%	99.1%	99.7%	99.4%	99.0%	99.7%	97.0%	Good
OP5c	<b>Timely benefit calculations</b>	% of calculations completed within 15 calendar days from completed application date	100%	89.0%	94.0%	94.0%	87.0%	94.0%	81.6%	
OP1f	<b>Call wait time</b>	Average length of wait before caller reaches live person	10 minutes	8.5	22.3	22.0	16.0	16.2	16.3	
SP2c	<b>Appeal reversal rate</b>	% of staff determinations that are reversed on appeal	5%	n/a	n/a	n/a	27.0%	4.5%	10.2%	
SP3h	<b>System uptime</b>	% of time systems are available during the service window	100%	99.8%	99.6%	99.1%	99.2%	95.3%	99.5%	
SP5c	<b>Recruitment</b>	Average number of days for recruitment (from requisition to offer)	50	n/a	77	44	57	n/a	n/a	

### 2023-Q3 Overall Performance (Quarter ending September 2023)

**Outcome & Process Measure Performance**



**Quarterly Green Performance**



December 1, 2023  
PERS Board meeting agenda

## Administrative rulemaking

1. Notice of Rulemaking for rules to implement 2023 legislation
2. Adoption of Reemployment of a Retired Member of the OPSRP Pension Program Rule





# Oregon

Tina Kotek, Governor

## Public Employees Retirement System

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December 1, 2023

TO: Members of the PERS Board

FROM: Melanie Chandler, Research Policy Coordinator, Policy Analysis and Compliance Section  
Anne Marie Vu, Research Policy Coordinator, Policy Analysis and Compliance Section  
Stephanie Vaughn, Manager, Policy Analysis and Compliance Section

SUBJECT: Notice of Rulemaking for Rules to Implement 2023 Legislation:  
OAR 459-045-0090 *PERS Administrative Fee*  
OAR 459-014-0040 *Valid Request for Distribution of Pre-Retirement Death Benefits*  
OAR 459-017-0060 *Reemployment of Retired Members*

### OVERVIEW

- Action: None. This is notice that staff has begun rulemaking.
- Reason: Implement several PERS-related bills enacted by the 2023 Oregon Legislature.
- Policy Issue: None identified.

### BACKGROUND

Staff have compiled amendments to administrative rules necessary to implement several PERS-related bills enacted during the 2023 Oregon Legislative session.

#### *House Bill (HB) 2284 PERS Administrative Fee*

This was a PERS-sponsored bill that raises the statutory cap on the amount the agency can charge to process a divorce decree that requires PERS to administer an alternate payee award. The existing statutory limit of no more than \$300 for total administrative expenses and related costs incurred in obtaining data or making calculations related to divorce decrees was originally set in 1993. In 1996, the PERS Board adopted OAR 459-045-0090, which acknowledged that “The Board has determined that actual and reasonable administrative expenses incurred by PERS for obtaining data and making calculations to administer an alternate payee award will always exceed \$300.” As of 2019, the approximate cost to process a divorce decree was ~\$1,300 and PERS processes approximately 1,000 decrees per year.

HB 2284 increased the maximum allowable administrative fee to administer a divorce decree from \$300 to \$1,300 and directs the board to increase the fee threshold by the Consumer Price Index (CPI) as published by the Bureau of Labor Statistics annually beginning January 1, 2025. Staff analyzed the potential ways that a divorce decree can be administered and evaluated the amount of work necessary to administer each decree variation. Using this research, fee tiers were developed to account for the different levels of work and administrative efficiency. The proposed revision of OAR 459-045-0090 amends the rule to incorporate the changes as

effected by HB 2284 and establishes the structure to allow for different pay tiers depending on the complexity of the decree administered. HB 2284 is effective January 1, 2024.

*House Bill (HB) 2283 Valid Request for Distribution of Pre-Retirement Death Benefits*

House Bill (HB) 2417 (2019) established a new Optional Spouse Death Benefit (OSDB) for surviving spouses of Tier One and Tier Two PERS members who died before retirement. The bill included a requirement that surviving spouses must elect the OSDB within 60 days of the member's date of death. During implementation of HB 2417 (2019), PERS staff observed that the restrictive timing language of HB 2417 (2019) meant that at least one-third of spouses who would have been eligible to elect the benefit were missing the required window to notify PERS of their election. In January 2020, the PERS Board amended OAR 459-014-0040 to accommodate surviving spouses to the extent allowable by statute by establishing a preliminary election which allowed a surviving spouse to request an estimate within 60 days from the date of death and providing an additional 60 days to notify the board in a final written election if they wished to elect the OSDB.

To address this issue more directly, HB 2283 included a provision amending ORS 238.395(2)(b) and (d) to require the surviving spouse to make an election for the OSDB within 60 days of the date of the benefit estimate instead of the member's date of death.

The proposed revision of OAR 459-014-0040 amends the rule to remove the provisions that were previously put in place to clarify when the OSDB was deemed effective. Since the statute was amended to allow more time for the surviving spouse to elect the OSDB, these provisions are no longer needed. HB 2283 becomes effective January 1, 2024.

*House Bill (HB) 2296 Reemployment of Retired Members*

The work after retirement provisions of Senate Bill 1049 (2019) allow retired PERS members to be reemployed by a participating public employer for an unlimited number of hours in a calendar year without reduction in pension benefits.<sup>1</sup> HB 2296 (2023) extends these provisions until the end of calendar year 2034. This means these retired members can retain their retired member status and continue to receive their PERS retirement benefits while working for a PERS participating employer as a retiree.

The bill also removed certain sunset provisions for special work after retirement exceptions for Tier One and Tier Two members which would have otherwise been repealed, making these exceptions permanent. The work after retirement exceptions impacted by HB 2296 include the following:

- Retired member employed as a nursing instructor and who is a registered nurse. (Was set to expire January 2, 2026.)
- Retired member employed by Department of Public Safety Standards and Training (DPSST) for training purposes. (Was set to expire January 2, 2026.)
- Retired member employed by a school district or educational service district (ESD) to provide services in the following positions:

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<sup>1</sup> If they had retired at normal retirement age or were early retirees with a bona fide retirement (absent from employment with all participating public employers for at least six months before the date the person is rehired as a retiree).



- As a speech-language pathologist, or as a speech-language pathology assistant. (Was set to expire January 2, 2026.)
- As a teacher of career and technical education (CTE). (Was set to expire June 30, 2023.)

The proposed revisions to OAR 459-017-0060 amend the rule to incorporate the changes made under HB 2296.

#### PUBLIC COMMENT AND HEARING TESTIMONY

A rulemaking hearing will be held remotely on December 19, 2023, at 2:00 p.m. The public comment period ends December 29, 2023, at 5:00 p.m.

#### LEGAL REVIEW

The attached rules were submitted to the Department of Justice for legal review and any comments or changes will be incorporated before the rules are presented for adoption.

#### IMPACT

Mandatory: No.

Benefit: Updates the rules to reflect recent legislative changes and provides clarification on the agency's administration of the plan.

Cost: There are no discrete costs attributable to these rules.

#### RULEMAKING TIMELINE

December 1, 2023	Staff began the rulemaking process by filing Notice of Rulemaking with the Secretary of State.
December 1, 2023	PERS Board notified that staff began the rulemaking process.
December 1, 2023	Secretary of State publishes the Notice in the Oregon Administrative Rules Database. Notice is sent to employers, legislators, and interested parties. Public comment period begins.
December 19, 2023	Rulemaking hearing to be held remotely at 2:00 p.m.
December 29, 2023	Public comment period ends at 5:00 p.m.
February 2, 2024	Staff will propose adopting the rule modifications, including any changes resulting from public comment or reviews by staff or legal counsel.

#### NEXT STEPS

A rulemaking hearing will be held remotely on December 19, 2023. The rule is scheduled to be brought before the PERS Board for adoption at the February 2, 2024, board meeting.

B.1. Attachment 1 – OAR 459-045-0090

*PERS Administrative Fee*

B.1. Attachment 2 – OAR 459-014-0040

*Valid Request for Distribution of Pre-Retirement Death Benefits*

B.1. Attachment 3 – OAR 459-017-0060

*Reemployment of Retired Members*

OREGON ADMINISTRATIVE RULE  
PUBLIC EMPLOYEES RETIREMENT BOARD  
CHAPTER 459  
DIVISION 45 – DOMESTIC RELATIONS ORDERS

1 459-045-0090

2 PERS Administrative Fee

3 *[The Board has determined that actual and reasonable administrative expenses*  
4 *incurred by PERS for obtaining data and making calculations to administer an*  
5 *alternate payee award will always exceed \$300.00. At the time of benefit payment,*  
6 *PERS shall allocate the administrative fee under the provisions of ORS 238.465(9).]*

7 **(1) An administrative fee is assessed by PERS for obtaining data and making**  
8 **calculations to administer court-ordered alternate payee awards under ORS 238.465**  
9 **in the name of an alternate payee.**

10 **(2) Pursuant to the provisions of ORS 238.465(9), the board may not charge**  
11 **more than \$1,300 for calendar year 2024 for the total administrative expenses and**  
12 **related costs incurred in administering court-ordered alternate payee awards. This**  
13 **fee is allocated between the member and the alternate payee based on the fraction of**  
14 **the benefit received by the member or the alternate payee.**

15 **(3) The fee to be assessed by the board shall be determined by the estimated**  
16 **administrative cost of implementing the court order based on a percentage of the fee**  
17 **threshold (rounded to the nearest dollar), as set forth below:**

18 **(a) Low Administrative Cost Tier: Set at 50% of the maximum allowable**  
19 **administrative fee and is \$650 for calendar year 2024.**

20 **(b) Moderate Administrative Cost Tier: Set at 75% of the maximum allowable**  
21 **administrative fee and is \$975 for calendar year 2024.**

1      **(c) High Administrative Cost Tier: Set at 100% of the maximum allowable**  
2      **administrative fee and is \$1,300 for calendar year 2024.**

3      **(4) On January 1 of each year, the board shall update the administrative cost**  
4      **fees tiers as the dollar limit threshold provided by ORS 238.465(9) is updated.**

5      Statutory Authority: ORS 238.465, 238.650 & 238A.450

6      Statutes Implemented: ORS 238.465

**OREGON ADMINISTRATIVE RULE  
PUBLIC EMPLOYEES RETIREMENT BOARD  
CHAPTER 459  
DIVISION 014 – DEATH AND SURVIVOR BENEFITS**

1   **459-014-0040**

2   **Valid Request for Distribution of Pre-Retirement Death Benefits**

3       (1) For the purposes of this rule, “valid request for distribution” is when PERS receives  
4   the last required document PERS has determined necessary to distribute a death benefit to  
5   a beneficiary.

6       *[(2) Effective January 1, 2020, a written request for an estimate by a surviving spouse*  
7   *of a Tier One or Tier Two member received no later than 60 days after the member’s date*  
8   *of death will be deemed a preliminary election under ORS 238.395(2). The surviving*  
9   *spouse then has 60 days after the date of the estimate to notify the Board in a final written*  
10   *election if they elect to receive the benefit provided under ORS 238.395(2).]*

11       **[(3)](2)** PERS must receive a copy of the death certificate of the deceased member or  
12   alternate payee. PERS will provide instructions to a beneficiary identifying additional  
13   documents that must be received to make a valid request for distribution. Required  
14   documents may include but are not limited to:

- 15       (a) Death Benefit Election;
- 16       (b) Letters of Testamentary/Administration;
- 17       (c) Small Estate Affidavit or out of state equivalent;
- 18       (d) Affidavit of Next of Kin;
- 19       (e) Affidavit of Beneficiary;
- 20       (f) Declaration of Beneficiary;
- 21       (g) Proof of marriage;
- 22       (h) Proof of registered domestic partnership;

- 1 (i) Proof of birth of the beneficiary;
- 2 (j) Trust document or certification of trust;
- 3 (k) Proof of Conservatorship; and
- 4 (l) Proof of Guardianship.
- 5 ~~[(4)]~~ (3) Earnings crediting for the distribution amount for an IAP account beneficiary
- 6 will be determined under OAR 459-007-0320.
- 7 Statutory Authority: ORS 238.650 & 238A.450
- 8 Statutes Implemented: ORS 238.390, 238A.230, 238A.410 & 238.395

**OREGON ADMINISTRATIVE RULE  
PUBLIC EMPLOYEES RETIREMENT BOARD  
CHAPTER 459  
DIVISION 017 – REEMPLOYED RETIRED MEMBERS**

1   **459-017-0060**

2   **Reemployment of Retired Members**

3       (1) For purposes of this rule:

4       (a) “Bona fide retirement” means that the retired member has been absent from  
5   service with all participating employers and all employers in a controlled group with a  
6   participating employer for at least six full calendar months between the effective date of  
7   retirement and the date of hire.

8       (b) “Retired member” means a member of the PERS Chapter 238 Program who is  
9   retired for service.

10      (2) A retired member may be employed under ORS 238.082 by a participating  
11   employer without loss of retirement benefits provided:

12      (a) The period or periods of employment with one or more participating employers  
13   total less than 1,040 hours in a calendar year; or

14      (b) If the retired member is receiving retirement, survivors, or disability benefits  
15   under the federal Social Security Act, the period or periods of employment total less than  
16   either 1,040 hours in a calendar year, or the total number of hours in a calendar year that,  
17   at the retired member’s specified hourly rate of pay, would cause the annual  
18   compensation of the retired member to exceed the following Social Security annual  
19   compensation limits, whichever is greater.

20      (A) For retired members who have not reached full retirement age under the Social  
21   Security Act, the annual compensation limit is \$21,240; or

1 (B) For the calendar year in which the retired member reaches full retirement age  
2 under the Social Security Act and only for compensation for the months before reaching  
3 full retirement age, the annual compensation limit is \$51,960.

4 (3) The limitations on employment in section (2) of this rule do not apply if the  
5 retired member has reached full retirement age under the Social Security Act.

6 (4) The limitations on employment in section (2) of this rule do not apply if:

7 (a) The retired member meets the requirements of ORS 238.082(4), (5), (6), (7), or  
8 (8), and did not retire at a reduced benefit under the provisions of ORS 238.280(1), (2), or  
9 (3);

10 (b) The retired member retired at a reduced benefit under ORS 238.280(1), (2), or (3),  
11 is employed in a position that meets the requirements of ORS 238.082(4), the date of hire  
12 is more than six months after the member's effective retirement date, and the member's  
13 retirement otherwise meets the standard of a bona fide retirement;

14 (c) The retired member is employed by a school district or education service district  
15 as a speech-language pathologist or speech-language pathologist assistant and:

16 (A) The retired member did not retire at a reduced benefit under the provisions of  
17 ORS 238.280(1) or (3); or

18 (B) The retired member retired at a reduced benefit under the provisions of ORS  
19 238.280(1) or (3), but is not employed by any participating employer until more than six  
20 months after the member's effective retirement date, and the member's retirement  
21 otherwise meets the standard of a bona fide retirement;

22 (d) The retired member meets the requirements of section 2, chapter 499, Oregon  
23 Laws 2007, as amended by section 1, chapter 108, Oregon Laws 2015;

1 (e) The retired member meets the requirements of section 2, chapter 475, Oregon  
2 Laws 2015;

3 (f) The retired member is employed for service during a legislative session under  
4 ORS 238.092(2);

5 (g) The retired member meets the requirements of ORS 238.088(2), and did not retire  
6 at a reduced benefit under the provisions of ORS 238.280(1), (2), or (3); or

7 (h) The retired member is on active state duty in the organized militia and meets the  
8 requirements under ORS 399.075(8).

9 (i) The retired member is employed as a special campus security officer  
10 commissioned by a public university and meets the requirements under section 5, chapter  
11 152, Oregon Laws 2019.

12 (j) The retired member is employed as a security officer for a community college and  
13 meets the requirements under section 5, chapter 152, Oregon Laws 2019.

14 (k) The retired member is employed by Harney County Health District as a person  
15 licensed, registered or certified to provide health services and meets the requirements  
16 under section 2, chapter 496, Oregon Laws 2019.

17 (5) For purposes of population determinations referenced by statutes listed in this  
18 rule, the latest federal decennial census shall first be operative on the first day of the  
19 second calendar year following the census year.

20 (6) For purposes of ORS 238.082(6), a retired member replaces an employee if the  
21 retired member:

22 (a) Is assigned to the position of the employee; and

23 (b) Performs the duties of the employee or duties that might be assigned to an  
24 employee in that position.



1        (7) If a retired member is reemployed subject to the limitations of ORS 238.082 and  
2 section (2) of this rule, the period or periods of employment subsequently exceed those  
3 limitations, and employment continues into the month following the date the limitations  
4 are exceeded:

5        (a) If the member has been retired for six or more calendar months:

6        (A) PERS will cancel the member's retirement.

7        (i) If the member is receiving a monthly service retirement allowance, the last  
8 payment to which the member is entitled is for the month in which the limitations were  
9 exceeded.

10       (ii) If the member is receiving installment payments under ORS 238.305(4), the last  
11 installment payment to which the member is entitled is the last payment due on or before  
12 the last day of the month in which the limitations were exceeded.

13       (iii) If the member received a single lump sum payment under ORS 238.305(4) or  
14 238.315, the member is entitled to the payment provided the payment was dated on or  
15 before the last day of the month in which the limitations were exceeded.

16       (iv) A member who receives benefits to which he or she is not entitled must repay  
17 those benefits to PERS.

18       (B) The member will reestablish active membership the first of the calendar month  
19 following the month in which the limitations were exceeded.

20       (C) The member's account must be rebuilt in accordance with the provisions of  
21 section (9) of this rule.

22       (b) If the member has been retired for less than six calendar months:

23       (A) PERS will cancel the member's retirement effective the date the member was  
24 reemployed.

1 (B) All retirement benefits received by the member must be repaid to PERS in a  
2 single payment.

3 (C) The member will reestablish active membership effective the date the member  
4 was reemployed.

5 (D) The member account will be rebuilt as of the date that PERS receives the single  
6 payment. The amount in the member account must be the same as the amount in the  
7 member account at the time of the member's retirement.

8 (8) For purposes of determining period(s) of employment in section (2) of this rule:

9 (a) Hours of employment are hours on and after the retired member's effective  
10 retirement date for which the member receives wages, salary, paid leave, or other  
11 compensation.

12 (b) Hours of employment that are performed under the provisions of section (4) of  
13 this rule on or after the later of January 1, 2004, or the operative date of the applicable  
14 statutory provision, are not counted.

15 (9) If a member has been retired for service for more than six calendar months and is  
16 reemployed in a qualifying position by a participating employer under the provisions of  
17 238.078(1):

18 (a) PERS will cancel the member's retirement effective the date the member is  
19 reemployed.

20 (b) The member will reestablish active membership on the date the member is  
21 reemployed.

22 (c) If the member elected a benefit payment option other than a lump sum option  
23 under ORS 238.305(2) or (3), the last monthly service retirement allowance payment to  
24 which the member is entitled is for the month before the calendar month in which the

1 member is reemployed. Upon subsequent retirement, the member may choose a different  
2 benefit payment option.

3 (A) The member’s account will be rebuilt as required by ORS 238.078 effective the  
4 date active membership is reestablished.

5 (B) Amounts from the Benefits-In-Force Reserve (BIF) credited to the member’s  
6 account under the provisions of paragraph (A) of this subsection will be credited with  
7 earnings at the BIF rate or the assumed rate, whichever is less, from the date of retirement  
8 to the date of active membership.

9 (d) If the member elected a partial lump sum option under ORS 238.305(2), the last  
10 monthly service retirement allowance payment to which the member is entitled is for the  
11 month before the calendar month in which the member is reemployed. The last lump sum  
12 or installment payment to which the member is entitled is the last payment due before the  
13 date the member is reemployed. Upon subsequent retirement, the member may not  
14 choose a different benefit payment option unless the member has repaid to PERS in a  
15 single payment an amount equal to the lump sum and installment benefits received and  
16 the earnings that would have accumulated on that amount.

17 (A) The member’s account will be rebuilt as required by ORS 238.078 effective the  
18 date active membership is reestablished.

19 (B) Amounts from the BIF credited to the member’s account under the provisions of  
20 paragraph (A) of this subsection, excluding any amounts attributable to repayment by the  
21 member, will be credited with earnings at the BIF rate or the assumed rate, whichever is  
22 less, from the date of retirement to the date of active membership.

23 (e) If the member elected the total lump sum option under ORS 238.305(3), the last  
24 lump sum or installment payment to which the member is entitled is the last payment due

1 before the date the member is reemployed. Upon subsequent retirement, the member may  
2 not choose a different benefit payment option unless the member has repaid to PERS in a  
3 single payment an amount equal to the benefits received and the earnings that would have  
4 accumulated on that amount.

5 (A) If the member repays PERS as described in this subsection the member’s account  
6 will be rebuilt as required by ORS 238.078 effective the date that PERS receives the  
7 single payment.

8 (B) If any amounts from the BIF are credited to the member’s account under the  
9 provisions of paragraph (A) of this subsection, the amounts may not be credited with  
10 earnings for the period from the date of retirement to the date of active membership.

11 (f) If the member received a lump sum payment under ORS 238.315:

12 (A) If the payment was dated before the date the member is reemployed, the member  
13 is not required or permitted to repay the benefit amount. Upon subsequent retirement:

14 (i) The member may choose a different benefit payment option.

15 (ii) The member’s retirement benefit will be calculated based on the member’s  
16 periods of active membership after the member’s initial effective retirement date.

17 (B) If the payment was dated on or after the date the member is reemployed, the  
18 member must repay the benefit amount. Upon subsequent retirement:

19 (i) The member may choose a different benefit payment option.

20 (ii) The member’s retirement benefit will be calculated based on the member’s  
21 periods of active membership before and after the member’s initial effective retirement  
22 date.

23 (iii) The member’s account will be rebuilt as described in ORS 238.078(2).

1 (g) A member who receives benefits to which he or she is not entitled must repay  
2 those benefits to PERS.

3 (10) If a member has been retired for less than six calendar months and is reemployed  
4 in a qualifying position by a participating employer under the provisions of 238.078(2):

5 (a) PERS will cancel the member’s retirement effective the date the member is  
6 reemployed.

7 (b) All retirement benefits received by the member must be repaid to PERS in a  
8 single payment.

9 (c) The member will reestablish active membership effective the date the member is  
10 reemployed.

11 (d) The member account will be rebuilt as of the date that PERS receives the single  
12 payment. The amount in the member account must be the same as the amount in the  
13 member account at the time of the member’s retirement.

14 (e) Upon subsequent retirement, the member may choose a different benefit payment  
15 option.

16 (11) Upon the subsequent retirement of any member who reestablished active  
17 membership under ORS 238.078 and this rule, the retirement benefit of the member must  
18 be calculated using the actuarial equivalency factors in effect on the effective date of the  
19 subsequent retirement.

20 (12) The provisions of paragraphs (9)(c)(B), (9)(d)(B), and (9)(e)(B) of this rule are  
21 applicable to retired members who reestablish active membership under ORS 238.078  
22 and this rule and whose initial effective retirement date is on or after March 1, 2006.

23

1 (13) A participating employer that employs a retired member must notify PERS in a  
2 format acceptable to PERS under which statute the retired member is employed.

3 (a) Upon request by PERS, a participating employer must certify to PERS that a  
4 retired member has not exceeded the number of hours allowed under ORS 238.082 and  
5 section (2) of this rule.

6 (b) Upon request by PERS a participating employer must provide PERS with business  
7 and employment records to substantiate the actual number of hours a retired member was  
8 employed.

9 (c) Participating employers must provide information requested under this section  
10 within 30 days of the date of the request.

11 (14) Accumulated unused sick leave reported by an employer to PERS upon a  
12 member's retirement, as provided in ORS 238.350, may not be made available to a  
13 retired member returning to employment under sections (2) or (9) of this rule.

14 *[(15) Subsections (4)(c) and (4)(d) of this rule are repealed effective January 2,*  
15 *2026.]*

16 *[(16) Subsection (4)(e) of this rule is repealed effective June 30, 2023.]*

17 *[(17)]*(15) A member who is retired for service maintains their status as a retired  
18 member of the system, and does not accrue additional benefits during the period of  
19 employment. A retired member may not participate in the pension program or the  
20 Individual Account Program as an active member, except as provided by ORS 238.092(1)  
21 or 237.650.

22 *[(18)]*(16) For calendar years 2020 through 2034*[2024]*, a public employer  
23 employing a retired member shall apply the employer's contribution rate for its covered  
24 payroll to the wages paid to the retired member. The public employer shall make a

1 payment to the Public Employees Retirement Fund in that amount. This payment is in  
2 addition to the employer’s contribution required under ORS 238.225, and will be applied  
3 to the employer’s liabilities, including pension benefit costs and retiree medical benefit  
4 costs. If the employer is a member of a pool established under ORS 238.227, the  
5 additional payment will be applied to the employer’s rate pool’s liabilities.

6 ~~[(19)]~~(17) For calendar years 2020 through ~~2034~~[2024], the limitations on  
7 employment in section (2) of this rule do not apply to a retired member unless the  
8 member retired under the provisions of ORS 238.280(1), (2), or (3), and does not have a  
9 bona fide retirement.

10 ~~[(20) For calendar years 2020 through 2024, if]~~If the member retired under the  
11 provisions of ORS 238.280(1), (2), or (3), and does not have a bona fide retirement, the  
12 member is subject to the limitations on employment in section (2) of this rule.

13 ~~[(21)]~~(18) Sections ~~[(18), (19), and (20)]~~(16) and (17) of this rule are repealed  
14 effective January 2, ~~2035~~[2025].

15 Statutory Authority: ORS 238.650 & 238.630

16 Statutes/Other Implemented: ORS 238.078, 238.082, 238.088, 238.092, 399.075,  
17 2007 OL Ch. 499 & 774, 2015 OL Ch. 108 & 475, 2018 OL Ch. 48, 2019 OL Ch. 355, &  
18 House Bill 2296 (2023)

December 1, 2023  
PERS Board meeting agenda

## Administrative rulemaking

1. Notice of Rulemaking for rules to implement 2023 legislation
2. Adoption of Reemployment of a Retired Member of the OPSRP Pension Program Rule





# Oregon

Tina Kotek, Governor

## Public Employees Retirement System

Headquarters

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December 1, 2023

TO: Members of the PERS Board

FROM: Anne Marie Vu, Research Policy Coordinator, Policy Analysis and Compliance Section  
Stephanie Vaughn, Manager, Policy Analysis and Compliance Section

SUBJECT: Adoption of Reemployment of a Retired Member of the OPSRP Pension Program Rule

*OAR 459-075-0300 Reemployment of a Retired Member of the OPSRP Pension Program*

### OVERVIEW

- Action: Adoption of changes to Reemployment of a Retired Member of the OPSRP Pension Program Rule.
- Reason: Provide clarification on impact of early retirees exceeding work after retirement restrictions.
- Policy Issue: None identified.

### BACKGROUND

This rule provides guidance on PERS administration when retired members of the Oregon Public Service Retirement Plan (OPSRP) Pension Program return to work for a PERS-participating employer. PERS continues to operate under the simplified current “work after retirement” framework created by Senate Bill 1049 (2019) that allows most retirees in all programs to work unlimited hours for PERS-participating employers during calendar years 2020-2024, while continuing to receive their retirement benefits. However, to comply with federal regulations, PERS carves out an exception for early retirees that only allows them to work unlimited hours if they have a bona fide retirement.<sup>1</sup>

The rule already explains that an early retiree who does not have a bona fide retirement may not be employed in a qualifying position or work 600 hours or more in a calendar year within six months of their effective retirement date. However, it does not clearly explain the consequences if an early retiree fails to comply with these restrictions. These proposed rule amendments provide such clarification.

Section (2)(c) of the rule clarifies that if an early retiree returns to active membership within six months of their effective retirement date, PERS will cancel their retirement retroactively, as if it had not occurred. The member will reestablish active membership effective the date of hire into the qualifying position. The active member will have to repay all retirement benefits that they

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<sup>1</sup> An early retiree is a member who retires before they reach normal retirement age, usually on a reduced service retirement allowance.

received. This requirement is already provided in the corresponding administrative rule for Tier One and Tier Two retirees in OAR 459-017-0060.

Section (2)(b) of the rule clarifies that if the early retiree returns to active membership after six months or more have passed from their effective retirement date, their retirement will only be canceled effective the first of the month in which the member was hired into the qualifying position. They will be allowed to keep retirement benefits paid before the calendar month in which the member was hired into the qualifying position.

Other amendments include removing the word “net” from section (7) of the rule to be consistent with how the term “contribution” is used in OAR 459-009-0070 and updating the sunset provisions to comply with House Bill 2296 (2023), which extends Senate Bill 1049’s work after retirement allowances through calendar year 2034.

#### CHANGES MADE SINCE NOTICE

The previous version of the rule presented at the September PERS Board meeting had proposed removing the language from section (8) because it was already addressed in section (9). However, PERS received public comment requesting that the language be retained. To accommodate the public comment concerns and streamline the rule, sections (8) and (9) were consolidated for clarity.

#### PUBLIC COMMENT AND HEARING TESTIMONY

A rulemaking hearing was held remotely on October 24, 2023, at 2:00 p.m. The public comment period ended October 31, 2023, at 5:00 p.m. As mentioned above, public comment was submitted by Margaret Olney on behalf of the PERS Coalition requesting section (8) not be removed.

#### LEGAL REVIEW

The attached rule was submitted to the Department of Justice for legal review and any comments or changes were incorporated in the rule as presented for adoption.

#### IMPACT

Mandatory: No.

Benefit: These amendments provide early retirees with notice of the potential financial consequences of returning to active membership within six months of their effective retirement date.

Cost: There are no discrete costs attributable to the rule.

#### RULEMAKING TIMELINE

September 29, 2023	Staff began the rulemaking process by filing Notice of Rulemaking with the Secretary of State.
September 29, 2023	PERS Board notified that staff began the rulemaking process.

October 1, 2023	Secretary of State published the Notice in the Oregon Administrative Rules Database. Notice was sent to employers, legislators, and interested parties. Public comment period began.
October 24, 2023	Rulemaking hearing was held remotely at 2:00 p.m.
October 31, 2023	Public comment period ended at 5:00 p.m.
December 1, 2023	Board may adopt the rule modifications.

### BOARD OPTIONS

The PERS Board may:

1. Pass a motion to “adopt changes to Reemployment of a Retired Member of the OPSRP Pension Program Rule, as presented.”
2. Direct staff to make other changes to the rule or explore other options.

### STAFF RECOMMENDATION

Staff recommends the PERS Board choose Option #1.

- B.2. Attachment 1 – OAR 459-075-0300 *Reemployment of a Retired Member of the OPSRP Pension Program*  
B.2. Attachment 2 – *PERS Coalition Comments 23.10.30*

**OREGON ADMINISTRATIVE RULE  
PUBLIC EMPLOYEES RETIREMENT BOARD  
CHAPTER 459  
DIVISION 75 – OPSRP PENSION PROGRAM**

1 **459-075-0300**

2 **Reemployment of a Retired Member of the OPSRP Pension Program**

3 (1) For purposes of this rule, “bona fide retirement” means that the retired member  
4 has been absent from service with all participating employers and all employers in a  
5 controlled group with a participating employer for at least six full calendar months  
6 between the effective date of retirement and the date of hire.

7 (2) If a retired member of the OPSRP Pension Program who is receiving monthly  
8 pension payments is employed by a participating public employer in a qualifying  
9 position:

10 (a) The member reestablishes active membership effective the date of hire.

11 (b) If the member has been retired for six or more calendar months:

12 (A) The member’s retirement is canceled effective the first of the month in which the  
13 member was hired.

14 ~~[(b)]~~(B) The last pension payment the member is entitled to receive is for the month  
15 before the calendar month in which the member was hired. A member who receives  
16 benefits to which he or she is not entitled must repay those benefits to PERS.

17 (c) ~~[The member reestablishes active membership effective the date the member was~~  
18 ~~hired.]~~If the member has been retired for less than six calendar months:

19 (A) PERS will cancel the member’s retirement retroactively, as of the member’s  
20 effective date of retirement.

1            **(B) All retirement benefits received by the member, including benefits received**  
2 **prior to the member’s date of hire into the qualifying position, must be repaid to**  
3 **PERS in a single payment.**

4            (3) If a retired member of the OPSRP Pension Program who received a lump sum  
5 benefit in lieu of a small pension under ORS 238A.195 is employed by a participating  
6 public employer in a qualifying position, the member reestablishes active membership  
7 effective the date of hire.

8            (a) If the member was hired after the date of the payment, the member is not required  
9 or permitted to repay the benefit amount.

10           (b) If the member was hired on or before the date of the payment, the member must  
11 repay the gross benefit amount.

12           (4) A retired member of the OPSRP Pension Program who is hired by a participating  
13 public employer in a non-qualifying position may receive pension payments or a lump  
14 sum payment under ORS 238A.195 without affecting the member’s status as a retired  
15 member, provided the period or periods of employment worked as a retired member total  
16 less than 600 hours in a calendar year.

17           (a) If, by reason of hours of service performed by the retired member, the non-  
18 qualifying position becomes qualifying in a calendar year, the position is qualifying  
19 effective the later of the first day of the calendar year or the date of hire.

20           (A) If the member retired under the provisions of ORS 238A.185 and was retired for  
21 six or more calendar months before returning to work for a PERS participating employer,  
22 the member’s retirement benefits shall end and the member shall reestablish active

1 membership as of the date the position becomes qualifying under subsection (a) of this  
2 section.

3 (B) If the member retired under the provisions of ORS 238A.185 and was retired for  
4 less than six calendar months before returning to work for a PERS participating  
5 employer, the member’s retirement shall be canceled and the member shall reestablish  
6 active membership as of the date of hire into the qualifying position. *[the position*  
7 *becomes qualifying under subsection (a) of this section.]*

8 (b) If a position becomes qualifying under subsection (a) of this section, the retired  
9 member is subject to the provisions of sections (2) and (3) of this rule.

10 (5) A retired member who reestablishes active membership may, at subsequent  
11 retirement, elect any option provided in ORS 238A.180 and 238A.190, subject to the  
12 provisions of ORS 238A.195.

13 (a) The member’s subsequent retirement benefit will be calculated based on the  
14 member’s periods of active membership before and after the member’s initial effective  
15 retirement date if at the initial retirement:

16 (A) The member received a monthly pension; or

17 (B) The member received a lump sum payment under ORS 238A.195 and repaid the  
18 benefit amount under subsection (3)(b) of this rule.

19 (b) The member’s subsequent retirement benefit will be calculated based on the  
20 member’s periods of active membership after the member’s initial effective retirement  
21 date if:

1 (A) At initial retirement, the member received a lump sum payment under ORS  
2 238A.195 and was not required to repay the benefit amount under subsection (3)(a) of  
3 this rule; or

4 (B) The member is required to repay the benefit amount under subsection (3)(b) of  
5 this rule and, as of the effective retirement date of the member’s subsequent retirement,  
6 the member has not repaid the benefit amount.

7 (c) The member’s subsequent retirement benefit will be calculated using the actuarial  
8 equivalency factors in effect on the effective retirement date of the subsequent retirement.

9 (6) A member who is retired for service maintains the member’s status as a retired  
10 member of the system and does not accrue additional benefits during the period of  
11 employment. A retired member may not participate in the pension program or the  
12 Individual Account Program as an active member, except as provided by ORS 238A.250  
13 or 237.650.

14 (7) For calendar years 2020 through ~~2024~~2034, a public employer employing a  
15 retired member shall apply the employer’s *[net]* contribution rate for its covered payroll  
16 to the wages paid to the retired member. The public employer shall make a payment to  
17 the Public Employees Retirement Fund in that amount. This payment is in addition to the  
18 employer’s contribution required under ORS 238A.220 and will be applied to the  
19 employer’s liabilities, including pension benefit costs and retiree medical benefit costs.

20 (8) For calendar years 2020 through ~~2024~~2034, the limitations on employment in  
21 sections (2), (3), and (4) of this rule, and the repayment obligations provided in  
22 sections (2) and (3) of this rule do not apply to a retired member unless the member  
23 retired under the provisions of ORS 238A.185 and does not have a bona fide retirement.

1 *[(9) For calendar years 2020 through 2024, i]* If a member retired under the  
2 provisions of ORS 238A.185 and does not have a bona fide retirement, the member is  
3 subject to the limitations on employment in section (4) *[of this rule]*, and the repayment  
4 obligations provided in this rule.

5 *[(10)]* (9) Sections *[7, 8, and 9]* (7) and (8) of this rule are repealed effective January  
6 2, *[2025]* 2035.

7 Statutory Authority: ORS 238A.450 & 238.630

8 Statutes/Other Implemented: ORS 238A.245 & 2019 OL, Ch. 355, Sec. 37





Robert A. Bennett (1931-2018)  
Kate D. Flanagan  
Nelson R. Hall  
Gregory A. Hartman †  
Henry J. Kaplan †  
Linda J. Larkin §  
Derrick A. Louie  
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† retired  
§ of counsel  
€ Grand Ronde Tribal Court

October 30, 2023

Via email only: [chris.GEIER@pers.oregon.gov](mailto:chris.GEIER@pers.oregon.gov)  
[AnneMarie.VU@pers.oregon.gov](mailto:AnneMarie.VU@pers.oregon.gov)

Chris Geier, PERS Rule Coordinator  
Anne Marie Vu, Research Policy Coordinator  
Oregon Public Employees Retirement System

Re: PERS Coalition Comments on Proposed Rulemaking  
OAR 459-075-0300 Revisions

Dear PERS Rulemaking Staff:

This office represents the PERS Coalition, a group of public employee labor organizations representing the people who teach our children, protect our life and property, repair our roads and bridges, and keep our communities healthy and safe. I write to comment on the proposed revision to OAR 459-075-0300, *Reemployment of a Retired Member of the OPSRP Pension Program*. I understand that the intent of the rule is to clarify what happens when an OPSRP member takes early retirement (i.e., retires before normal retirement age with a reduced monthly benefit) and then seeks reemployment with a participating employer within six months of retirement. Under federal regulations, doing so requires PERS to cancel the members' retirement retroactively and require repayment of all benefits received. This consequence can be avoided if the member waits six full months before reemployment (i.e., they have a "bona fide retirement"). The rule amendments are intended to clarify this consequence for OPSRP early retirees under ORS 238A.185. See, proposed revisions to OAR 459-075-0300(2). These clarifications are already in place for Tier One/Tier Two early retirees. See, OAR 459-017-0060.

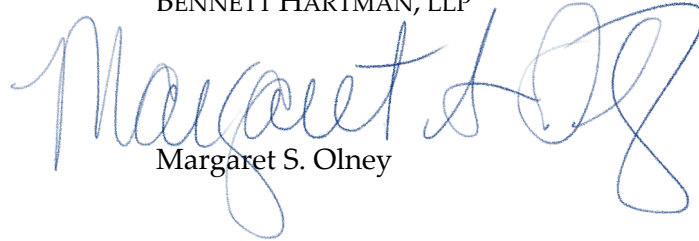
While the PERS Coalition understands and supports the desire to clarify the consequence of reemployment for OPSRP early retirees, we believe that the proposed revisions can be improved to be more understandable to our members. Specifically, we request that the current subsection 8, which references the simplified reemployment rules adopted in SB 1049, not be deleted. That provision reads:

“(8) For calendar years 2020 through 2034, the limitation on employment in section (4) of this rule do not apply to a retired member unless the member retired under the provisions of ORS 238A.185 and does not have a bona fide retirement.”

Thank you for your consideration.

Sincerely,

BENNETT HARTMAN, LLP

A handwritten signature in blue ink, appearing to read "Margaret S. Olney", is written over the typed name. The signature is fluid and cursive.

Margaret S. Olney

cc: Clients

December 1, 2023  
PERS Board meeting agenda

## Action and discussion items

1. SB 1049 Implementation update
2. Contingency Fund request
3. 2022 Valuation update and financial modeling results
4. Adoption of Actuarial Equivalency Factor Tables



# Oregon

Tina Kotek, Governor

## Public Employees Retirement System

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December 1, 2023

TO: Members of the PERS Board  
 FROM: Yvette Elledge-Rhodes, Deputy Director  
 SUBJECT: Senate Bill 1049 Implementation Update

### BACKGROUND

Senate Bill (SB) 1049 was signed into law by the Governor on June 11, 2019. PERS' staff continue to focus on completing work in an efficient and effective manner and are entering the last 18 months of the program.

### PROGRAM AND PROJECT IMPLEMENTATION

The SB 1049 Implementation Program is being managed as one comprehensive program, with the following six individual projects. All projects go through the Enterprise Information Services (EIS) stage-gate process.

Project	Effective Date	Project Health and Status (as of 11/8/23)
SB 1049 Program		Program health: Yellow <ul style="list-style-type: none"> <li>The program moved from red to yellow status on 8/4/23 due to Member Redirect and Technical Debt projects returning to green. The program will remain at yellow status until Cross Project Effort (CPE) red status is resolved. The program schedule has also been rebaselined. The expected end date of the program is now 5/9/25.</li> <li>CPE health continues to be in red status due to delays in Work Package (WP) 6. Development of the tool was completed; however, User Acceptance Testing (UAT) was delayed due to resource constraints. Testing will resume in the spring once a new Target Date Fund is implemented. This effort is in replanning for a potential deployment of 6/6/24.</li> </ul>
Employer Programs Project	Effective 7/1/2019	Project ended 7/16/21.
Salary Limit Project	Effective 1/1/2020	Project ended 5/28/21.

Work After Retirement Project	Effective 1/1/2020	Project ended 2/24/22.
Member Redirect Project	Effective 7/1/2020	<p>Project health: Green</p> <ul style="list-style-type: none"> <li>The Member Redirect Project status moved from red to green status on 8/3/23 once the schedule rebaseline was completed. New deployment dates for WP 8, WP 10, and WP 11 are in the attached Road Map.</li> <li>UAT for WP 8 (EPSA Death) and WP 10 (Mid-Project Clean up) is in process and scheduled to end on 1/22/24, with deployment on 2/15/24.</li> <li>All other project activities are progressing as expected.</li> </ul>
Member Choice Project	Effective 1/1/2021	Project ended 8/4/21.
Technical Debt		<p>Project health: Green</p> <ul style="list-style-type: none"> <li>The Technical Debt Project moved from red to green status on 7/14/23 once the schedule rebaseline was completed.</li> <li>UAT for WP 5 (Side Account Reversals) is in process and scheduled to end on 1/22/24, with deployment on 2/15/24.</li> <li>Once deployment is complete, the project will initiate closure activities and is expected to end on 4/29/24.</li> </ul>

**HIGHLIGHTED ACTIVITIES**

- The SB 1049 Program Manager, James Allen, will be retiring at the end of this year. Due to the critical nature of this role, PERS has already identified a resource to replace him effective 1/1/24. Knowledge transfer and transition activities began November 1.
- iQMS activities
  - Draft Quarterly Quality Assurance Status and Improvement Report (October 2023) received on 10/23/23.
  - Final Periodic Quality Status Report (August 2023) received on 9/11/23.

**Budget reporting**

- Next bi-monthly meeting with the Chief Financial Office, Legislative Fiscal Office, and the Governor’s Office is scheduled for 11/22/23.

PROGRAM/PROJECT BUDGET

The high-level budget information is contained within page three of the attachment to agenda item A.2.c. The detailed budget can be viewed in the attached Monthly Status Report.

The 2023-2025 SB 1049 budget was approved by the Legislature as part of the PERS budget bill, House Bill 5033, and was signed by the Governor on 7/27/23. We will continue to update the board as program implementation continues throughout the year.

C.2. Attachment 1 – *Monthly Project Status Report and Road Map*

# SB 1049 Implementation Program

## Status Report for November 17, 2023

Executive Sponsor: Kevin Olineck  
Program Manager: James Allen

### Program information:

**Program start:** July 1, 2019 | **Program end:** June 30, 2025

### Subprojects:

Project 1: Employer Programs

Project start: July 1, 2019 | Project end: July 16, 2021

Project status: **Complete**

Project 2: Work After Retirement (WAR)

Project start: July 1, 2019 | Project end: February 24, 2022

Project status: **Complete**

Project 3: Salary Limit

Project start: July 1, 2019 | Project end: May 28, 2021

Project status: **Complete**

### Program statement:

SB 1049 is comprehensive legislation intended to address the increasing cost of funding Oregon’s Public Employees Retirement System (PERS), reduce system Unfunded Actuarial Liability (UAL) obligations, and provide relief to escalating contribution rate increases for public employers. Implementation will occur across six subprojects.

Project 4: Member Redirect

Project start: July 1, 2019 | Project end: May 9, 2025

Project status: **Green**

Project 5: Member Choice

Project start: October 23, 2019 | Project end: August 4, 2021

Project status: **Complete**

Project 6: Technical Debt

Project start: June 22, 2021 | Project end: April 29, 2024

Project status: **Green**

### Overall program status: **Yellow**

The program status continues to be yellow. The program will remain yellow until the Cross Project Effort (CPE) returns to a green status (details in the Cross Project Effort section below).

The Member Redirect and Technical Debt projects continue with User Acceptance Testing (UAT) for their next production release in February 2024. So far, UAT has gone very well. Testing is ahead of schedule and defect rates are low.

The Product Owner transition to Modernization continues. A new Product Owner was onboarded on 11/6/2023. Training and transition activities are in process and are expected to take some time to complete. SB 1049 continues to get all the Product Owner support it needs.

The SB 1049 Program Manager, James Allen, is retiring 12/31/2023. Prashant Jaiswal has been identified as the replacement Program Manager, and knowledge transfer/transition activities began on 11/1/2023.

# SB 1049 Implementation Program

Status Report for November 17, 2023

Executive Sponsor: Kevin Olineck  
Program Manager: James Allen

Budget health: **Green**

29560- SB 1049 Implementation Program by Project					
Other Funds Lmt	23-25 Budget	Actual to Date	Projections	23-25 Total	Variance
Member Redirect	\$ 18,873,650	\$ 1,712,832	\$ 15,499,948	\$ 17,212,780	\$ 1,660,870
Technical Debt	\$ 1,258,122	\$ 226,006	\$ 930,401	\$ 1,156,407	\$ 101,714
				\$ -	\$ -
<b>Total</b>	<b>\$ 20,131,772</b>	<b>\$ 1,938,838</b>	<b>\$ 16,430,349</b>	<b>\$ 18,369,187</b>	<b>\$ 1,762,584</b>

29560- SB 1049 Implementation Program by POP					
Other Funds Lmt	23-25 Budget	Actual to Date	Projections	23-25 Total	Variance
Project Management & Admin	\$ 1,876,800	\$ 226,200	\$ 1,632,360	\$ 1,858,560	\$ 18,240
Quality Assurance and Testing	\$ 1,062,600	\$ -	\$ 366,500	\$ 366,500	\$ 696,100
Info Technology Applications	\$ 13,423,000	\$ 1,088,484	\$ 10,776,484	\$ 11,864,969	\$ 1,558,031
Operational Implementation	\$ 3,769,372	\$ 624,154	\$ 3,655,005	\$ 4,279,160	\$ (509,788)
<b>Total</b>	<b>\$ 20,131,772</b>	<b>\$ 1,938,838</b>	<b>\$ 16,430,348</b>	<b>\$ 18,369,188</b>	<b>\$ 1,762,582</b>



# SB 1049 Implementation Program

**Status Report for November 17, 2023**

Executive Sponsor: Kevin Olineck  
Program Manager: James Allen

**Schedule health: Red**

CPE WP 6 (IAP Balance Comparison Tool) is red due to delays in UAT activities.

**Scope health: Green**

The current program scope is well understood.

Quality Assurance activities:

- iQMS Deliverable 4.1.15 Quarterly QA Status and Improvement Report started 9/8/2023, due 12/6/2023.
- iQMS Deliverable 3.3.15 Periodic Quality Status Report started 10/25/, due 12/11/2023.
- iQMS Deliverable 4.1.16 Quarterly QA Status and Improvement Report starts 12/7/2023, due 2/20/2024.

Emerging concerns/needs/impacts:

- The SB 1049 Program Manager will retire 12/31/2023. A replacement Program Manager has been identified, Prashant Jaiswal. Knowledge transfer and transition activities began 11/1/2023 and will continue through the end of the year.
- CPE WP 6 (IAP Balance Comparison Tool) failed to meet UAT acceptance criteria on time. Updates since last month:
  - The next UAT window has been identified: 4/22/2024 - 5/17/2024
  - In the meantime, the technical team is continuing to define and document infrastructure, governance, and security of Power Apps
- There is a continued concern that non-SB 1049 projects could have a negative impact to SB 1049:
  - This area continues to see significant improvement. Non-SB 1049 projects are proactively monitoring and mitigating impact to SB 1049.
  - Resources, both people and technical, may be negatively impacted. The SB 1049 team continues to monitor resource allocations for SB 1049 resources across all projects (where data is available) and mitigate impacts where issues are found. The SB 1049 Project Managers proactively manage their schedules to ensure major milestones are kept on track.
  - Staff could transfer off of SB 1049, requiring backfill and training of new resources.
  - jClarety production deployments (both SB 1049 and non-SB 1049) continue to be stacked very tightly for the foreseeable future. There is little room to accommodate schedule slippage for any release without impacting subsequent SB 1049 releases.

# SB 1049 Implementation Program

Status Report for November 17, 2023

Executive Sponsor: Kevin Olineck  
Program Manager: James Allen

## Program Risks and Mitigation

Listed below are the most critical risks for this project.

For the complete Risk Log, please see the Risk Log tab in the most recent weekly status report: [SB 1049 Program Weekly Status Report](#)

#	Risk Description	Mitigation and/or Contingency Plan	Notes
2	<b>Complexity of Effort:</b> The forecasted amount of work, timing, and complexity is inaccurate, or assumptions made that are off base.	<ul style="list-style-type: none"> <li>➤ Use iterative development to meet Business need.</li> <li>➤ Ensure effective inter-team project communication.</li> <li>➤ Schedule additional time to analyze complex code.</li> </ul>	
4	<b>Internal Staffing:</b> Resource shifting, competing priorities, or over allocation impact the availability of dedicated project resources, or a key resource becomes unavailable, and/or staff experience levels are inadequate.	<ul style="list-style-type: none"> <li>➤ Monitor work assignments for SB 1049 activities. Ensure on-time completion and address/escalate if resources are impacted.</li> </ul>	

## Program Issues and Action Plans

Listed below are the most critical issues for this project.

For the complete Issue Log, please see the Issue Log tab in the most recent weekly status report: [SB 1049 Program Weekly Status Report](#)

No	Issue	Resolution / Notes	Estimated Resolution Date
22	<b>Technology Risk: Complex, New or Untried Process:</b> The project solution is complex, new, untried in the market or not aligned with best practices.	<ul style="list-style-type: none"> <li>➤ PowerApps is being used for Cross Project Effort (CPE) WP 6 (IAP Balance Comparison Tool), but this tool is new to PERS, and the learning curve continues to be significant.</li> </ul>	6/6/2023
29	<b>Continuity in Key Project or Program roles:</b> A key role leaves the project causing disruption and delay	<ul style="list-style-type: none"> <li>➤ The SB 1049 Product Owner has accepted a position on the Modernization Program. The replacement Product Owner has started effective 11/6/2023</li> <li>➤ The SB 1049 Program Manager will retire 12/31/2023. Knowledge transfer and transition activities are in process.</li> </ul>	3/31/2023

# SB 1049 Implementation Program

Status Report for November 17, 2023

Executive Sponsor: Kevin Olineck  
Program Manager: James Allen

**Program information: Cross Project Effort (CPE)**

Start: May 28, 2020 | End: 5/9/2025  
Project Manager: Susan K. Mundell

**Cross Project Effort objective:**

The Cross Project Effort (CPE) is focused on technical tools, and extracts that are used across multiple SB 1049 projects. Originally, these efforts were included as Work Packages within the individually impacted projects. The scope of this effort has not changed, but the work has been restructured to ensure it receives an appropriate level of coordination and ensure the success of the necessary inter-project integrations.

**Overall status: Red**

**Narrative:** WP 6 (IAP Balance Comparison Tool) has completed the Rework 2 Business Function Testing (BFT) cycle and is waiting for the Product Owner Team and Testing Subject Matter Expert to begin User Acceptance Testing (UAT). UAT is on hold until April of 2024 due to higher priority workload, as well as for date specific Target Date Fund functionality that needs to be tested after the 2023-year closes in April. In the meantime, the technical team is continuing to define and document infrastructure, governance, and security of Power Apps.

The Cross Project Effort Schedule has been finalized.

Once WP 6 is deployed to production, the project can return to a green status.

**Schedule Deliverables and Milestones**

Milestones Schedule				
Milestone	Percent Complete	Baseline Finish Date	Actual / Forecast Finish Date*	Status/ Notes
WP 6: IAP Balance Comparison Rework 2 BFT Complete	100%	N/A	10/31/2023	
WP 6: Functional Validation Testing (Pre-UAT Check)	0%	N/A	4/9/2024	
WP 6: IAP Balance Comparison Rework 2 UAT Complete	0%	N/A	4/16/2024	
WP 6: IAP Balance Comparison Production Release	0%	10/04/2022	6/6/2024	
WP 7.3: Payouts Actuarial Extract Development Ends	0%	1/2/2025	1/2/2025	
WP 7.3: Payouts Actuarial Extract Production Release	0%	4/17/2025	4/17/2025	
Cross Project Effort Closure	0%	5/9/2025	5/9/2025	

\*Finish Date Color: Green = on Schedule, Yellow = in Jeopardy, Red = Late

# SB 1049 Implementation Program

Status Report for November 17, 2023

Executive Sponsor: Kevin Olineck  
Program Manager: James Allen



## Senate Bill (SB) 1049 Implementation Road Map

2019-2021 Biennium

	2019						2020						2021										
	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY
<b>Employer Programs</b>	• 7/1/19 – Effective Date						• 9/3/19 – Employer Incentive Fund (EIF) Application #1 Opens						• 8/6/20 – Employer Rate Projection Tool (ERPT) Assessment Complete										
							• 11/27/19 – EIF Application #1 Closes						• 12/1/20 – EIF Application #2 Closes										
							• 12/2/19 – EIF Application #2 Opens						3/30/21 – Work Package (WP) 1 Migrate and Adapt ERPT →•										
													6/30/21 – WP2 ERPT Stakeholder Acceptance and Deployment →•										
<b>Salary Limit</b>							• 12/24/19 – Work Package (WP) 1 – Short Term						• 11/19/20 – WP3 User Screens to Record Annual Salary Limit										
							• 1/1/20 – Effective Date						5/13/21 – WP4 Proration Reports and Workflow →•										
							• 1/24/20 – WP2 Post 2020 Salary Limit						5/28/21 – Project Close →•										
<b>Work After Retirement</b>							• 12/19/19 – Work Package (WP) 1 Retiree Wages Suspended – Short Term						• 11/19/20 – WP2 New Wage Codes with General Ledger (GL) Integration										
							• 1/1/20 – Effective Date						5/13/21 – WP3 Retro Rate Change →•										
<b>Member Redirect</b>							6/18/20 – Work Package (WP) 1 Employee Pension Stability Account Set Up/Batch/General Ledger – Short Term						• 9/22/20 – Voluntary Contributions Initial Functionality										
							7/1/20 – Effective Date						• 10/30/20 – WP2.2 IAP Forecaster Tool – non-jClarety										
													• 11/19/20 – Voluntary Contributions Final Functionality Release										
													1/21/21 – WP5.2 Online Member Services User Interface →•										
													1/26/21 – WP2 TIED SSIS – Non-jClarety →•										
													3/23/21 – WP3 EPSA Earnings										
													6/24/21 – WP4.2 EPSA Display, and WP12 Full EPSA Set up Screen →•										
<b>Member Choice</b>	• 10/23/19 – Project Kick Off						8/19/20 – Member Choice Notification →•						8/20/20 – Work Package (WP) 1 Online Member Services (OMS) Changes Deployed										
	5/15/20 – Member Annual Statements (MAS) Flyer Communication →•												9/1-30/20 – Election Period										
													• 1/1/21 – Effective Date										
													3/23/21 – WP2 OMS & jClarety Enhancements →•										
													5/1/21 – Member Choice reflected in MAS →•										
													6/24/21 – WP3 Online Member Services (OMS) Election and Bugs →•										
<b>PROGRAM INITIATIVE</b>													1/26/21 – WP2.1 IAP Payment Recon (short-term) →•										
<b>Cross Project Effort</b>													3/18/21 – WP1.2 IAP Validator Tool →•										
							9/17/20 – WP1.1 IAP Validator Tool (short-term) →•						4/27/21 – WP2.2 IAP Payment Recon →•										
													5/13/21 – WP7.2 Employer Information Actuarial Extract →•										
													6/18/21 – WP5.1 PYE Invoicing Tool →•										
													6/24/21 – WP7.1 Non-Retired Census Actuarial Extract →•										
													6/28/21 – WP4.1 IAP Adjustment Calculator →•										



# SB 1049 Implementation Program

Status Report for November 17, 2023

Executive Sponsor: Kevin Olineck  
Program Manager: James Allen



## Senate Bill (SB) 1049 Implementation Road Map

2021-2023 Biennium

	2021						2022						2023											
	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN
<b>Employer Programs</b>	● 7/16/21 – Project Close																							
<b>Work After Retirement</b>							● 12/16/21 – WP4 Side Account Credit Allocation																	
							● 2/24/22 – Project Close																	
<b>Member Redirect</b>							● 10/14/21 – WP5 Voluntary Contribution Maintenance						● 7/21/22 – WP6.1 EPISA Retirement											
							● 3/24/22 – WP4.3 EPISA Transaction Display						6/29/23 – WP9.1 EPISA Withdrawal → ●											
													6/29/23 – WP9.2 Alter OPSRP Withdrawal → ●											
<b>Member Choice</b>	● 8/4/21 – Project Close																							
<b>Technical Debt</b>	● 7/1/21 – Project Kickoff						4/30/22 – WP3 General Ledger Reversals, Including Side Accounts – Functional Design Specification Completed						6/29/23 – WP6 General Ledger Reversals → ●											
							● 3/31/22 – WP2 Benefit Account Transition Status – Functional Design Specification Completed						● 7/21/22 – WP1 Employer Statements											
													● 10/20/22 – WP4 Hyperion Replacement											
<b>PROGRAM INITIATIVE</b>																								
<b>Cross Project Effort</b>																								
	● 3/4/22 – WP3 IAP Divorce Tool																							
	● 5/20/22 – WP5.2 PYE Invoicing Tool																							
	● 6/1/22 – WP4.2 IAP Adjustment Calculator																							

# SB 1049 Implementation Program

Status Report for November 17, 2023

Executive Sponsor: Kevin Olineck  
Program Manager: James Allen



## Senate Bill (SB) 1049 Implementation Road Map

2023-2025 Biennium

PROJECTS	2023						2024						2025												
	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	
<b>Member Redirect</b>					Nov 17																				
					2/15/24 - WP10 Mid-Project Clean up →																				
<b>Technical Debt</b>																									
<b>PROGRAM INITIATIVE</b>																									
<b>Cross Project Effort</b>																									

**Project information: Member Redirect**

**Project start:** July 1, 2019, | **Project end:** May 9, 2025

**Project Manager:** Chris Yu

**Overall project status:** **Green**

**Project Narrative:**

The overall project schedule is on track and the health status is green. The User Acceptance Testing (UAT) for WP 8.1 (EPSA Death) and WP 10 (Mid-Project Clean up) began on 10/20/2023. As of 11/16/2023, UAT has tested 75.42% and passed 74.37%. Please note that this release includes WP 8.1/WP 10 and Technical Debt work packages as well.

Construction for WP 11.1A (EPSA Retirement Cancellation and Adjustments) and WP 11.2B (Death Excess EPSA) is progressing towards the 3/1/2024 completion date.

**Work Package 8.1: EPSA Death**

- Production Deployment Date: 2/15/2024
- Construction completed on 8/1/2023
- Business Functional Testing was completed on 10/5/2023
- User Acceptance Testing began on 10/20/2023
- User Acceptance Testing will be completed by 1/12/2024
- Deployment to production will be on 2/15/2023

**Work Package 11.1A: EPSA Retirement Cancellation and Adjustments**

- Production Deployment Date: 8/15/2024
- Construction will be completed on 3/1/2024
- Business Functional Testing will begin on 3/8/2024
- User Acceptance Testing will begin on 5/23/2024

**Additional long-term work packages exist. See the Milestones Schedule for a complete list of work packages**

**Project objective:**

Effective July 1, 2020, this section of the bill redirects a portion of member contributions to a new Employee Pension Stability Account (EPSA) when the funded status of the plan is below 90% and the member's monthly salary is more than \$2,500.

**Work Package 10: Mid-Project Clean up**

- Production Deployment Date: 2/15/2024
- Construction was completed on 2/28/2023
- Business Functional Testing was completed on 3/14/2023
- User Acceptance Testing began on 10/20/2023
- User Acceptance Testing will be completed by 1/12/2024
- Deployment to production will be on 2/15/2023

**Work Package 11.2B: Death Excess EPSA**

- Production Deployment Date: 8/15/2024
- Construction will be completed on 3/1/2024
- Business Functional Testing will begin on 3/8/2024
- User Acceptance Testing will begin on 5/23/2024

# SB 1049 Implementation Program

**Status Report for November 17, 2023**

Executive Sponsor: Kevin Olineck  
Program Manager: James Allen

**Budget health: Green**

29560 SB1049 - Member Redirect Project					
Expenses	Budget	Actual to Date	Projections	Total	Variance
*Personal Services - PERS	\$ 1,600,000	\$ 101,439	\$ 1,498,561	\$ 1,600,000	\$ -
Personal Services - SB1049	\$ 3,376,729	\$ 550,649	\$ 3,305,735	\$ 3,856,384	\$ (479,655)
Services and Supplies	\$ 2,633,212	\$ 171,875	\$ 1,806,408	\$ 1,978,283	\$ 654,929
IT Professional Services	\$ 12,863,709	\$ 990,308	\$ 10,387,804	\$ 11,378,113	\$ 1,485,596
IT Expendable Property	\$ -		\$ -	\$ -	\$ -
Data Processing Hardware	\$ -	\$ -	\$ -	\$ -	\$ -
<b>SB1049 Total Expenses</b>	<b>\$ 18,873,650</b>	<b>\$ 1,712,832</b>	<b>\$ 15,499,948</b>	<b>\$ 17,212,780</b>	<b>\$ 1,660,870</b>
<b>Project Total</b>	<b>\$ 20,473,650</b>	<b>\$ 1,814,271</b>	<b>\$ 16,998,509</b>	<b>\$ 18,812,780</b>	<b>\$ 1,660,870</b>
Average Monthly Spend (Burn Rate)		\$ 71,368.02	\$ 645,831.15		
*Not included in SB1049 Expenses					

**Schedule Health: Green**

The team continues to successfully execute according to the baselined schedule.

**Scope health: Green**

The project scope is well understood.

Quality Assurance activities:

- The Monthly Release Management Report will be submitted for Quality Check Point review on 11/30/2023.

Emerging concerns/needs/impacts:

- There is a project being planned to update the Actuarial Equivalency Factors (AEF) on 1/4/2024. This project is being planned to minimize impact to SB 1049, but it could impact the release schedule of WP 8.1 (EPSA Death) and WP 10 (Mid-Project Clean up) in February 2025.
- Staffing updates and changes. The Program Manager is retiring, and the Lead Product Owner is moving to another Program. Staff are being onboarded to fill those roles and transition activities are in process.



# SB 1049 Implementation Program

## Status Report for November 17, 2023

Executive Sponsor: Kevin Olineck  
Program Manager: James Allen

### High Level Project Risks and Mitigation

Listed below are the most critical risks for this project.

For the complete Risk Log, please see the Risk Log tab in the most recent weekly status report: [Member Redirect Weekly Status Report](#)

#	Risk Description	Mitigation and/or Contingency Plan	Notes
4	<b>Internal Staffing:</b> Resource shifting, competing priorities, or over allocation impact the availability of dedicated project resources, or a key resource leaves PERS or is out for an extended period, and/or staff experience levels are inadequate and meet quality needs	➤ Work with other SB 1049 and non-SB 1049 Project Managers to manage resources and schedule. Also, confirm back-up resources and communicate with team Managers	Monitoring the transition plan as there is a new Product Owner and Program Manager for SB 1049. The new Program Manager will officially begin on 1/2/2024.
102	<b>Release 9.20.0 Regression Testing:</b> Due to a lack of prepared test scripts there are some concerns with Regression testing and also the timeline from the code merge to the end of UAT, which is 5 business days.	➤ See if we can update the code merge date to give us more time for regression testing.	At the end of December, the Actuarial Equivalency Factors (AEF) code changes will be ready, which means testing can begin on January 1st. This will give additional time to test prior to the AEF code merge.

### Project Issues and Action Plans

Listed below are the most critical issues for this project.

For the complete Issue Log, please see the Issue Log tab in the most recent weekly status report: [Member Redirect Weekly Status Report](#)

No	Issue	Resolution / Notes	Estimated Resolution Date
	None		

# SB 1049 Implementation Program

Status Report for November 17, 2023

Executive Sponsor: Kevin Olineck  
Program Manager: James Allen

## Project Schedule Deliverables and Milestones

Milestones Schedule				
Milestone	Percent Complete	Baseline Finish Date	Actual / Forecast Finish Date*	Status/ Notes
WP 5.1 - Voluntary Contribution maintenance	100%	10/14/2021	10/14/2021	
WP 4.3 - EPSA Correct Member Account	100%	3/24/2022	3/24/2022	
WP 6.1 - EPSA Retirement	100%	7/21/2022	7/21/2022	
WP 9.1 - EPSA Withdrawal	100%	6/29/2023	6/29/2023	
WP 9.2 - Alter OPSRP Withdrawal	100%	6/29/2023	6/29/2023	
WP 8.1 - EPSA Death	0%	2/15/2024	2/15/2024	
WP 10 - Mid-Project Clean up	0%	2/15/2024	2/15/2024	
WP 11.1A - EPSA Retirement Cancellation and Adjustments	0%	8/15/2024	8/15/2024	
WP 11.2B - Death Excess EPSA	0%	8/15/2024	8/15/2024	
WP 11.1B - Withdrawal Cancellation and Adjustments	0%	2/6/2025	2/6/2025	
WP 11.1C - EPSA Death Cancellation and Adjustments	0%	2/6/2025	2/6/2025	
Project Complete	0%	5/9/2025	5/9/2025	

\*Finish Date Color: Green = on Schedule, Yellow = in Jeopardy, Red = Late

### Project information: Technical Debt

Project start: June 22, 2021 | Project end: April 29, 2024

Project Manager: Susan Mundell

Overall project status: **Green**

#### Project Narrative:

Quality Assurance Testing and User Acceptance Testing for Technical Debt WP 5 (Side Account Reversals) and STDP-82 (Employer Statements WP 1 Backlog Item) continues and is planned to conclude on 1/22/2024. As of 11/15/2023, UAT was 96.11% tested with 95.32% passed.

WP 5 is the final planned work package for Technical Debt.

#### Work Packages:

##### Work Package 1: Employer Statements

- Production Deployment Date: 7/21/2022 (complete)

##### Work Package 2: Benefit Account Status Transition

- Functional Design Specification 3/31/2022 (complete)

##### Work Package 3: General Ledger and Side Account Reversals

- Functional Design Specification 4/30/2022 (complete)

##### Work Package 4: Hyperion Replacement

- Production Deployment: 10/20/2022 (complete)

### Project objective:

The SB 1049 Technical Debt Project will address areas of technical debt which have been encountered and identified in the SB 1049 Implementation Program and prioritized for resolution. Resolution of technical debt will be limited to those items that are created by SB 1049, are exacerbated by SB 1049, or inhibit PERS' ability to complete SB 1049 requirements.

##### Work Package 5: Side Account Reversals

- Production Deployment Date: 2/15/2024
- Development concluded on 8/17/2023
- Business Functional Testing completed on 9/21/2023
- User Acceptance Testing is planned for completion on 1/22/2024

##### Work Package 6: General Ledger Reversals

- Production Deployment Date: 6/29/2023 (complete)

# SB 1049 Implementation Program

Status Report for November 17, 2023

Executive Sponsor: Kevin Olineck  
Program Manager: James Allen

CR or WP#	Description	Status	SB 1049 Technical Debt Qualification	Other Considerations/Notes
WP 1	Employer Statements	Closed	<b>Exacerbated by SB 1049:</b> New financial components from Member Redirect and WAR projects have made employer statements inaccurate and difficult for employers to understand and reconcile.	The enhancements will make statements easier to read- like a bank statement- and correct the inaccurate information.  This work package deployed on 7/21/2022.
WP 2	Benefit Account Status Transition	Closed	<b>Exacerbated by SB 1049:</b> SB 1049 introduced changes to the way employers report retiree salary and downstream inconsistent activity in recipient and benefit accounts was discovered.	The functional design specification document identified which statuses are correct and information has been updated for developers to utilize in future programming.  This work package completed on 3/31/2022.
WP 3	General Ledger and Side Account Reversals	Closed	<b>Exacerbated by SB 1049:</b> Two issues impacting General Ledger were discovered during the WAR project related to transaction reversals. Although these issues existed before SB 1049, the additional functionality added to implement the WAR project have exacerbated these issues.	Through the functional design specification document, it has been determined that although these issues are both related to reversals, the solutions will be different. A decision was made to develop two change requests (CR006 & CR007) to explore adding solutions to these issues to the project scope in future work packages.  This work package completed on 4/30/2022.
WP 4	Hyperion Replacement	Closed	<b>Inhibit PERS' ability to complete SB 1049:</b> Oracle Hyperion is end of life and a decision was made to discontinue developing new reports in a deprecated product. Member Redirect WP 9.1 has a dependency on the reporting features of Hyperion so the solution must be in place to support this WP. The scope of this WP delivers the solution in SSRS, a Microsoft product, as well	There are two other non-SB 1049 work streams to complete the Hyperion replacement: <ul style="list-style-type: none"> <li>• A Maintenance and Enhancement effort to convert approximately 80 reports</li> <li>• A Central Data Management effort to convert BRIO based reports which</li> </ul>

# SB 1049 Implementation Program

## Status Report for November 17, 2023

Executive Sponsor: Kevin Olineck  
Program Manager: James Allen

			as one report to be used as a test case for developers when addressing other reports used by the agency.	are utilized by the Financial Services Division. This work must be completed by 6/30/22 to comply with Oracle's mandate.  This work package deployed on 10/20/2022.
WP 5	Side Account Reversals	In Process	<b>Exacerbated by SB 1049:</b> Issues impacting Side Account Reversals were discovered during the WAR project.	Through the As-Is documentation produced in WP 3, we have found that Side Account Reversals are a complex issue to address.  Deployment for this work package is planned for 2/15/2024.
WP 6	General Ledger Reversals	Closed	<b>Exacerbated by SB 1049:</b> Issues impacting General Ledger transaction reversals were discovered during the WAR project.	Through the As-Is documentation produced in WP 3, we have found that the issues causing incorrect General Ledger is a technical debt item which should be addressed by SB 1049 Technical Debt Project.  This work package deployed on 6/29/2023.

**\*Note:** Change requests will be transitioned to work packages if/when the CR is approved by the SB 1049 Steering Team. No more change requests are anticipated for this project.

# SB 1049 Implementation Program

**Status Report for November 17, 2023**

Executive Sponsor: Kevin Olineck  
Program Manager: James Allen

**Budget health: Green**

29560 SB1049 - Technical Debt Project					
Expenses	Budget	Actual to Date	Projections	Total	Variance
*Personal Services - PERS	\$ 500,000	\$ 37,788	\$ 462,212	\$ 500,000	\$ -
Personal Services - SB1049	\$ 392,643	\$ -	\$ 422,774	\$ 422,774	\$ (30,131)
Office Expenses	\$ 15,000		\$ 15,000	\$ 15,000	\$ -
IT Professional Services	\$ 559,292	\$ 169,456	\$ 317,400	\$ 486,856	\$ 72,436
Professional Services - QA + PM	\$ 291,188	\$ 56,550	\$ 175,227	\$ 231,777	\$ 59,410
IT Expendable Prop			\$ -	\$ -	\$ -
SB1049 Expenses	\$ 1,258,122	\$ 226,006	\$ 930,401	\$ 1,156,407	\$ 101,715
<b>Project Total</b>	<b>\$ 1,758,122</b>	<b>\$ 263,794</b>	<b>\$ 1,392,613</b>	<b>\$ 1,656,407</b>	<b>\$ 101,715</b>
Average Monthly Spend (Burn Rate)		\$ 9,416.92	\$ 38,766.71		
*Not included in SB1049 Expenses					

**Schedule Health: Green**

The team continues to successfully execute according to the baselined schedule.

**Scope health: Green**

The project scope is well understood.

Quality Assurance activities:

- A Quality Check Point review for the Contractor Support Log was completed on 11/09/2023.

Emerging concerns/needs/impacts:

- There is a project being planned to update the Actuarial Equivalency Factors (AEF) on 1/4/2024. This project is being planned to minimize impact to SB 1049, but it could impact the release schedule of WP 5 (Side Account Reversals) in February 2025.
- Staffing updates and changes. The Program Manager is retiring, and the Lead Product Owner is moving to another Program. Staff are being onboarded to fill those roles and transition activities are in process.

# SB 1049 Implementation Program

Status Report for November 17, 2023

Executive Sponsor: Kevin Olineck  
Program Manager: James Allen

## High Level Project Risks and Mitigation

Listed below are the most critical risks for this project.

For the complete Risk Log, please see the Risk Log tab in the most recent weekly status report: [Technical Debt Weekly Status Report](#)

#	Risk Description	Mitigation and/or Contingency Plan	Notes
3	<b>Internal Staffing- Limited, Loss of or Inexperienced Resources:</b> Limited specialized resources, resource shifting and competing priorities pull dedicated project resources, a key resource leaves PERS or is out for an extended period, and/or staff experience levels are inadequate.	<ul style="list-style-type: none"> <li>➤ Ensure that project knowledge is shared so that others can pick up is a resource is shifted.</li> <li>➤ Hire or move knowledgeable staff for replacement, backup or fill in as additional help.</li> </ul>	The Program Manager is retiring, and the Lead Product Owner is moving to another Program. Staff are being onboarded to fill those roles and transition activities are in process.
5	<b>Technology Risk- Complexity and fragility of jClarety system:</b> jClarety, PERS primary system of record, is a nineteen-year-old application that has had four pension plans integrated into the functionality with multiple cross tentacles between pension plans which are governed by over 1000 business rules. Each and every change on the surface may seem small, but at times can have far reaching impact to the application. New code changes could require refactoring of primary processes which can greatly increase the scope of work for both development and testing.	<ul style="list-style-type: none"> <li>➤ Iteratively develop more complex code structure; Add necessary technical debt fixes to project scope; Regression Test to ensure technical issue do not negatively affect new code.</li> <li>➤ Assign staff that are familiar with the complex general ledger jClarety code structure.</li> </ul>	The focus of Technical Debt WP 5 (Side Account Reversals) is in an area in jClarety where we have known gaps in documentation and system knowledge. The Functional Design Specification developed in WAR and Technical Debt WP 3, and WP 6 will greatly assist. Additionally, the same staff that developed the above-mentioned SB 1049 code changes are assigned to the Side Account development.

## Project Issues and Action Plans

Listed below are the most critical issues for this project.

For the complete Issue Log, please see the Issue Log tab in the most recent weekly status report: [Technical Debt Weekly Status Report](#)

No	Issue	Resolution / Notes	Estimated Resolution Date
	No current issues.		

# SB 1049 Implementation Program

Status Report for November 17, 2023

Executive Sponsor: Kevin Olineck  
Program Manager: James Allen

## Project Schedule Deliverables and Milestones

Milestones Schedule				
Milestone	Percent Complete	Baseline Finish Date	Actual / Forecast Finish Date*	Status/ Notes
WP 5 - Development Complete	100%	8/9/2023	8/17/2023	
WP 5 - Business Functional Testing complete	100%	9/21/2023	9/21/2023	
WP 5 - User Acceptance Testing complete	0%	1/22/2024	1/22/2024	
WP 5 - Release to production Quality Gate complete	0%	1/25/2024	1/25/2024	
WP 5 - Production Deployment complete	0%	2/15/2024	2/15/2024	
Project Closure Quality Gate	0%	4/29/2024	4/29/2024	
Project ends	0%	4/29/2024	4/29/2024	

\*Finish Date Color: Green = on Schedule, Yellow = in Jeopardy, Red = Late



### Project information: Salary Limit

Project start: 7/01/ 2019 | Project end: 5/28/2021

Project Manager: Bruce Rosenblatt

### Project objective:

The Salary Limit Project is necessary because SB 1049 redefined "salary," which changes the calculation method for Final Average Salary, and contributions for members with subject salary greater than \$195,000. This limit is on salary for plan purposes, and is not a salary cap. The Salary Limit was adjusted for the Consumer Price Index, on 1/04/2021. The redefinition impacts the data and business processes used by diverse teams at PERS, including Benefit Calculations, Member Estimates, Data Verifications, Employer Data Reporting, and Account Data Reviews and Reporting.

### Overall project status: Complete

**Project Narrative:** The Salary Limit Project was successfully closed on 5/28/2021.

### Work Packages:

#### Work Package 1: Short-term Minimum Viable Product (MVP)

- Production Deployment Date: 12/24/2019 (Complete)

#### Work Package 2: Annual Implementation of New Salary Limit

- Production Deployment Date: 1/23/2020 (Complete)

#### Work Package 3: Adding self-service screens to jClarety system to record annual changes and effective dates - Long-term

- Production Deployment Date: 11/19/2020 (Complete)

#### Work Package 4 - Enhances proration work processes when partial year calculations may apply - Long-term

- Production Deployment Date: 5/13/2021 (Complete)

### Project information: Employer Programs

**Project start:** July 1, 2019 | **Project end:** July 16, 2021

**Project Manager:** Joli Whitney

### Project objective:

The Employer Programs section of SB 1049 expands the requirements for the Employer Incentive Fund (EIF); and appropriates \$100 million from the General Fund to the Employer Incentive Fund; directs net proceeds from Oregon Lottery Sports betting to the Employer Incentive Fund; allows participating public employers who make larger than \$10 million deposits to side accounts to determine when they wish to have these funds included in their employer rate assessment; and requires all public employers to participate in the Unfunded Actuarial Liability Resolution Program (UALRP).

### Overall project status: Complete

**Project Narrative:** The Employer Programs project was successfully closed on 7/16/2021.

### Work Packages:

#### WP 1 Migrate and Adapt ERPT

- Acceptance Quality Gate: 3/23/2021 (this WP was not released to production) (Complete)

#### WP 2 ERPT Stakeholder Acceptance and Deployment to Cloud

- Production Deployment Date: 6/3/2021 (Complete)

### Project information: Member Choice

Project start: October 23, 2019 | Project end: August 4, 2021

Project Manager: Joli Whitney

### Project objective:

The Member Choice sections of SB 1049 give members a say in how their Individual Account Program (IAP) accounts will be invested. Members' regular IAP accounts are currently allocated to Target-Date Funds (TDF) based on their year of birth. Beginning with calendar year 2021, members will be able to elect a TDF other than the default TDF.

### Overall project status: Complete

Project Narrative: The Member Choice project was successfully closed on 8/4/2021.

### Work Packages:

#### WP 1.1 Online Election

- Production Deployment Date: 8/20/2020 (Complete)

#### WP 1.2 Voya's updates to website and nightly sweep program

- Production Deployment Date: 1/19/2021 (Complete)

#### WP 1.3 PERS paper form election process including workflow

- Production Deployment Date: 8/12/2020 (Complete)

#### WP 1.4 Development of new reports (to Voya and internal)

- Production Deployment Date 9/29/2020 (Complete)

#### WP 2- Refining TDF Processes - Long-term

##### WP 2.1 -Online Member Services and jClarety Enhancements

- Production Deployment Date: 3/23/2021 (Complete)

##### WP 2.2 -Central Data Management Reports

- Production Deployment Date: 6/15/2021 (Complete)

#### WP 3- Online Member Services Election and Bugs

- Production Deployment Date: 6/24/2021 (Complete)

**Project information: Work After Retirement (WAR)**

**Project start:** July 1, 2019 | **Project end:** 2/24/2022

**Project Manager:** Susan K. Mundell

**Project objective:**

Effective January 1, 2020, the Work After Retirement (WAR) sections of SB 1049 allow most service retirees to work unlimited hours for PERS participating employers in calendar years 2020-2024 while retaining their retirement benefit. It also requires employers to pay employer contributions on retirees' salary during that period.

**Overall project status: Complete**

**Project Narrative:** The Work After Retirement Project was successfully closed on 2/24/2022.

**Work Packages:**

**Work Package 1: Suspend DTL2-07 Retiree Wage Codes – Short-term**

- Production Deployment Date: 12/19/2019 (Complete)

**Work Package 2: New Wage Codes with General Ledger Integration – Long-term**

- Production Deployment Date: 11/19/2020 (Complete)

**Work Package 3: Retro Rate Change – Long-term**







- Production Deployment Date: 5/13/2021 (Complete)

**Work Package 4: Side Account Credit Allocation**

- Production Deployment Date: 12/16/2021 (Complete)







# Senate Bill (SB) 1049 Implementation Road Map

2019-2021 Biennium

	2019						2020						2021										
	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY
 <b>Employer Programs</b>	<ul style="list-style-type: none"> <li>7/1/19 – Effective Date</li> <li>9/3/19 – Employer Incentive Fund (EIF) Application #1 Opens</li> </ul>						<ul style="list-style-type: none"> <li>11/27/19 – EIF Application #1 Closes</li> <li>12/2/19 – EIF Application #2 Opens</li> </ul>						<ul style="list-style-type: none"> <li>8/6/20 – Employer Rate Projection Tool (ERPT) Assessment Complete</li> <li>12/1/20 – EIF Application #2 Closes</li> <li>3/30/21 – Work Package (WP) 1 Migrate and Adapt ERPT →●</li> <li>6/30/21 – WP2 ERPT Stakeholder Acceptance and Deployment →●</li> </ul>										
 <b>Salary Limit</b>							<ul style="list-style-type: none"> <li>12/24/19 – Work Package (WP) 1 – Short Term</li> <li>1/1/20 – Effective Date</li> <li>1/24/20 – WP2 Post 2020 Salary Limit</li> </ul>						<ul style="list-style-type: none"> <li>11/19/20 – WP3 User Screens to Record Annual Salary Limit</li> <li>5/13/21 – WP4 Proration Reports and Workflow →●</li> <li>5/28/21 – Project Close →●</li> </ul>										
 <b>Work After Retirement</b>							<ul style="list-style-type: none"> <li>12/19/19 – Work Package (WP) 1 Retiree Wages Suspended – Short Term</li> <li>1/1/20 – Effective Date</li> </ul>						<ul style="list-style-type: none"> <li>11/19/20 – WP2 New Wage Codes with General Ledger (GL) Integration</li> <li>5/13/21 – WP3 Retro Rate Change →●</li> </ul>										
 <b>Member Redirect</b>							<ul style="list-style-type: none"> <li>6/18/20 – Work Package (WP) 1 Employee Pension Stability Account Set Up/Batch/General Ledger – Short Term</li> <li>7/1/20 – Effective Date</li> </ul>						<ul style="list-style-type: none"> <li>9/22/20 – Voluntary Contributions Initial Functionality</li> <li>10/30/20 – WP2.2 IAP Forecaster Tool – non-jClarety</li> <li>11/19/20 – Voluntary Contributions Final Functionality Release</li> <li>1/21/21 – WP5.2 Online Member Services User Interface →●</li> <li>1/26/21 – WP2 TIED SSIS – Non-jClarety →●</li> <li>6/24/21 – WP4.2 EPSA Display, and WP12 Full EPSA Set up Screen →●</li> <li>3/23/21 – WP3 EPSA Earnings</li> </ul>										
 <b>Member Choice</b>	<ul style="list-style-type: none"> <li>10/23/19 – Project Kick Off</li> <li>5/15/20 – Member Annual Statements (MAS) Flyer Communication</li> </ul>						<ul style="list-style-type: none"> <li>8/19/20 – Member Choice Notification</li> </ul>						<ul style="list-style-type: none"> <li>8/20/20 – Work Package (WP) 1 Online Member Services (OMS) Changes Deployed</li> <li>9/1-30/20 – Election Period</li> <li>1/1/21 – Effective Date</li> <li>3/23/21 – WP2 OMS &amp; jClarety Enhancements →●</li> <li>5/1/21 – Member Choice reflected in MAS →●</li> <li>6/24/21 – WP3 Online Member Services (OMS) Election and Bugs →●</li> </ul>										
<b>PROGRAM INITIATIVE</b>													<ul style="list-style-type: none"> <li>1/26/21 – WP2.1 IAP Payment Recon (short-term) →●</li> </ul>										
 <b>Cross Project Effort</b>							<ul style="list-style-type: none"> <li>9/17/20 – WP1.1 IAP Validator Tool (short-term) →●</li> </ul>						<ul style="list-style-type: none"> <li>3/18/21 – WP1.2 IAP Validator Tool →●</li> <li>4/27/21 – WP2.2 IAP Payment Recon →●</li> <li>5/13/21 – WP7.2 Employer Information Actuarial Extract →●</li> <li>6/18/21 – WP5.1 PYE Invoicing Tool →●</li> <li>6/24/21 – WP7.1 Non-Retired Census Actuarial Extract →●</li> <li>6/28/21 – WP4.1 IAP Adjustment Calculator →●</li> </ul>										




# Senate Bill (SB) 1049 Implementation Road Map

2021-2023 Biennium

	2021						2022												2023					
	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN
 <b>Employer Programs</b>	● 7/16/21 – Project Close																							
 <b>Work After Retirement</b>							● 12/16/21 – WP4 Side Account Credit Allocation						● 2/24/22 – Project Close											
 <b>Member Redirect</b>							● 10/14/21 – WP5 Voluntary Contribution Maintenance						● 3/24/22 – WP4.3 EPSA Transaction Display						● 7/21/22 – WP6.1 EPSA Retirement					
																			6/29/23 – WP9.1 EPSA Withdrawal → ●					
																			6/29/23 – WP9.2 Alter OPSRP Withdrawal → ●					
 <b>Member Choice</b>	● 8/4/21 – Project Close																							
 <b>Technical Debt</b>	● 7/1/21 – Project Kickoff						4/30/22 – WP3 General Ledger Reversals, Including Side Accounts – Functional Design Specification Completed						● 3/31/22 – WP2 Benefit Account Transition Status – Functional Design Specification Completed						6/29/23 – WP6 General Ledger Reversals → ●					
													● 7/21/22 – WP1 Employer Statements						● 10/20/22 – WP4 Hyperion Replacement					
<b>PROGRAM INITIATIVE</b>																								
 <b>Cross Project Effort</b>							● 3/4/22 – WP3 IAP Divorce Tool						● 5/20/22 – WP5.2 PYE Invoicing Tool						● 6/1/22 – WP4.2 IAP Adjustment Calculator					

# Senate Bill (SB) 1049 Implementation Road Map

## 2023-2025 Biennium

PROJECTS	2023						2024						2025												
	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	
 <b>Member Redirect</b>					Nov 17																				
 <b>Technical Debt</b>																									
<b>PROGRAM INITIATIVE</b>																									
 <b>Cross Project Effort</b>																									

December 1, 2023  
PERS Board meeting agenda

## Action and discussion items

1. SB 1049 Implementation update
2. Contingency Fund request
3. 2022 Valuation update and financial modeling results
4. Adoption of Actuarial Equivalency Factor Tables





# Oregon

Tina Kotek, Governor

## Public Employees Retirement System

Headquarters

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Tigard, OR 97281-3700

888-320-7377

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[www.oregon.gov/pers](http://www.oregon.gov/pers)

December 1, 2023

TO: Members of the PERS Board  
 FROM: Richard Horsford, Chief Financial Officer  
 SUBJECT: Request for distribution of contingency funds

### OVERVIEW:

\$2,140.59 of contingency funds are being requested to fund Individual Account Program (IAP) accounts due to an employer bankruptcy leaving an unpaid IAP liability.

### BACKGROUND:

Under the current IAP rules, accounts must be funded by employers before they may be paid out to a beneficiary. Due to this rule, there are currently IAP benefits that cannot be paid because the account has not been fully funded because of a case where an employer – a former charter school – has declared bankruptcy and has no remaining assets to fund the account.

### BOARD OPTIONS:

The PERS Board may:

1. Pass a motion allocating \$2,140.59 of contingency funds to fund the IAP liabilities of Sister Web and Early College Academy 1 & 2, a former employer that is now bankrupt with no remaining assets.
2. No action, leaving IAP benefits unable to be distributed.

### STAFF RECOMMENDATION:

Staff recommends the PERS Board choose Option #1.

December 1, 2023  
PERS Board meeting agenda

## Action and discussion items

1. SB 1049 Implementation update
2. Contingency Fund request
3. 2022 Valuation update and financial modeling results
4. Adoption of Actuarial Equivalency Factor Tables



# FINANCIAL MODELING

## OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

**Presented by:**

**Matt Larrabee, FSA, EA**  
**Scott Preppernau, FSA, EA**

December 1, 2023

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# Introduction

- July: Board adopted updated valuation methods and assumptions, including updated salary increase assumption and maintaining 6.90% rate of return
- September: Milliman presented system-average results from the advisory December 31, 2022 valuation
  - December 31, 2023 actuarial valuation will develop rates for July 2025 – June 2027
- **Today: Long-term financial modeling projections reflecting published investment results through September 30**
  - System average contribution rates
  - System funded status
  - System unfunded actuarial liability (UAL)

# Models and Inputs

- System financials are projected using two different models
  - Steady return model – consistent year-to-year future investment returns
  - Variable return model – future investment returns vary from year to year
- Modeling starts with liabilities and actuarial assumptions from the 12/31/2022 system-wide actuarial valuation report
  - This includes the current Board-adopted 6.90% return assumption for valuing liabilities
- Modeling uses 12/31/2022 assets adjusted for **published regular account returns of +2.65% through September 2023**
  - Returns for October through December 2023 vary in our models based on scenario

# Financial Modeling

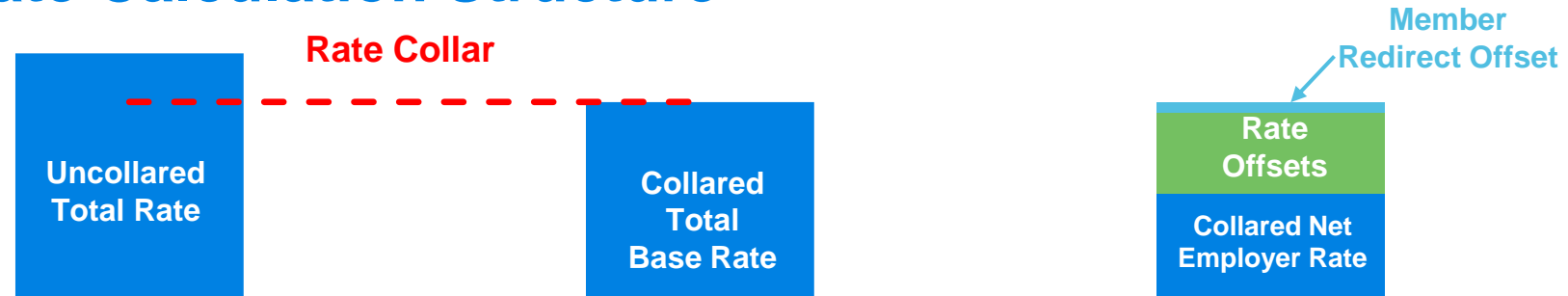
## Comments on System Average Rates

- Projections depict **system average** funded status and employer contribution rates
- Rates shown in this presentation are “employer” rates
  - Redirected member contributions serve as an offset to “total” rate
- No single employer pays the system average rate
  - Contribution rates vary both by experience pooling group, employer, and type of payroll
- In most scenarios, average base employer rates for the 2025-2027 biennium are projected to increase due to investment losses in 2022 and underperformance so far during 2023
  - Actual outcome will vary by rate pool and employer
- Rates shown do not include:
  - Contribution rates for the Individual Account Plan (IAP)
  - Employer contribution rates for the RHIA & RHIPA retiree healthcare programs
  - Debt service payments on employer-specific pension obligation bonds

## Rate Collaring

- In the December 31, 2021 rate-setting valuation, the rate collar held the UAL rate constant (above the uncollared UAL rate) for 2023-2025 contribution rates for the large rate pools and for most independent employers
  - This provides a partial buffer against potential poor investment returns during the 2022 and 2023 calendar years and reduces the biennium-to-biennium increase in contribution rates resulting from any underperformance

# Overview of Rate Calculation Structure



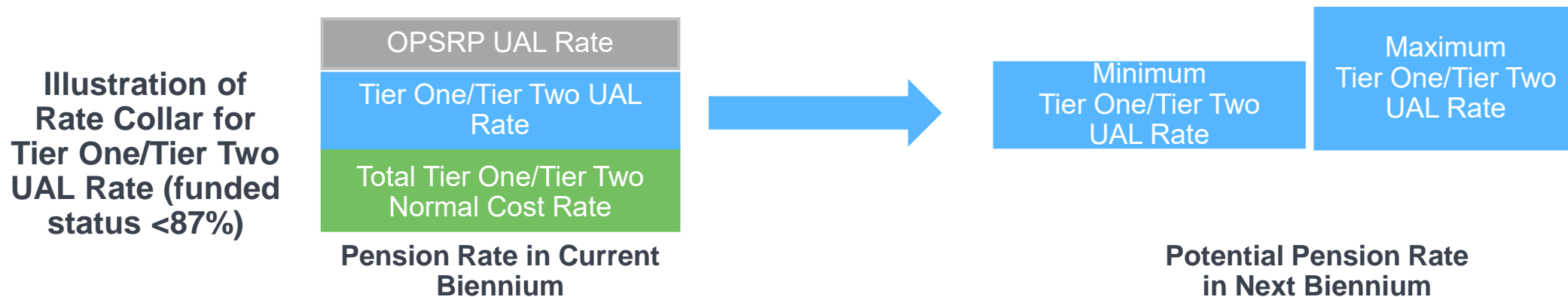
- The **uncollared total rate** is the theoretical contribution rate to reach 100% funded status over a specified amortization period if:
  - Contributions at that rate started on the actuarial valuation date, and
  - Actual future experience mirrors the actuarial valuation's assumptions, and
  - The normal cost rate does not change in subsequent years
- The rate collar sets a biennium's **collared total base rate**, limiting the base rate change for a single biennium when there is a large change in the uncollared rate
- **Member redirect offset** reflects estimated portion of collared total base rate paid by redirected member contributions
- Employers pay the **collared net employer rate**, which reflects the member redirect offset and any rate offset adjustments from:
  - Side account rate offsets for employers with side accounts
  - SLGRP charges/offsets (e.g., Transition Liability/Surplus)

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# Rate Collar Design

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



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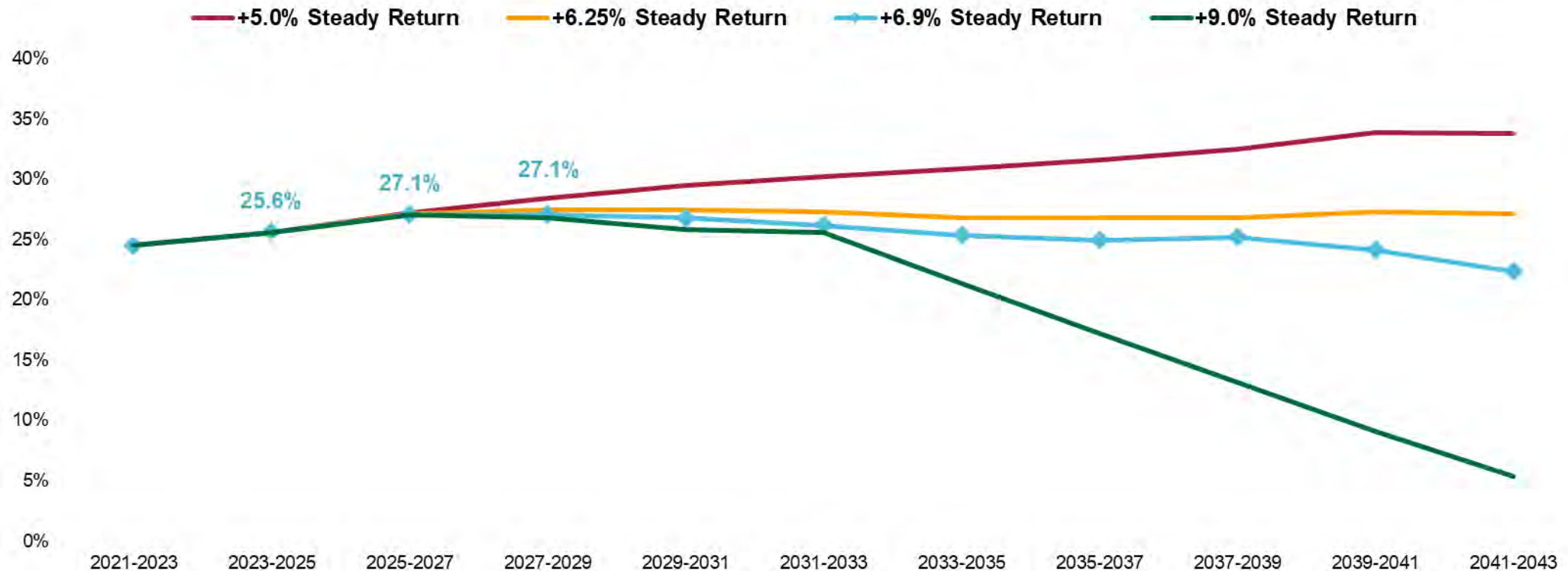
# Steady Return Model

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# Steady Return Model

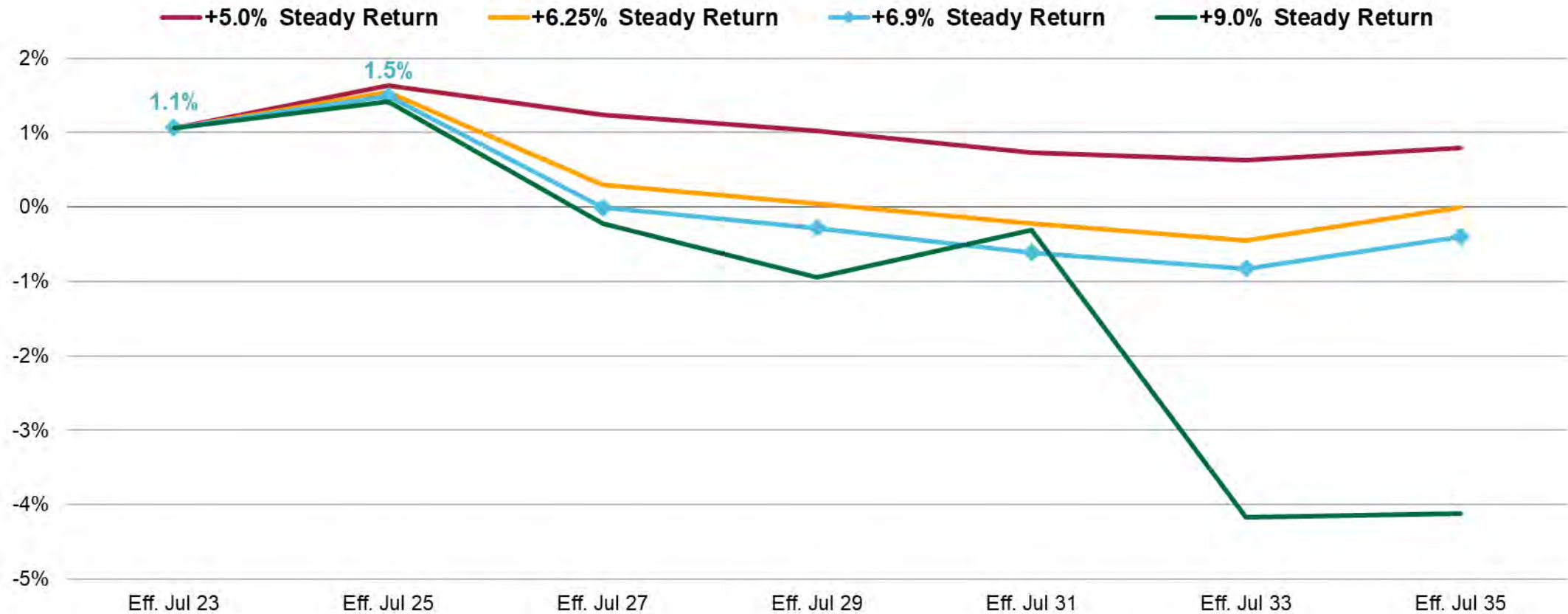
- The next four slides show financial projections under the current rate setting structure
  - Employer rates adjust each biennium, with changes limited by the rate collar
- Four scenarios for **steady annual actual future investment** return are shown
  - **+5.0%; +6.25%; +6.9%; +9.0%**
- While actual future returns won't be steady year-to-year, the steady return model clearly illustrates the financial dynamics
  - More realistic “noisy” future returns will be shown in the variable return model later in this presentation
  - The effects of near-term and/or long-term future annualized returns worse than +5.0% are captured in the variable return model
- Model incorporates published returns through September 2023 of 2.65%

# Employer Collared Base Pension Rates (System Average)

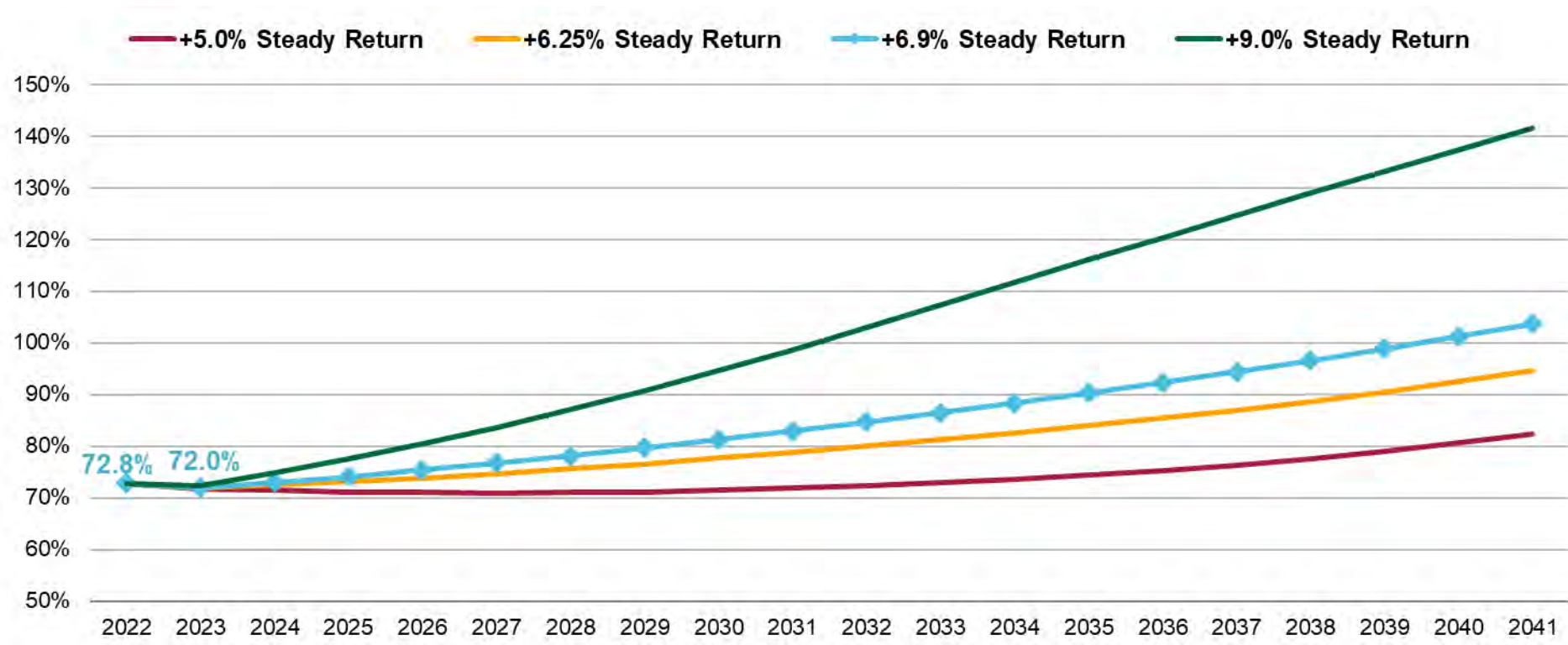


- System average employer collared base pension rates in 2025-27 are projected to increase from 2023-25 rates due to asset underperformance in 2022 and so far in 2023, along with updated salary assumptions
- Blue line: rates decrease as new OPSRP members replace exiting Tier One / Tier Two members
- Final 2025-27 rates will be based on asset returns through December 31, 2023

# Biennial Change in Employer Collared Base Rate (System Average)

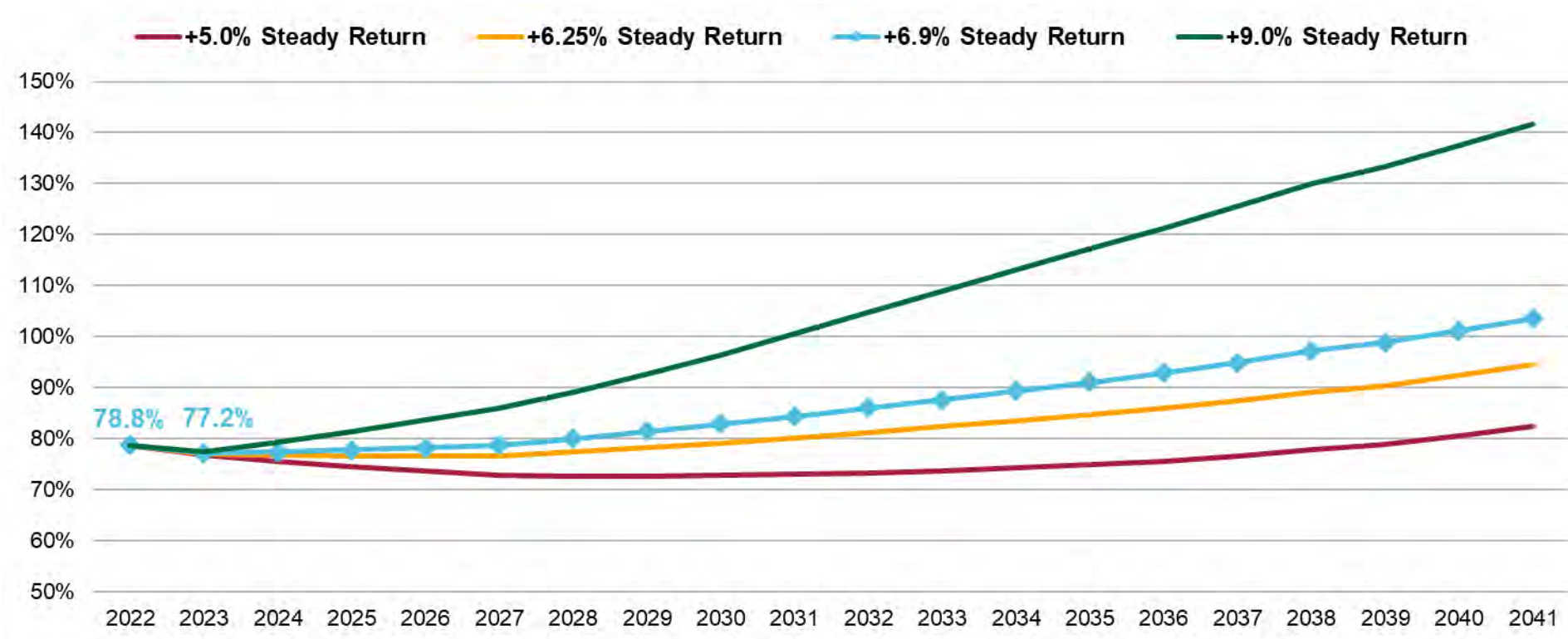


# System Funded Status (Excluding Side Accounts)



- 2023 funded status decreases due to estimated year-end 2023 investment returns
- In steady +6.9% return scenario, funded status projected to reach 100% in 2040

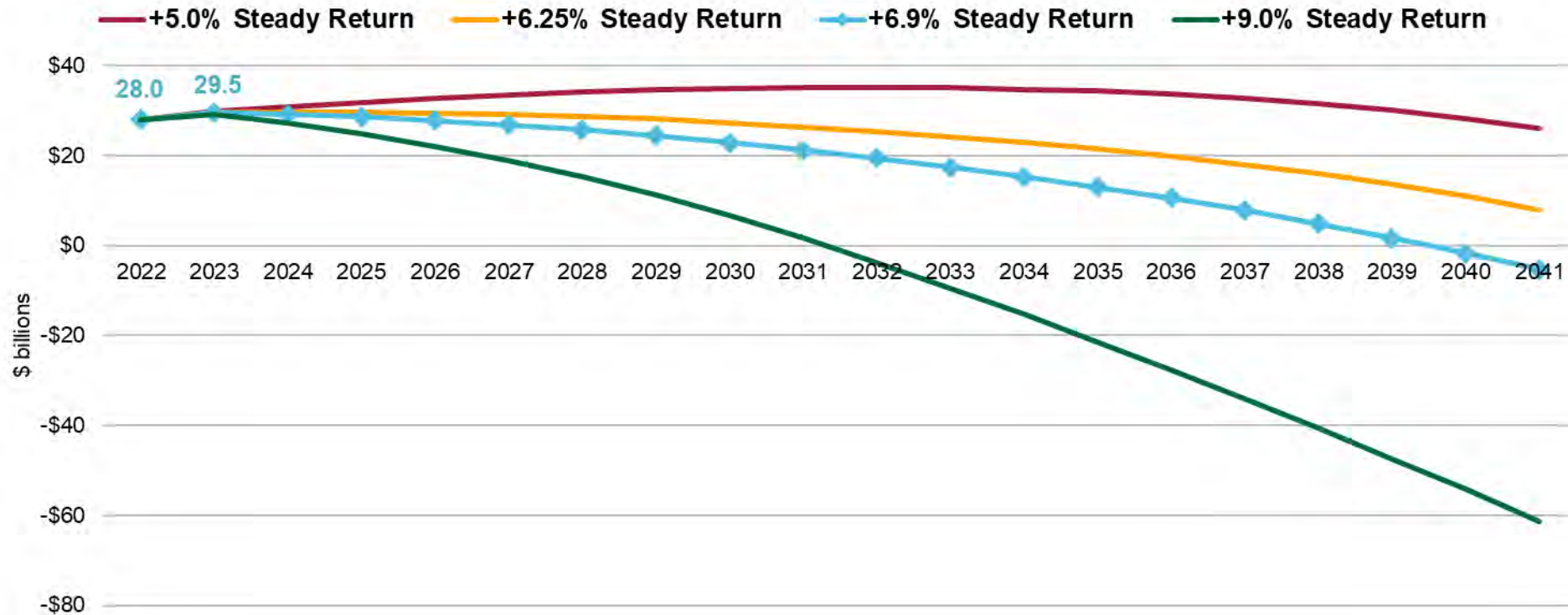
# System Funded Status (Including Side Accounts)



- 2023 funded status decreases due to estimated year-end 2023 investment returns
- In steady +6.9% return scenario, funded status projected to reach 100% in 2040



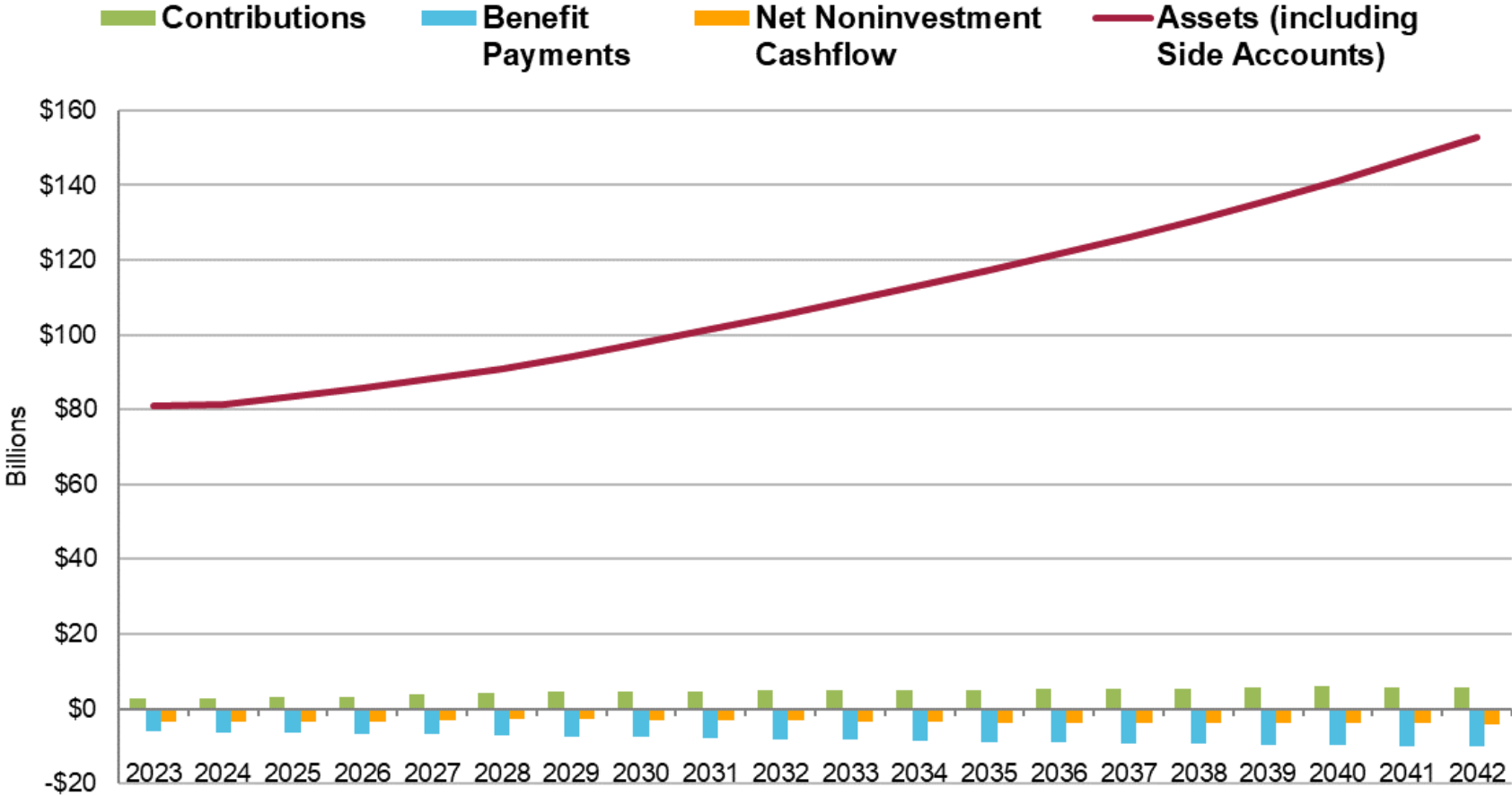
# UAL (Unfunded Actuarial Liability) Excluding Side Accounts



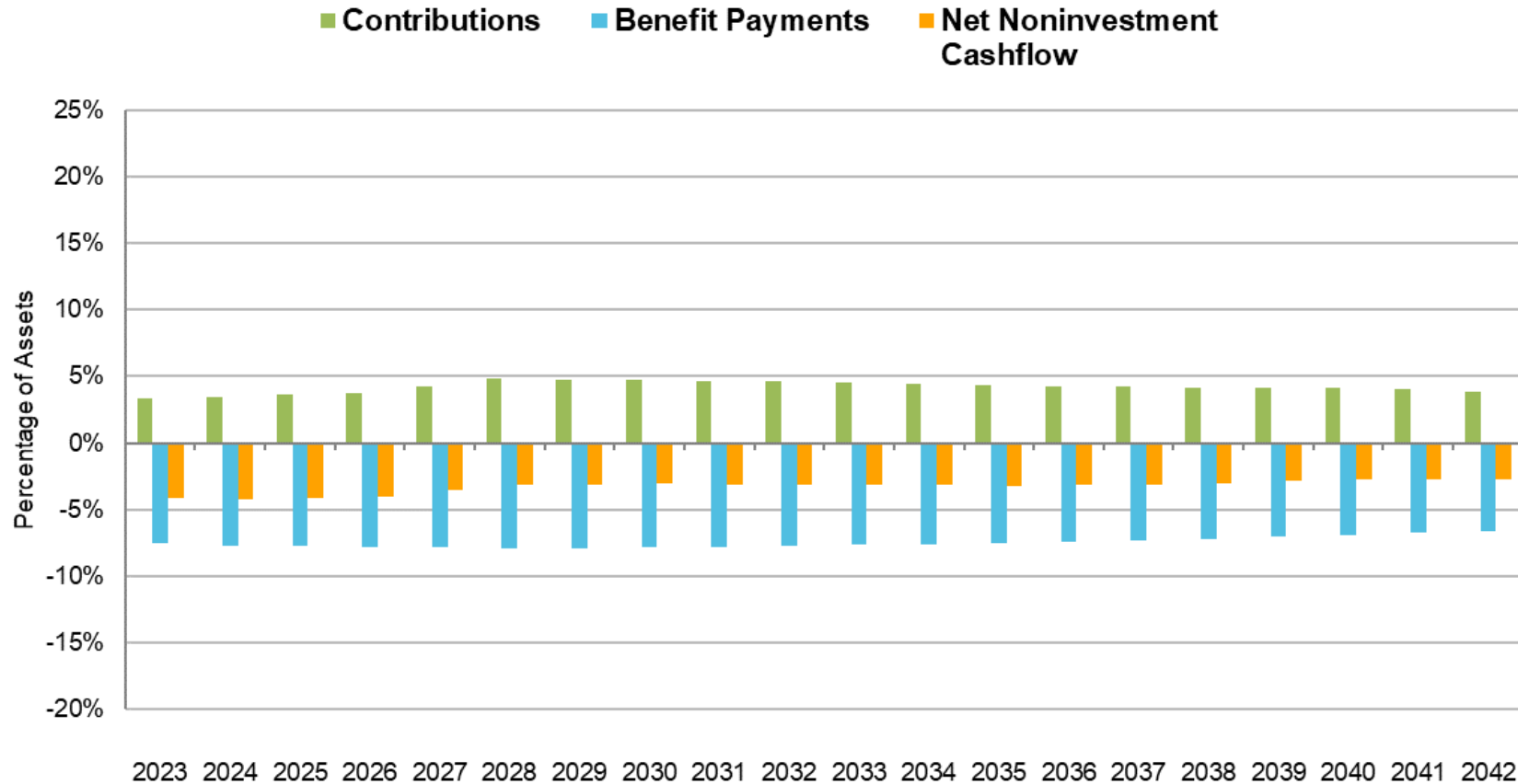
- 2023 UAL increases due to estimated year-end 2023 investment returns
- At steady +6.9% returns, UAL remains relatively level for a couple years before declining to below \$0 at year-end 2040



# Cash Flow and Asset Balance at +6.90% Actual Return

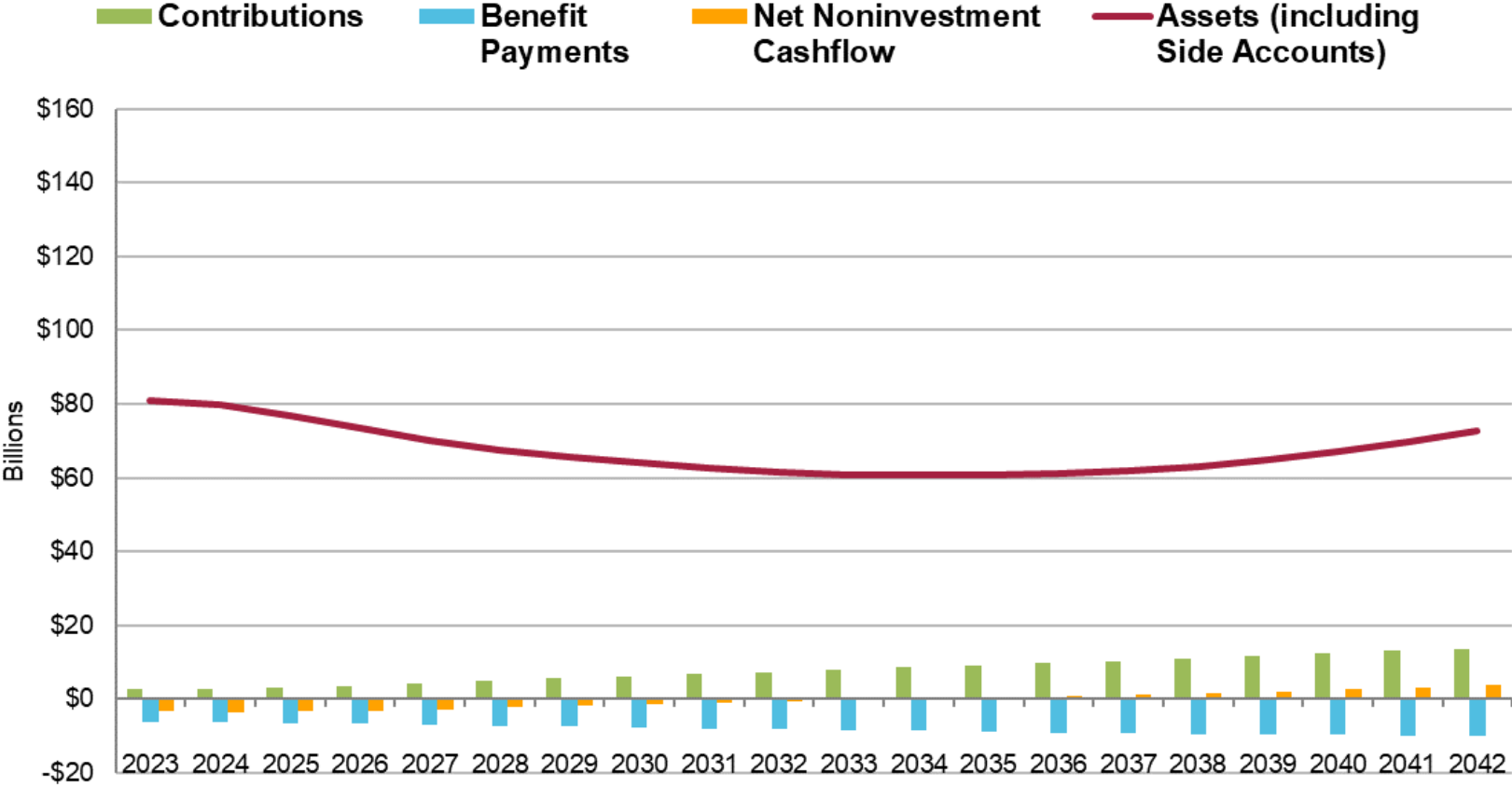


# Cash Flows as % of Assets at +6.90% Actual Future Return



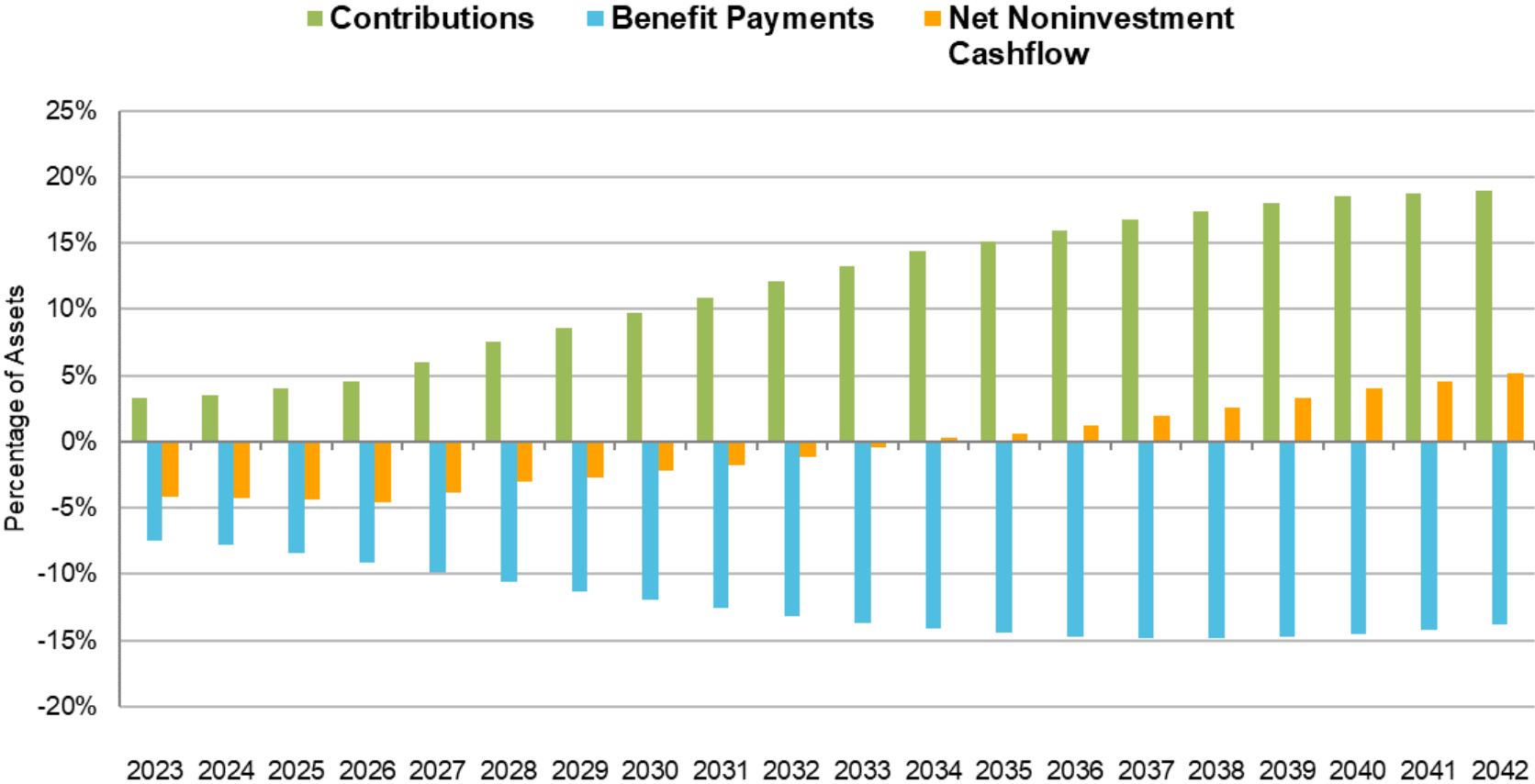
**Net Noninvestment Cashflow = Contributions – Benefit Payments**

# Cash Flow and Asset Balance at +0.00% Actual Future Return



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# Cash Flows as % of Assets at +0.00% Actual Future Return



**Net Noninvestment Cashflow = Contributions – Benefit Payments**



# Variable Return Model

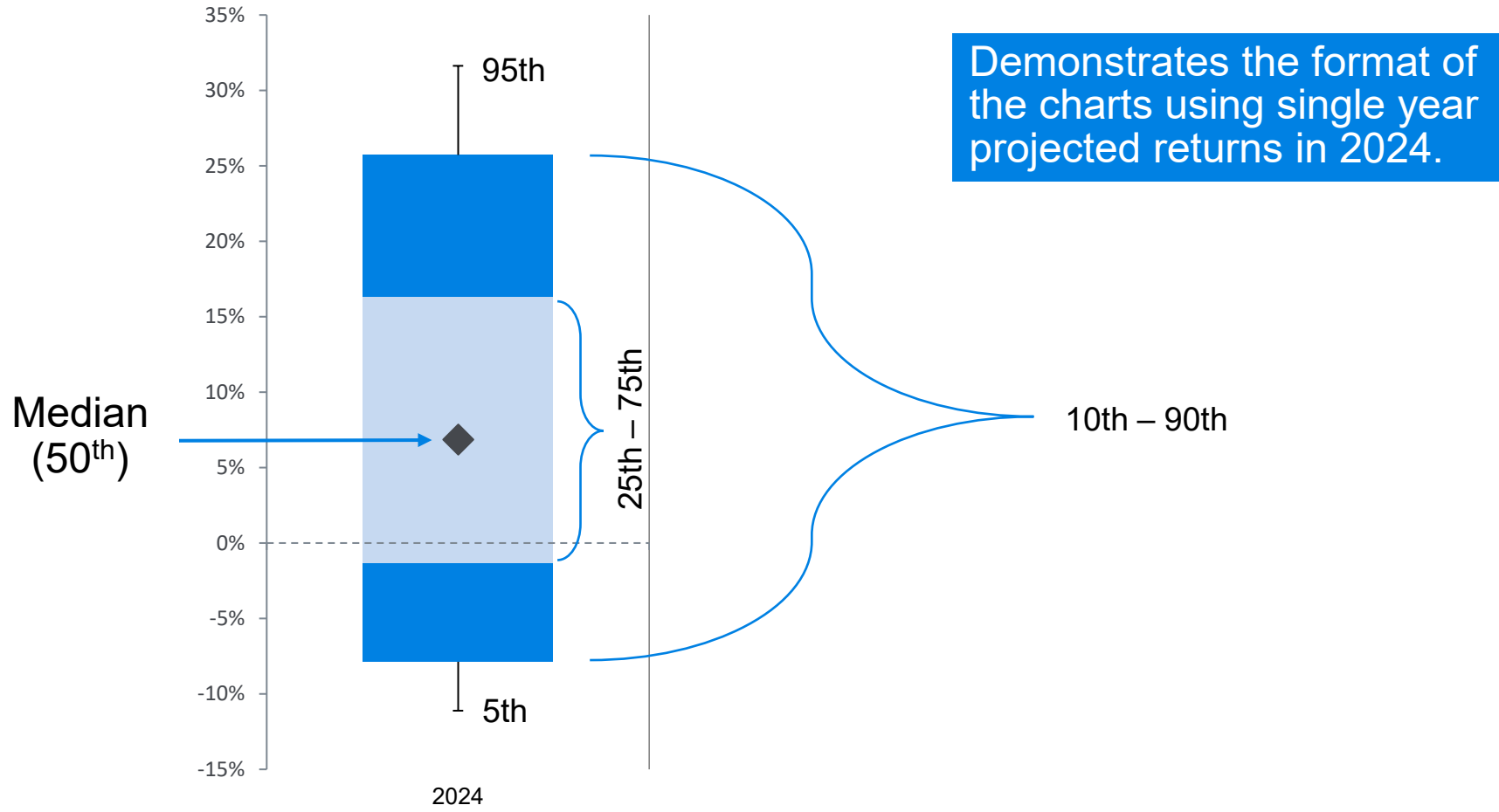
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# Variable Return Model

- Model results are likelihood ranges instead of a single amount
  - The range's distribution is based on a stochastic simulation using 10,000 trials
  - Scenarios were developed by our national capital market specialists, and use the OPERF target asset allocation policy (reflecting recent proposed changes as described in the appendix); for these scenarios, the **median annualized average geometric 20-year return is 7.33%**
  - **Model incorporates published returns through September 2023**
- In our results charts, the dots represent median (50<sup>th</sup> percentile) outcomes
- We display model results from the 5<sup>th</sup> to 95<sup>th</sup> percentiles
  - Ten percent of model outcomes fall outside of the depicted range
- The chart format is demonstrated on the next slide

# PERS Fund Rate of Return

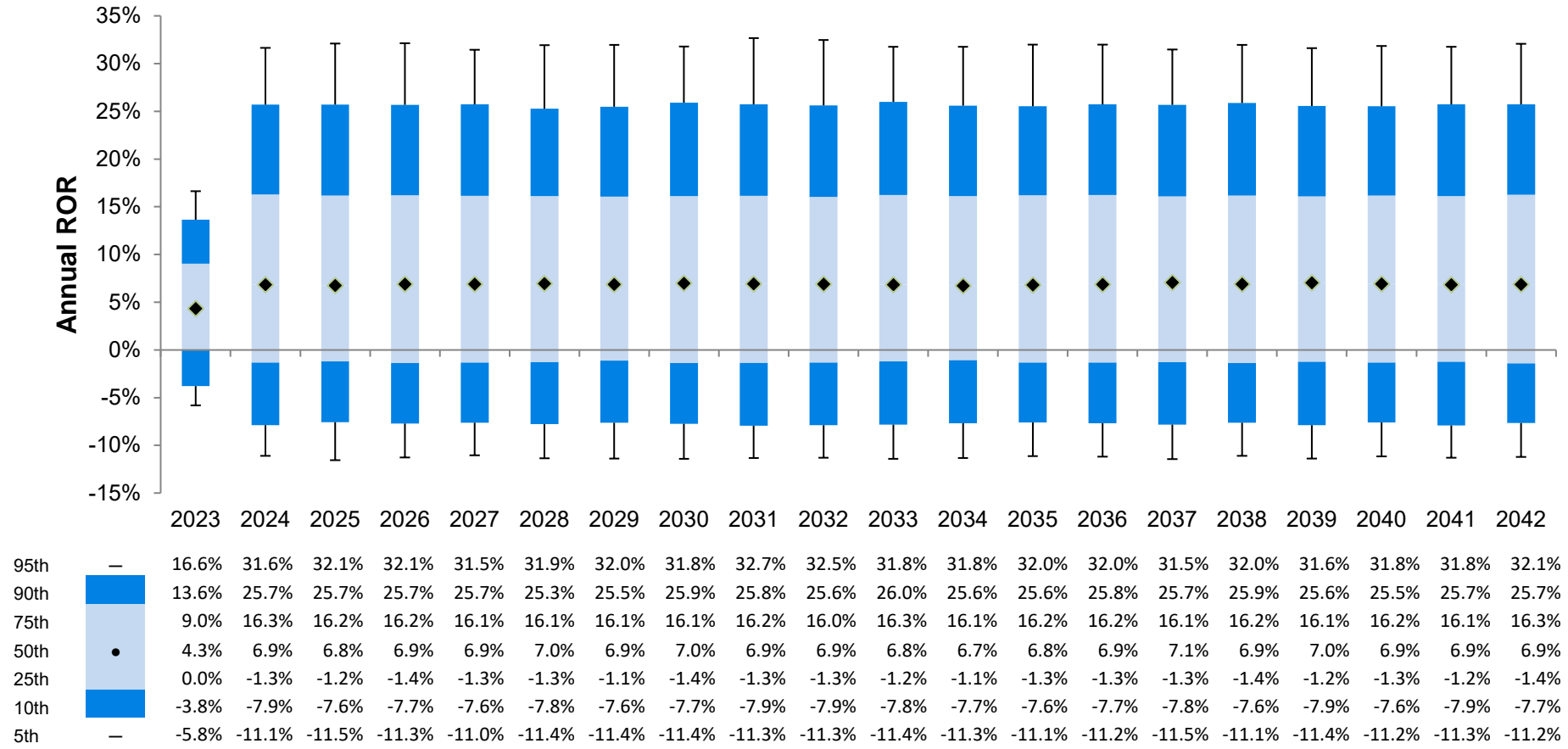
## Projected 2024 Investment Returns



# PERS Fund Rate of Return

## Single Calendar Year Investment Returns

The distribution of returns for 2023 reflects known results through September combined with modeled results for the last quarter of the year. Starting in 2024, our capital market outlooks model projects similar return ranges throughout the modeling period.

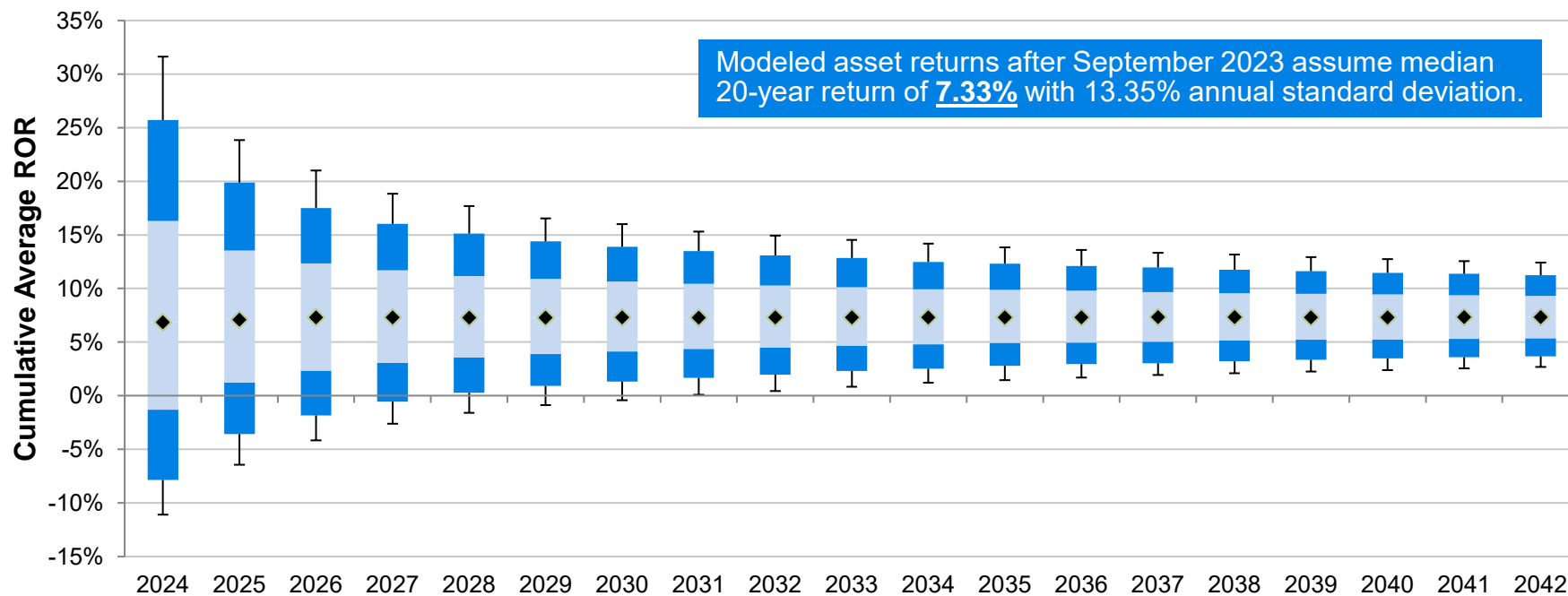


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# Average Annualized Rate of Investment Return

## Post-2023 Modeled Returns (Geometric Average)

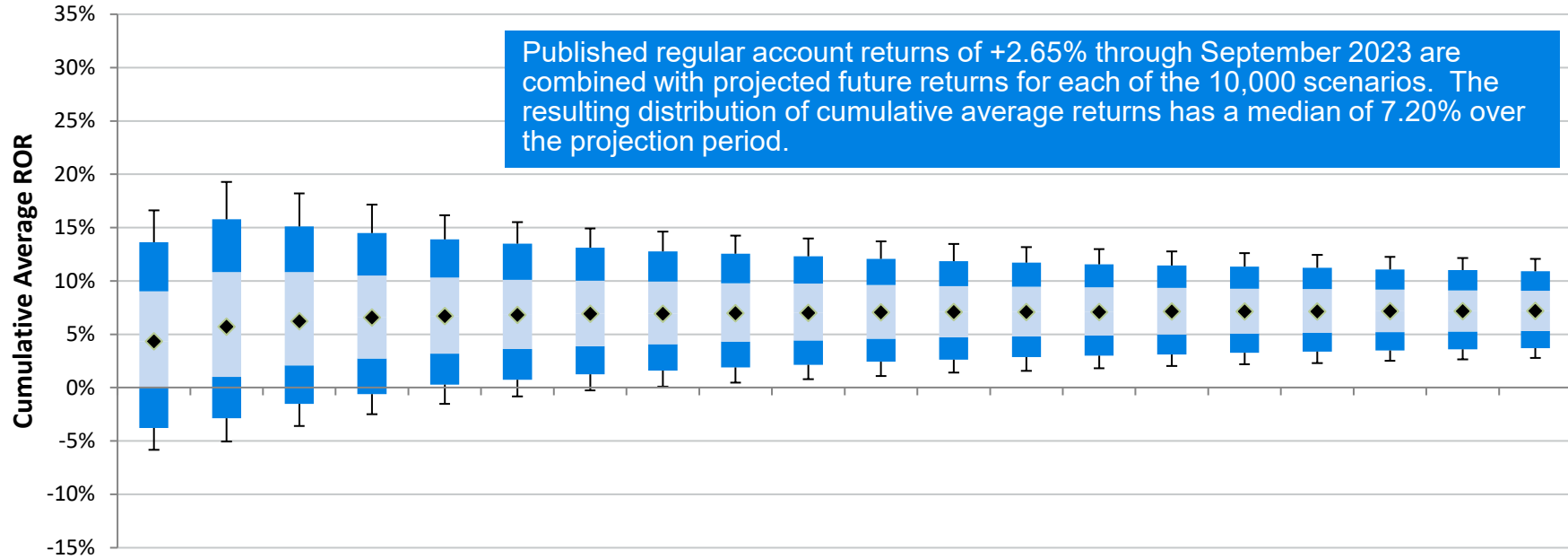


	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	
95th	—	31.6%	23.9%	21.0%	18.9%	17.7%	16.5%	16.0%	15.3%	14.9%	14.5%	14.2%	13.8%	13.6%	13.3%	13.2%	12.9%	12.7%	12.6%	12.4%
90th	—	25.7%	19.9%	17.5%	16.0%	15.1%	14.4%	13.9%	13.5%	13.1%	12.8%	12.5%	12.3%	12.1%	12.0%	11.7%	11.6%	11.5%	11.4%	11.2%
75th	—	16.3%	13.5%	12.4%	11.7%	11.2%	10.9%	10.7%	10.4%	10.3%	10.1%	9.9%	9.9%	9.8%	9.7%	9.6%	9.5%	9.5%	9.4%	9.3%
50th	●	6.9%	7.1%	7.3%	7.3%	7.3%	7.3%	7.3%	7.3%	7.3%	7.3%	7.3%	7.3%	7.3%	7.3%	7.3%	7.3%	7.3%	7.3%	7.3%
25th	—	-1.3%	1.2%	2.3%	3.1%	3.6%	3.9%	4.1%	4.4%	4.5%	4.7%	4.8%	4.9%	5.0%	5.0%	5.1%	5.2%	5.3%	5.3%	5.4%
10th	—	-7.9%	-3.6%	-1.8%	-0.6%	0.3%	0.9%	1.3%	1.7%	2.0%	2.3%	2.5%	2.8%	2.9%	3.0%	3.2%	3.4%	3.5%	3.6%	3.7%
5th	—	-11.1%	-6.4%	-4.2%	-2.6%	-1.6%	-0.9%	-0.4%	0.1%	0.4%	0.8%	1.2%	1.5%	1.7%	1.9%	2.1%	2.3%	2.4%	2.6%	2.7%

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# Average Annualized Rate of Investment Return

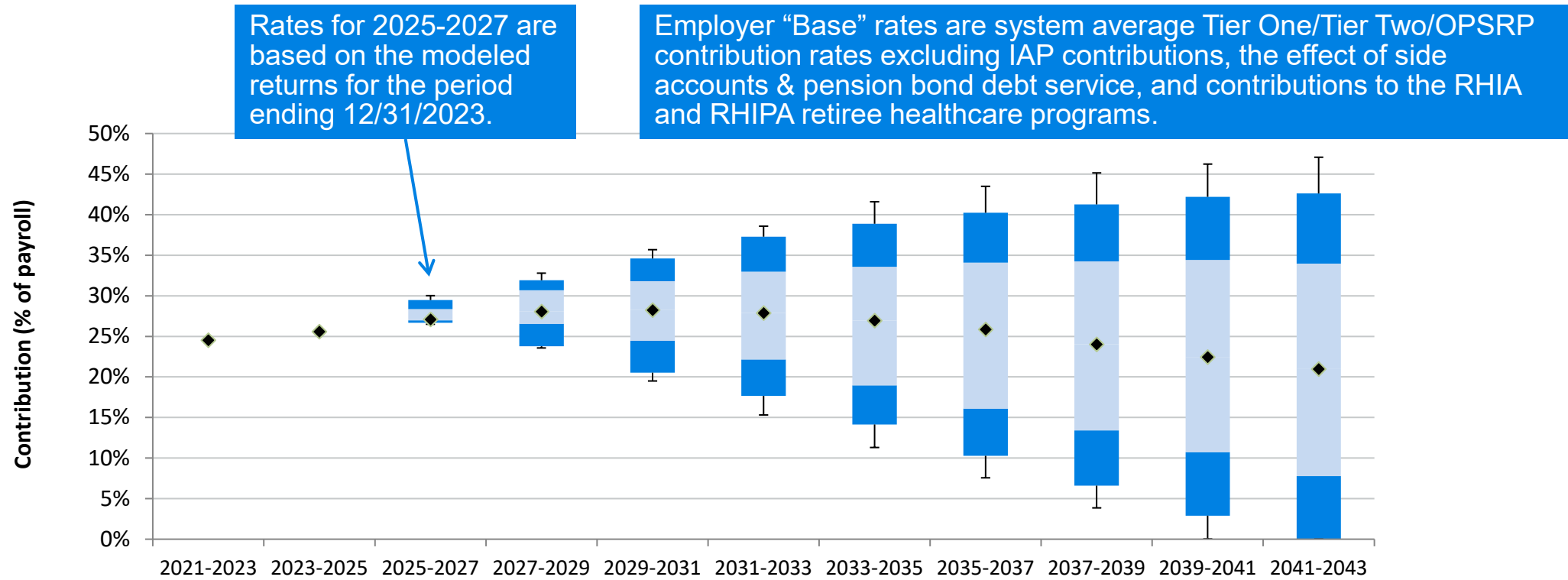
## Post-2022 Modeled Returns (Geometric Average)



	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042
95th	16.6%	19.3%	18.2%	17.2%	16.2%	15.5%	14.9%	14.6%	14.3%	14.0%	13.7%	13.5%	13.2%	13.0%	12.8%	12.6%	12.4%	12.3%	12.2%	12.1%
90th	13.6%	15.8%	15.1%	14.5%	13.9%	13.5%	13.1%	12.8%	12.6%	12.3%	12.1%	11.9%	11.7%	11.6%	11.5%	11.3%	11.2%	11.1%	11.0%	10.9%
75th	9.0%	10.8%	10.8%	10.5%	10.3%	10.1%	10.0%	9.9%	9.8%	9.8%	9.6%	9.5%	9.5%	9.4%	9.4%	9.3%	9.2%	9.2%	9.1%	9.1%
50th	4.3%	5.7%	6.2%	6.6%	6.7%	6.8%	6.9%	6.9%	7.0%	7.0%	7.1%	7.1%	7.1%	7.1%	7.2%	7.2%	7.2%	7.2%	7.2%	7.2%
25th	0.0%	1.0%	2.1%	2.7%	3.2%	3.6%	3.9%	4.1%	4.3%	4.4%	4.6%	4.7%	4.8%	4.9%	5.0%	5.1%	5.2%	5.2%	5.3%	5.3%
10th	-3.8%	-2.9%	-1.5%	-0.6%	0.3%	0.8%	1.3%	1.6%	1.9%	2.1%	2.4%	2.6%	2.9%	3.0%	3.1%	3.3%	3.4%	3.5%	3.6%	3.7%
5th	-5.8%	-5.1%	-3.6%	-2.5%	-1.5%	-0.8%	-0.3%	0.1%	0.5%	0.8%	1.1%	1.4%	1.6%	1.8%	2.0%	2.2%	2.3%	2.5%	2.7%	2.8%

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# Employer Collared Base Pension Rates (System Average)

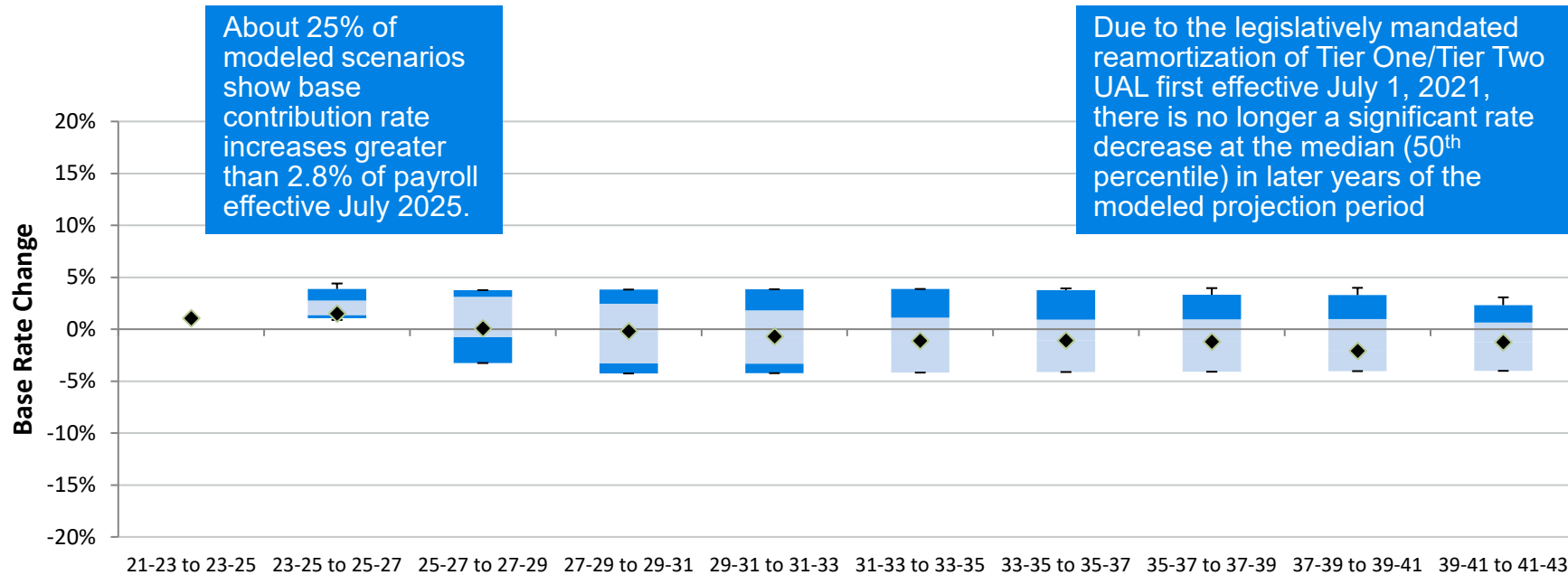


	2021-2023	2023-2025	2025-2027	2027-2029	2029-2031	2031-2033	2033-2035	2035-2037	2037-2039	2039-2041	2041-2043	
5th	—	24.5%	25.6%	30.0%	32.8%	35.7%	38.6%	41.5%	43.4%	45.0%	46.1%	47.0%
10th	—	24.5%	25.6%	29.5%	31.9%	34.6%	37.2%	38.8%	40.1%	41.2%	42.1%	42.5%
25th	—	24.5%	25.6%	28.4%	30.7%	31.8%	32.9%	33.5%	34.0%	34.2%	34.3%	33.8%
50th	•	24.5%	25.6%	27.1%	28.1%	28.3%	27.9%	27.0%	25.9%	24.1%	22.5%	20.9%
75th	—	24.5%	25.6%	27.0%	26.6%	24.5%	22.2%	19.0%	16.2%	13.5%	10.8%	7.9%
90th	—	24.5%	25.6%	26.7%	23.8%	20.5%	17.7%	14.1%	10.3%	6.7%	2.9%	0.0%
95th	—	24.5%	25.6%	26.5%	23.6%	19.5%	15.3%	11.3%	7.6%	3.9%	0.1%	0.0%

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# Biennial Change in Employer Collared Base Pension Rate

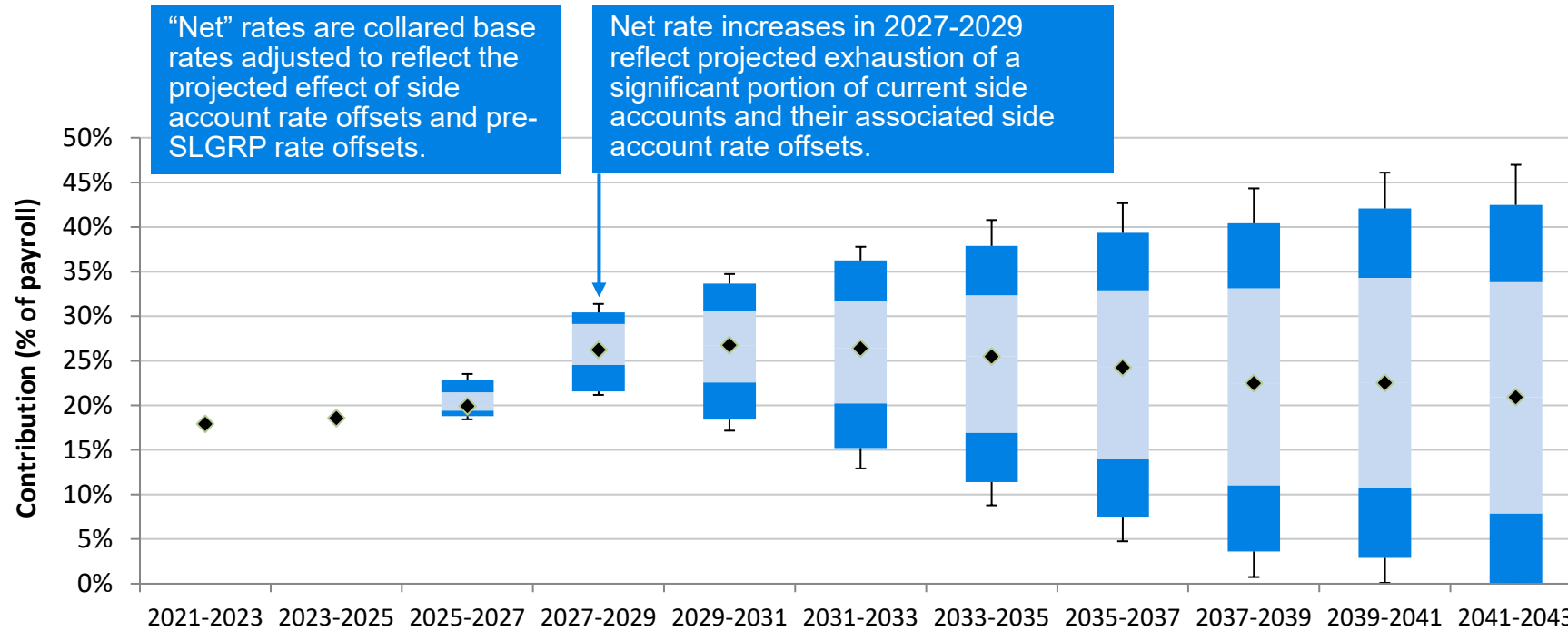
## System Average Rates



		21-23 to 23-25	23-25 to 25-27	25-27 to 27-29	27-29 to 29-31	29-31 to 31-33	31-33 to 33-35	33-35 to 35-37	35-37 to 37-39	37-39 to 39-41	39-41 to 41-43
5th	—	1.1%	4.4%	3.8%	3.8%	3.9%	3.9%	3.9%	4.0%	4.0%	3.1%
10th	■	1.1%	3.9%	3.8%	3.8%	3.9%	3.9%	3.8%	3.3%	3.3%	2.3%
25th	■	1.1%	2.8%	3.1%	2.5%	1.8%	1.1%	0.9%	1.0%	1.0%	0.7%
50th	●	1.1%	1.5%	0.1%	-0.2%	-0.7%	-1.1%	-1.1%	-1.2%	-2.1%	-1.3%
75th	■	1.1%	1.4%	-0.8%	-3.3%	-3.3%	-4.2%	-4.1%	-4.1%	-4.0%	-4.0%
90th	■	1.1%	1.1%	-3.2%	-4.3%	-4.2%	-4.2%	-4.1%	-4.1%	-4.0%	-4.0%
95th	—	1.1%	0.9%	-3.2%	-4.3%	-4.2%	-4.2%	-4.1%	-4.1%	-4.0%	-4.0%

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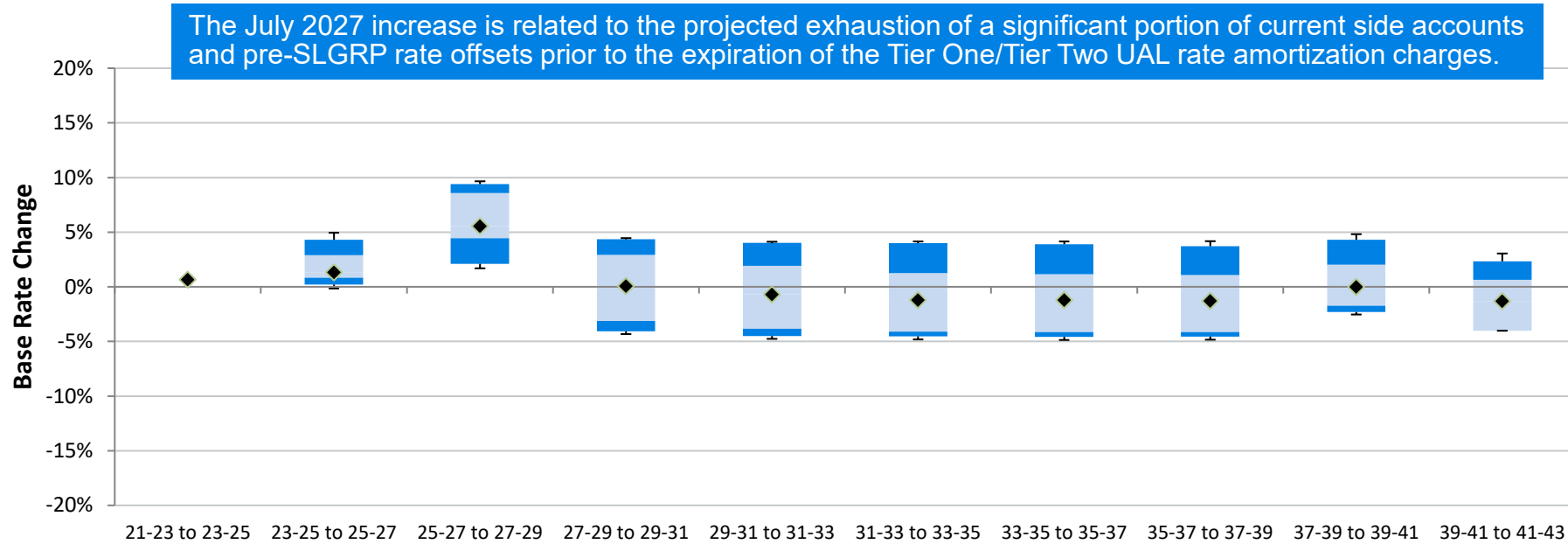
# Employer Collared Net Pension Rates (System Average)



	2021-2023	2023-2025	2025-2027	2027-2029	2029-2031	2031-2033	2033-2035	2035-2037	2037-2039	2039-2041	2041-2043	
5th	—	17.9%	18.6%	23.5%	31.4%	34.7%	37.8%	40.8%	42.7%	44.3%	46.1%	47.0%
10th	—	17.9%	18.6%	22.9%	30.4%	33.7%	36.3%	37.9%	39.4%	40.4%	42.1%	42.5%
25th	—	17.9%	18.6%	21.5%	29.1%	30.6%	31.7%	32.4%	32.9%	33.1%	34.3%	33.8%
50th	•	17.9%	18.6%	19.9%	26.2%	26.7%	26.4%	25.5%	24.2%	22.5%	22.5%	20.9%
75th	—	17.9%	18.6%	19.4%	24.5%	22.6%	20.2%	17.0%	13.9%	11.0%	10.8%	7.9%
90th	—	17.9%	18.6%	18.8%	21.6%	18.4%	15.2%	11.4%	7.5%	3.6%	2.9%	0.0%
95th	—	17.9%	18.6%	18.4%	21.2%	17.2%	12.9%	8.8%	4.7%	0.7%	0.1%	0.0%

# Biennial Change in Employer Collared Net Pension Rate

## System Average Rates

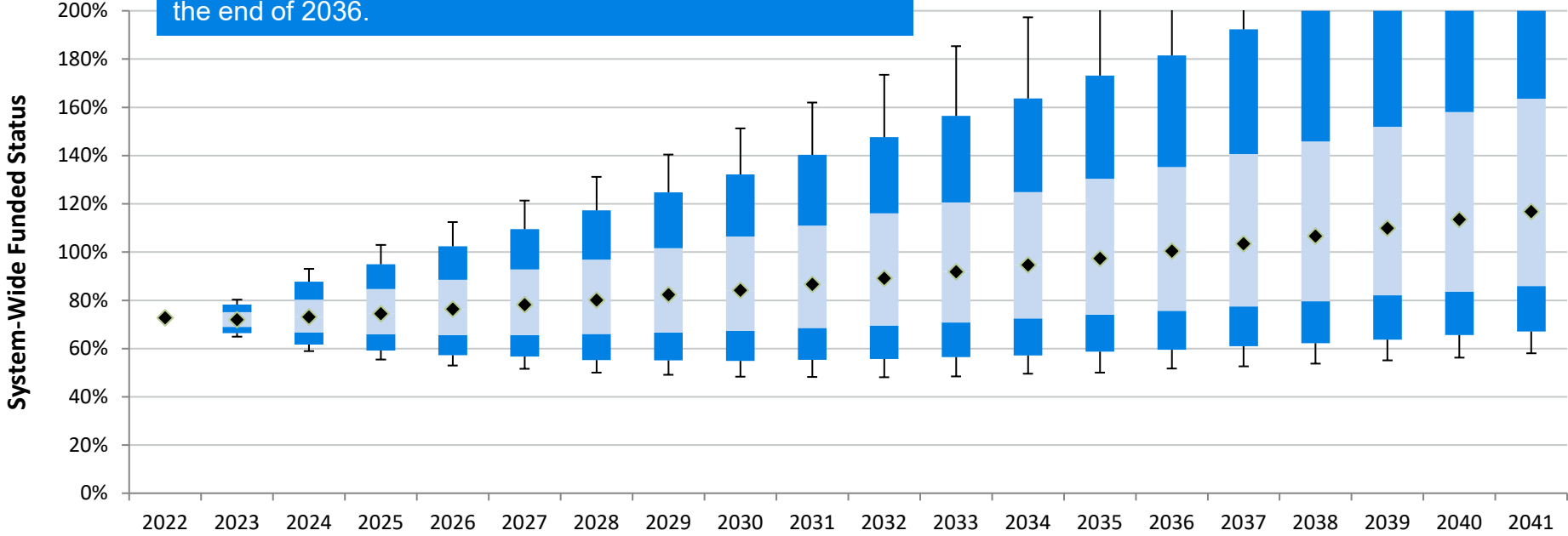


	21-23 to 23-25	23-25 to 25-27	25-27 to 27-29	27-29 to 29-31	29-31 to 31-33	31-33 to 33-35	33-35 to 35-37	35-37 to 37-39	37-39 to 39-41	39-41 to 41-43
5th	—	0.7%	5.0%	9.7%	4.5%	4.1%	4.2%	4.2%	4.2%	3.1%
10th	—	0.7%	4.3%	9.4%	4.4%	4.0%	4.0%	3.9%	4.3%	2.3%
25th	—	0.7%	2.9%	8.6%	2.9%	1.9%	1.3%	1.2%	1.1%	2.0%
50th	—	0.7%	1.3%	5.6%	0.1%	-0.7%	-1.2%	-1.2%	-1.3%	0.0%
75th	—	0.7%	0.8%	4.5%	-3.1%	-3.8%	-4.1%	-4.1%	-4.1%	-1.7%
90th	—	0.7%	0.2%	2.1%	-4.1%	-4.5%	-4.5%	-4.6%	-4.6%	-2.3%
95th	—	0.7%	-0.2%	1.7%	-4.3%	-4.8%	-4.8%	-4.9%	-4.8%	-4.0%

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# Funded Status (Excluding Side Accounts)

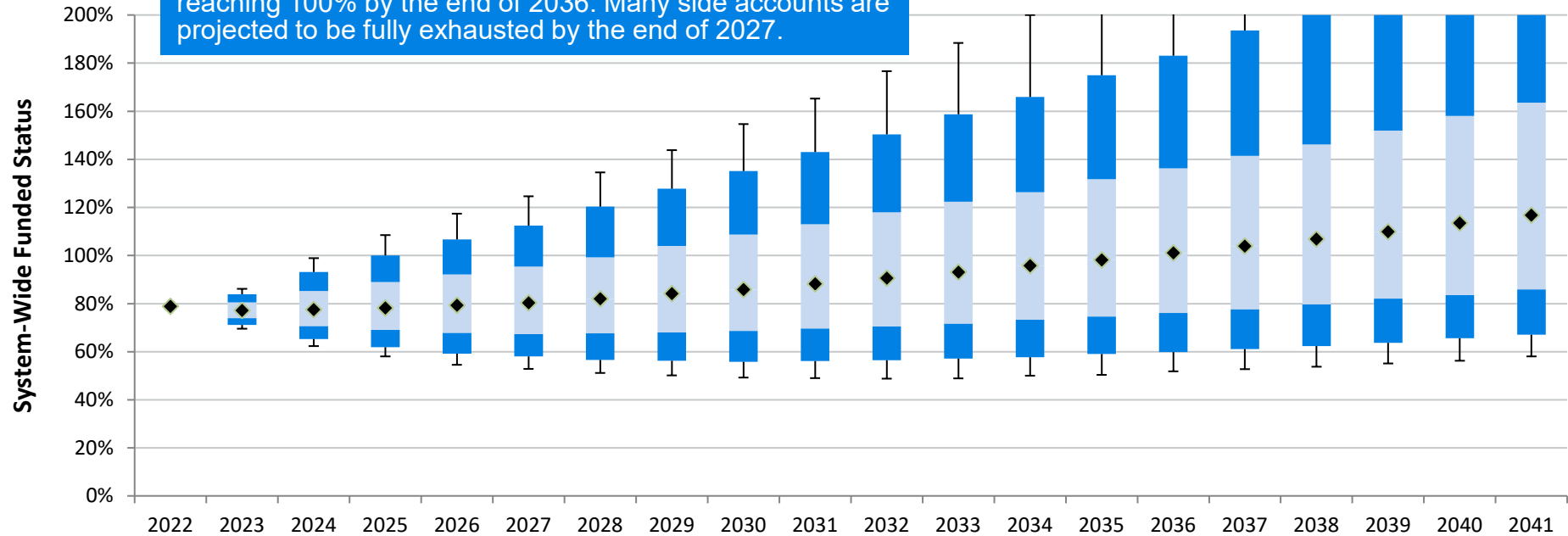
At the 50<sup>th</sup> percentile, funded status is 71.9% at year-end 2023, but subsequently increases to reach over 100% by the end of 2036.



95th	—	72.8%	80.3%	93.1%	102.9%	112.5%	121.3%	130.8%	139.6%	150.9%	161.2%	172.9%	184.9%	196.5%	207.2%	219.7%	231.9%	246.0%	261.1%	270.1%	286.6%
90th	■	72.8%	78.3%	87.7%	94.9%	102.4%	109.5%	117.0%	124.2%	131.6%	139.9%	147.3%	156.0%	163.5%	172.6%	181.4%	192.0%	200.1%	209.9%	220.7%	232.1%
75th	■	72.8%	75.1%	80.3%	84.7%	88.6%	92.9%	96.7%	101.4%	106.2%	110.7%	115.7%	120.5%	124.6%	130.3%	135.1%	140.4%	145.8%	151.9%	158.2%	164.3%
50th	●	72.8%	71.9%	73.1%	74.5%	76.3%	78.2%	80.0%	82.4%	84.1%	86.6%	89.2%	91.9%	94.7%	97.2%	100.3%	103.4%	106.6%	109.8%	113.8%	117.2%
25th	■	72.8%	69.0%	66.8%	65.9%	65.7%	65.6%	66.2%	66.8%	67.5%	68.7%	69.6%	71.1%	72.6%	74.2%	75.8%	77.7%	79.7%	82.2%	83.8%	86.4%
10th	■	72.8%	66.4%	61.7%	59.2%	57.3%	56.7%	55.6%	55.4%	55.2%	55.5%	55.9%	56.7%	57.2%	58.8%	59.8%	61.1%	62.3%	63.8%	65.7%	67.3%
5th	—	72.8%	65.0%	59.0%	55.4%	53.0%	51.6%	50.3%	49.6%	48.8%	48.6%	48.4%	48.7%	49.9%	50.4%	51.8%	52.9%	53.9%	55.1%	56.6%	58.2%

# Funded Status (Including Side Accounts)

At the 50<sup>th</sup> percentile, funded status including side accounts is 77.1% at year-end 2023 but subsequently improves, reaching 100% by the end of 2036. Many side accounts are projected to be fully exhausted by the end of 2027.



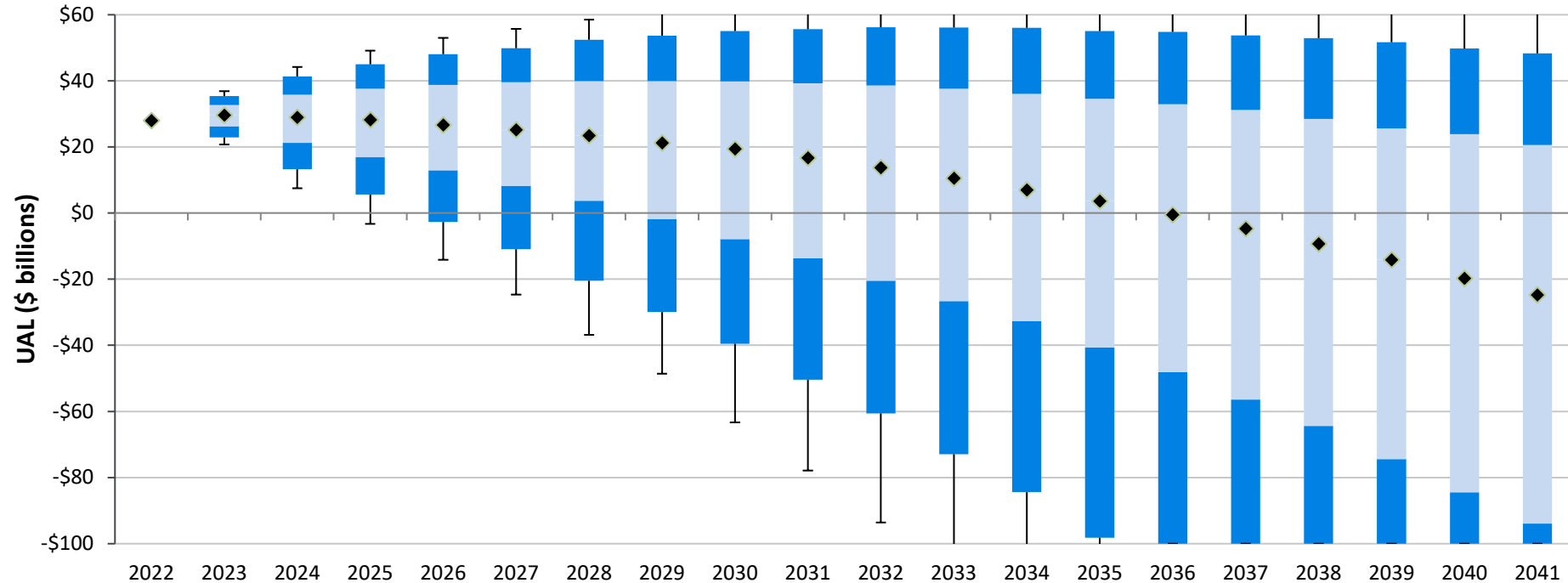
	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	
95th	—	78.8%	86.1%	98.9%	108.5%	117.4%	124.6%	134.1%	143.0%	154.3%	164.5%	175.9%	187.9%	199.2%	209.8%	221.7%	233.3%	247.2%	261.1%	270.1%	286.6%
90th	—	78.8%	83.9%	93.1%	100.0%	106.7%	112.5%	119.9%	127.2%	134.5%	142.6%	149.8%	158.4%	165.6%	174.5%	182.9%	193.1%	201.1%	209.9%	220.7%	232.1%
75th	—	78.8%	80.5%	85.2%	89.0%	92.1%	95.4%	99.1%	103.7%	108.5%	112.8%	117.7%	122.3%	126.1%	131.6%	136.1%	141.2%	146.2%	151.9%	158.2%	164.3%
50th	●	78.8%	77.1%	77.5%	78.2%	79.3%	80.2%	82.0%	84.2%	85.8%	88.2%	90.6%	93.1%	95.7%	98.1%	101.0%	103.9%	106.8%	109.8%	113.8%	117.2%
25th	—	78.8%	73.9%	70.7%	69.1%	67.9%	67.3%	67.7%	68.3%	68.8%	69.9%	70.7%	71.9%	73.3%	74.8%	76.2%	77.9%	79.9%	82.2%	83.8%	86.4%
10th	—	78.8%	71.1%	65.3%	61.9%	59.1%	58.1%	56.8%	56.5%	56.2%	56.4%	56.6%	57.3%	57.8%	59.2%	60.0%	61.2%	62.3%	63.8%	65.7%	67.3%
5th	—	78.8%	69.6%	62.4%	58.0%	54.5%	52.9%	51.4%	50.5%	49.7%	49.4%	49.0%	49.2%	50.3%	50.7%	52.0%	53.0%	53.9%	55.1%	56.6%	58.2%

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# UAL (Excluding Side Accounts)

At the 50<sup>th</sup> percentile, the UAL excluding side accounts is \$29.6 billion at year-end 2023, but subsequently declines to less than \$0 by the end of 2036.

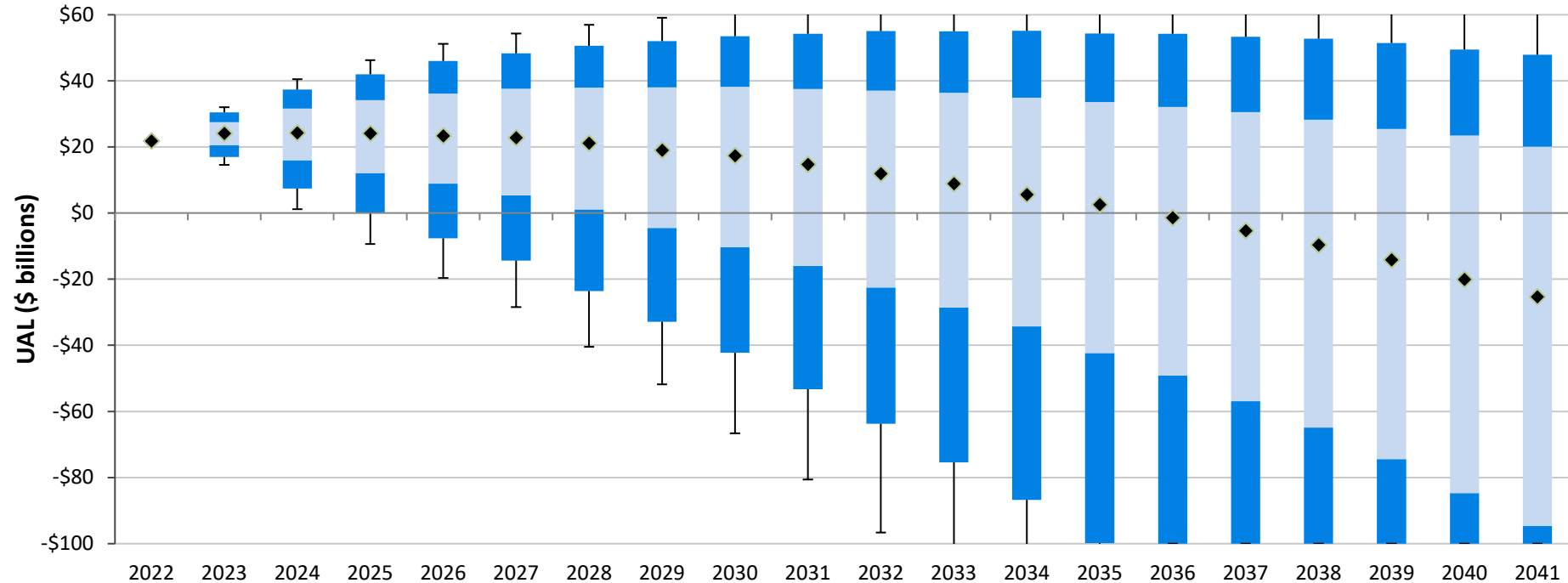


	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	
5th	—	28.0	36.9	44.2	49.1	53.0	55.8	58.3	60.3	62.4	63.8	65.2	65.6	66.1	65.3	65.0	64.4	63.7	62.9	61.2	
10th	—	28.0	35.4	41.3	45.0	48.1	49.9	52.1	53.4	54.7	55.4	56.0	55.8	54.9	54.6	53.6	52.8	51.5	49.5	47.9	
25th	—	28.0	32.7	35.8	37.7	38.8	39.6	39.8	39.7	39.8	39.0	38.4	37.5	35.9	34.4	32.7	30.9	28.4	25.4	23.5	20.1
50th	•	28.0	29.6	29.0	28.2	26.7	25.2	23.4	21.2	19.4	16.7	13.7	10.6	7.0	3.7	-0.4	-4.7	-9.3	-14.2	-20.1	-25.3
75th	—	28.0	26.3	21.3	16.9	12.9	8.3	3.9	-1.7	-7.6	-13.4	-20.0	-26.4	-32.4	-40.6	-47.8	-55.9	-64.2	-74.5	-84.8	-94.7
90th	—	28.0	22.9	13.3	5.6	-2.7	-10.9	-20.1	-29.3	-38.8	-50.0	-60.5	-72.3	-83.9	-97.3	-110.9	-127.3	-141.9	-157.6	-176.5	-195.9
95th	—	28.0	20.8	7.5	-3.3	-14.1	-24.7	-36.4	-47.7	-62.5	-76.5	-92.7	-109.8	-127.7	-144.5	-162.7	-182.1	-205.7	-230.6	-249.7	-277.2

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# UAL (Including Side Accounts)

At the 50<sup>th</sup> percentile, the UAL including side accounts is \$24.2 billion at year-end 2023, remains about that level for two years, and then declines to less than \$0 by the end of 2036. Many side accounts are projected to be fully exhausted by the end of 2027.



	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	
5th	—	21.8	32.0	40.5	46.3	51.2	54.3	57.0	59.1	61.4	62.9	64.4	64.9	65.1	65.6	65.1	64.8	64.3	63.7	62.9	61.2
10th		21.8	30.5	37.4	42.0	46.0	48.3	50.7	52.0	53.5	54.3	55.1	55.0	55.2	54.4	54.2	53.4	52.8	51.5	49.5	47.9
25th		21.8	27.5	31.6	34.1	36.2	37.6	37.9	38.0	38.2	37.5	37.1	36.4	34.9	33.6	32.2	30.6	28.3	25.4	23.5	20.1
50th	•	21.8	24.2	24.3	24.1	23.4	22.8	21.1	19.0	17.4	14.7	11.9	8.9	5.6	2.6	-1.3	-5.3	-9.6	-14.2	-20.1	-25.3
75th		21.8	20.5	16.0	12.1	8.9	5.4	1.1	-4.5	-10.4	-16.1	-22.5	-28.6	-34.3	-42.3	-49.2	-56.9	-64.9	-74.5	-84.8	-94.7
90th		21.8	16.9	7.4	0.0	-7.6	-14.4	-23.6	-32.9	-42.3	-53.3	-63.7	-75.4	-86.8	-99.8	-113.0	-128.9	-143.0	-157.6	-176.5	-195.9
95th	—	21.8	14.6	1.2	-9.4	-19.7	-28.5	-40.4	-51.8	-66.6	-80.6	-96.7	-113.7	-131.4	-147.5	-165.6	-184.4	-207.4	-230.6	-249.7	-277.2

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# Variable Return Model Stress Test

- As in recent years, we also used the variable return model to do a “stress test” of the likelihood of certain events in the 10,000 scenarios modeled
  - Testing is done at a system-average level; results for individual rate pools or employers may vary
- The percentage of modeled scenarios with funded status above a specified threshold at the end of the projection period is shown below
  - Median projected funded status excluding side accounts at year-end 2023 is 71.9%

Likelihood of Funded Status Level as of 12/31/2041	
Funded Status (Excluding Side Accounts) > 100%	63%
Funded Status (Excluding Side Accounts) > 90%	72%
Funded Status (Excluding Side Accounts) > 80%	80%
Funded Status (Excluding Side Accounts) > 70%	88%
Funded Status (Excluding Side Accounts) > 60%	94%

# Variable Return Model Stress Test

- Median projected funded status excluding side accounts at year-end 2023 is 71.9%
- The likelihood of specified events occurring at some valuation date during the 20-year projection period is shown below

Likelihood of Event Occurring at Some Valuation Date in Next 20 Years	
Funded Status (Excluding Side Accounts) > 100%	79%
Funded Status (Excluding Side Accounts) < 60%	39%
Funded Status (Excluding Side Accounts) < 40%	4%

# Variable Return Model Stress Test

- The likelihood of specified events occurring during the 20-year projection period is shown below

Likelihood of Event Occurring in at Least One Biennium in Next 20 Years	
Employer Collared Base Rate (Excluding Retiree Healthcare) < 10% of Pay	30%
Employer Collared Base Rate (Excluding Retiree Healthcare) > 30% of Pay	57%
Employer Collared Base Rate (Excluding Retiree Healthcare) > 40% of Pay	17%

- The system-average employer base rate for the 2023-2025 biennium is about 25.6%, per the December 31, 2021 valuation

## Variable Return Model Stress Test

- As shown earlier, about 25% of modeled scenarios show an increase in the employer collared base rate above 2.8% of payroll at July 2025
- Table shows likelihood in the model of an employer collared base rate increase exceeding a selected threshold at the July 2025 and July 2027 rate change dates

Likelihood of the Employer Collared Base Rate Increase Exceeding Threshold		
<u>Threshold Increase</u>	<u>July 2025</u>	<u>July 2027</u>
2% of Pay	40%	32%
3% of Pay	21%	26%
4% of Pay	9%	<1%
5% of Pay	<1%	<1%

- Changes in net rates will vary by employer depending on the size and amortization schedule of any side account(s) the employer may have
  - Rate offsets for over half of existing side accounts are scheduled to expire in July 2027, which will increase net rates for affected employers

## Wrap Up / Next Steps

- At the February 2, 2024 meeting, preliminary year-end 2023 investment results will be available
  - We can then comment as warranted on estimated impact on the 12/31/2023 actuarial valuation results, which will develop 2025 – 2027 contribution rates



# Appendix

This work product was prepared for discussion purposes only and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Any recipient of this work product who desires professional guidance should engage qualified professionals for advice appropriate to its own specific needs.



# Certification

This presentation summarizes deterministic and stochastic modeling for the Oregon Public Employees Retirement System (“PERS” or “the System”) over a 20-year period beginning December 31, 2022 under a wide range of potential economic scenarios. The results are based upon the same assumptions, methods, and plan provisions as described in the 2022 Experience Study and the December 31, 2022 System-Wide Actuarial Valuation Report, except where noted otherwise.

Actuarial computations presented in this report are for purposes of determining the recommended funding amounts consistent with the adopted funding policy of the System. The computations prepared for other purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System’s funding policy. The calculations in this report have been made on a basis consistent with our understanding of the plan provisions described in the appendix of this report. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

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

Actuarial assumptions, including discount rates, mortality tables, and others identified in this report, and actuarial cost methods are adopted by the PERS Board, which is responsible for selecting the plan’s funding policy, actuarial valuation methods, asset valuation methods, and assumptions. The policies, methods, and assumptions used in this valuation are those that have been so adopted and are described in this report. The System is solely responsible for communicating to Milliman any changes required thereto. All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which, in our professional opinion, are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System and are expected to have no significant bias. The valuation results were developed using models intended for valuations that use standard actuarial techniques. We have reviewed the models, including their inputs, calculations, and outputs for consistency, reasonableness, and appropriateness to the intended purpose and in compliance with generally accepted actuarial practice and relevant actuarial standards of practice.

This work product was prepared for discussion purposes only and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Any recipient of this work product who desires professional guidance should engage qualified professionals for advice appropriate to its own specific needs.

# Certification

A valuation report is only an estimate of the System's financial condition as of a single date. It can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions. While the valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct. Determining results using alternative assumptions is outside the scope of our engagement.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law. Due to the limited scope of our assignment, we did not perform an analysis of the potential range of future measurements. Our December 31, 2022 Actuarial Valuation Report provides additional discussion of the System's risks. The PERS Board has the final decision regarding the appropriateness of the assumptions.

Milliman's work is prepared solely for the internal business use of the Oregon Public Employees Retirement System. Milliman does not intend to benefit or create a legal duty to any third-party recipient of this report. No third-party recipient of Milliman's work product should rely upon this report. Such recipients should engage qualified professionals for advice appropriate to their own specific needs. No third-party recipient of Milliman's work product should rely upon Milliman's work product. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel. The actuaries are independent of the plan sponsors. We are not aware of any relationship that would impair the objectivity of our work.

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

# Appendix

## Actuarial Basis

### Data

We have based our calculation of the liabilities on the data supplied by the Oregon Public Employees Retirement System and summarized in the Valuation Report.

Assets as of December 31, 2022, were based on values provided by Oregon PERS reflecting the Board's earnings crediting decisions for 2022, as shown in the Valuation Report. Financial model projections reflect September 30, 2023 investment results for regular and variable accounts as published by Oregon State Treasury.

### Methods / Policies

*Actuarial Cost Method:* Entry Age Normal, adopted effective December 31, 2012.

*UAL Amortization:* The UAL for OPSRP and Retiree Health Care as of December 31, 2007 were amortized as a level percentage of combined valuation payroll over a closed 16-year period for OPSRP and a closed 10-year period for Retiree Health Care. For the Tier One/Tier Two UAL, the amortization period was reset at 20 years as of December 31, 2013. Senate Bill 1049 was signed into law in June 2019 and required a one-time re-amortization of Tier One/Tier Two UAL over a closed 22-year period at the December 31, 2019 rate-setting valuation which set actuarially determined contribution rates for the 2021-2023 biennium. Gains and losses between subsequent odd-year valuations are amortized as a level percentage of combined valuation payroll over the amortization period (20 years for Tier One/Tier Two, 16 years for OPSRP, 10 years for Retiree Health Care) from the odd-year valuation in which they are first recognized.

For the Retiree Health Care programs (RHIA and RHIPA), beginning with the December 31, 2021 rate-setting valuation the amortization policy when a program is over 100% funded status will be to amortize the actuarial surplus over Tier One/Tier Two payroll using a rolling 20-year amortization basis. The resulting negative UAL Rate will offset the normal cost rate for the program, but not below 0.0%. If either program subsequently fell below 100%, the UAL would be amortized over combined payroll following the 10-year closed, layered amortization policy.

# Appendix

## Actuarial Basis

### Methods / Policies (cont'd)

**Contribution rate stabilization method:** The UAL Rate contribution rate component for a rate pool (e.g. Tier One/Tier Two SLGRP, Tier One/Tier Two School Districts, OPSRP) is confined to a collared range based on the prior biennium's collared UAL Rate contribution rate component (prior to consideration of side account offsets, SLGRP transition liability or surplus rates, or pre-SLGRP liability rate charges or offsets).

**Collar Width:** the rate pool's new UAL Rate contribution rate component will generally not increase or decrease from the prior biennium's collared UAL Rate contribution rate component by more than the following amount:

- Tier One/Tier Two SLGRP and Tier One/Tier Two School District Pool: 3% of payroll
- OPSRP: 1% of payroll
- Tier One/Tier Two rates for independent employers: greater of 4% of payroll or one-third of the difference between the collared and uncollared UAL Rate at the prior rate-setting valuation. In addition, the UAL Rate will not be allowed to be less than 0.00% of payroll for any Tier One/Tier Two independent employer with a funded status (excluding side accounts) less than 100%.

**UAL Rate decrease restrictions:** the UAL Rate for any rate pool will not be allowed to decrease if the pool's funded status is 87% (excluding side accounts) or lower; the allowable decrease will phase into the full collar width from 87% funded to 90% funded.

**Expenses:** System-wide administration expenses are assumed to be equal to \$64.0M. The assumed expenses are allocated between Tier One/Tier Two and OPSRP based on projected payroll and are added to the respective normal costs.

**Actuarial Value of Assets:** Equal to Market Value of Assets excluding Contingency and Tier One Rate Guarantee Reserves. The Tier One Rate Guarantee Reserve is not excluded from assets if it is negative (i.e. in deficit status). The Actuarial Value of Assets includes the value of Employee Pension Stability Accounts (EPSA).

### Assumptions

Assumptions for valuation calculations are as described in the 2022 Experience Study Report.

### Provisions

Provisions valued are as detailed in the December 31, 2022 System-Wide Actuarial Valuation Report.

# Appendix

## Rate Projection Basis

### Assumptions

In general, all assumptions are as described in the 2022 Experience Study Report.

The major actuarial valuation assumptions used in our projections are shown below. They are aggregate average assumptions that apply to the whole population and were held constant throughout the projection period. The economic experience adjustments were allowed to vary in future years given the conditions defined in each economic scenario.

- Valuation interest rate – 6.90%
- Tier One Regular account growth – 6.90%
- Actual fund investment return – Varies by scenario according to capital market assumptions
- Variable account growth – Equal to investment return on public equity portion of the fund
- Inflation assumption – 2.40%
- Inflation experience – Varies by scenario according to capital market assumptions
- Wage growth assumption – 3.40%
- Wage growth experience – 1.00% greater than inflation experience
- Demographic experience – as described in 2022 Experience Study Report
- New entrant experience – New members are assumed to be hired at the rate necessary to keep the total number of members in each job class (General Service, School District, Police & Fire, and Judges) constant over the duration of the projection. All new entrants other than judges are assumed to join as OPSRP members. New entrant pay is assumed to grow at the rate necessary for overall system payroll to increase with wage growth experience, as described above.

# Appendix

## Rate Projection Basis

### Reserve Projection

Contingency Reserve as of 12/31/2022 was \$50.0M. No future increases or decreases to this reserve were assumed.

The Tier One Rate Guarantee Reserve (“RGR”) was \$736.5M as of 12/31/2022. The RGR was assumed to grow with excess returns above the 6.90% target growth on Tier One Member Accounts. When modeled aggregate returns were below 6.90%, applicable amounts from the RGR were assumed to transfer to Tier One Member Accounts to maintain the 6.90% target growth rate. The RGR is allowed to be negative, but the reserve is not excluded from valuation assets when it is negative. We did not include in rates any potential additional employer levy that could be required to eliminate a persistent negative RGR.

### Offset for Member Redirect Contributions

Under Senate Bill 1049, a portion of the 6% of pay member contribution previously made to the IAP was redirected to fund Tier One/Tier Two and OPSRP defined benefits beginning July 1, 2020. For Tier One/Tier Two members, the redirected amount will be 2.50% of pay, and for OPSRP it will be 0.75% of pay. Members with less than \$2,500 in monthly pay (indexed in future years) will be exempt from the redirection.

For the rate projection, member redirect contributions are assumed to offset the contribution rates paid by employers. The offset is assumed to be 2.40% of total payroll for Tier One/Tier Two and 0.65% of total payroll for OPSRP.

Redirected member contributions are assumed to cease in a biennium following a rate-setting valuation where the funded status, including side accounts, is 90% or greater.

### Work After Retirement Contributions

Under Senate Bill 1049, starting in 2020 and ending December 31, 2024, employers are required to pay PERS contribution rates on rehired retiree payroll. In 2023, HB 2296 extended the end date for this provision to December 31, 2034. For 2023, rehired retiree payroll was assumed to be approximately \$244.2M for Tier One/Tier Two members and \$15.4M for OPSRP members. After 2023, rehired retiree payroll was assumed to increase with the wage growth assumption.

# Appendix

## Rate Projection Basis

### Capital Market Model

For each 20-year projection, we ran 10,000 stochastic scenarios for inflation and asset class rates of return. The scenarios were calibrated to represent Milliman's capital market assumptions in terms of expected average real returns, the expected year-to-year volatility of the returns, and the expected correlation between the returns of different asset classes. Annual rates of return for each of the asset classes and inflation are generated from a multivariate lognormal probability distribution. Rates of return are independent from year to year.

The variable return model includes 10,000 projected scenarios for possible future year-by-year system investment returns and levels of inflation. In developing that model, per Actuarial Standards of Practice we disclose reliance upon a Milliman colleague who is a credentialed actuary and also a credentialed investment professional with expertise in preparing capital outlook modeling. We reviewed overall model results for reasonability while, as part of his work, our investment professional colleague reviewed the investment projections for internal consistency.

For this purpose, we considered the Oregon PERS Fund to be allocated among the model's asset classes as shown on the following slide. This allocation is based on input provided by Meketa (OIC's primary consultant) and reflects changes to the OIC's target allocation for the Oregon PERS fund adopted at the January 25, 2023 OIC meeting.

# Appendix

## Rate Projection Basis

### Capital Market Model

Reflects Milliman's capital market assumptions as of July 1, 2023.

	<b>Annual Arithmetic Mean</b>	<b>20-Year Annualized Geometric Mean</b>	<b>Annual Standard Deviation</b>	<b>Policy Allocation</b>
Global Equity	8.43%	6.89%	18.14%	27.500%
Private Equity	12.67%	8.59%	30.00%	25.500%
Real Estate	7.11%	6.03%	15.11%	12.250%
US Core Fixed Income	4.48%	4.38%	4.32%	25.000%
Hedge Fund – Macro	5.43%	5.21%	7.35%	5.625%
Hedge Fund – Equity Hedge	7.24%	6.47%	11.94%	0.625%
Hedge Fund – Multistrategy	6.67%	6.29%	8.97%	1.250%
Infrastructure	8.02%	6.61%	17.34%	1.500%
Master Limited Partnerships	9.47%	6.09%	26.92%	0.750%
US Inflation (CPI-U)	2.41%	2.40%	1.42%	<b>N/A</b>
<b>Fund Total (reflecting asset class correlations)</b>	<b>8.16%</b>	<b>7.35%*</b>	<b>13.35%</b>	<b>100.00%</b>

\* The model's 20-year annualized geometric median is 7.34%.



# Retirement System Risks

- Oregon PERS, like all defined benefit systems, is subject to various risks that will affect future system liabilities and contribution requirements, including:
  - **Investment risk:** the potential that investment returns will be different than assumed
  - **Demographic risks:** the potential that mortality experience, retirement behavior, or other demographic experience for the system membership will be different than assumed
  - **Contribution risk:** the potential that actual future contributions will be materially different than expected, for example if there are material changes in the system's covered payroll
- The results of an actuarial valuation are based on one set of reasonable assumptions, but it is almost certain that future experience will not exactly match the assumptions.
- Further discussion of system risks and historical information regarding system experience are shown in our annual actuarial valuations. In addition, our annual financial modeling presentation to the PERS Board illustrates future outcomes under a wide range of future scenarios reflecting variation in key risk factors.

December 1, 2023  
PERS Board meeting agenda

## Action and discussion items

1. SB 1049 Implementation update
2. Contingency Fund request
3. 2022 Valuation update and financial modeling results
4. Adoption of Actuarial Equivalency Factor Tables



# Oregon

Tina Kotek, Governor

## Public Employees Retirement System

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December 1, 2023

TO: Members of the PERS Board  
FROM: Kevin Olineck, Director  
SUBJECT: Adoption of Actuarial Equivalency Factor Tables

### BOARD OPTIONS

The PERS Board may:

1. Pass a motion to “Adopt the Actuarial Equivalency Factor Tables, as prepared by Milliman, based on the board-adopted changes to the actuarial methods and assumptions as presented by Milliman in the 2022 Experience Study, including setting the assumed rate at 6.9%.”
2. Direct Milliman to review one or more of their recommended changes and return with recommendations that more closely align with the board’s direction.

### STAFF RECOMMENDATION

Staff recommends that the PERS Board choose Option #1 above.

C.4. Attachment 1 – *Actuarial Equivalency Factor Tables*

**Oregon Public Employees Retirement System (Tier One / Tier Two)  
and Oregon Public Service Retirement Plan (OPSRP)  
Actuarial Equivalency Factors Effective January 1, 2024**

Actuarial Equivalency Factor Table	Tier One / Tier Two		OPSRP	
	Healthy	Disabled	Healthy	Disabled
Early Retirement Reduction Factors	Table 1	N/A	Table 1	N/A
Refund Annuity Conversion Factors (Option 0)	Table 2a	Table 2b	N/A	N/A
Non-Refund Life Annuity Conversion Factors (Option 1)	Table 3a	Table 3b	N/A	N/A
15-Year Certain and Life Annuity Conversion Factors (Option 4)	Table 4a	Table 4b	N/A	N/A
Option 4 death benefit (conversion of remaining benefit to a lump sum)	Table 5	Table 5	N/A	N/A
100% Joint & Survivor Factors (Option 2)	Table 6a	Table 6b	Table 6a	Table 6b
50% Joint & Survivor Factors (Option 3)	Table 7a	Table 7b	Table 7a	Table 7b
100% Joint & Survivor Factors with popup (Option 2A)	Table 8a	Table 8b	Table 8a	Table 8b
50% Joint & Survivor Factors with popup (Option 3A)	Table 9a	Table 9b	Table 9a	Table 9b
Police & Fire Additional Unit Benefits - After Age 60	Table 10	Table 10	N/A	N/A
Police & Fire Additional Unit Benefits - Before Age 60	Table 11	Table 11	N/A	N/A
Police & Fire Additional Unit Benefits by Payroll Deductions	Table 12	Table 12	N/A	N/A
Full Cost factors for Purchasing Service - Factor 1	Table 13a	Table 13b	N/A	N/A
Full Cost factors for Purchasing Service - Factor 2	Table 14	Table 14	N/A	N/A
Full Cost factors for Purchasing Service - Factor 3	Table 15	Table 15	N/A	N/A
Full Cost factors for Purchasing Service - Factor 5	Table 16a	Table 16b	N/A	N/A
Lump Sum Cash Out Factors Prior to Early Retirement Eligibility - General Service	N/A	N/A	Table 17	Not Provided
Lump Sum Cash Out Factors Prior to Early Retirement Eligibility - Police & Fire	N/A	N/A	Table 18	Not Provided
Lump Sum Cash Out Factors at or after Early Retirement Age	N/A	N/A	Table 19	Not Provided
Lump Sum Cash Out Factors for Beneficiaries	Table 20	N/A	Table 20	N/A
Conversion to Monthly Spouse Benefit at Later of Member's Death or Earliest Retirement Age	Table 21	Table 21	Table 21	Table 21
Conversion to Monthly Spouse Benefit at Commencement Date	Table 22	Table 22	Table 22	Table 22
Present Value of Member's Immediate Benefit - Healthy Members (OPSRP only)	N/A	N/A	Table 23	Table 23
Present Value of Alternate Payee Immediate Benefit (OPSRP only)	N/A	N/A	Table 24	Table 24
Present Value of Single Life Immediate Annuity with COLA	Table 25a	Table 25b	Table 25a	Table 25b

**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)**  
**Actuarial Equivalency Factors Effective January 1, 2024**

**Projected Value of Contributions and Account Balances - Healthy and Disabled Members**  
 (Assumes an Annual Interest Credit of 6.90% per year)

Years to Retire	Amount at Retirement		Years to Retire	Amount at Retirement	
	\$1 per Yr. to Retirement	\$1 Current Balance		\$1 per Yr. to Retirement	\$1 Current Balance
1	1.07	1.07	21	47.41	4.06
2	2.21	1.14	22	51.75	4.34
3	3.43	1.22	23	56.39	4.64
4	4.74	1.31	24	61.35	4.96
5	6.14	1.40	25	66.65	5.30
6	7.63	1.49	26	72.32	5.67
7	9.22	1.60	27	78.38	6.06
8	10.93	1.71	28	84.85	6.48
9	12.75	1.82	29	91.78	6.92
10	14.70	1.95	30	99.18	7.40
11	16.78	2.08	31	107.09	7.91
12	19.01	2.23	32	115.55	8.46
13	21.39	2.38	33	124.59	9.04
14	23.94	2.55	34	134.26	9.67
15	26.66	2.72	35	144.59	10.33
16	29.57	2.91	36	155.64	11.05
17	32.67	3.11	37	167.45	11.81
18	36.00	3.32	38	180.07	12.62
19	39.55	3.55	39	193.56	13.49
20	43.35	3.80	40	207.99	14.42

**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)**  
**Actuarial Equivalency Factors Effective January 1, 2024**

**Average Remaining Life Expectancy of Non-Disabled PERS Members Retiring in 2024**

Age	Weighted Average	State and Local Government Members				School District Members	
		General Service		Police & Fire		Male	Female
		Male	Female	Male	Female		
50	38.3	37.2	39.0	36.2	39.2	37.9	40.5
51	37.3	36.2	38.0	35.2	38.1	36.9	39.5
52	36.3	35.2	37.0	34.2	37.1	35.9	38.5
53	35.3	34.2	36.0	33.1	36.1	34.8	37.4
54	34.3	33.2	35.0	32.1	35.1	33.8	36.4
55	33.3	32.3	34.0	31.1	34.1	32.8	35.4
56	32.3	31.3	33.0	30.1	33.1	31.8	34.4
57	31.3	30.3	32.0	29.1	32.0	30.8	33.4
58	30.3	29.4	31.0	28.2	31.1	29.8	32.4
59	29.4	28.4	30.1	27.2	30.1	28.9	31.4
60	28.4	27.5	29.1	26.2	29.1	27.9	30.4
61	27.4	26.5	28.1	25.3	28.1	26.9	29.4
62	26.5	25.6	27.1	24.3	27.1	25.9	28.4
63	25.5	24.7	26.2	23.4	26.2	25.0	27.4
64	24.6	23.7	25.2	22.4	25.2	24.0	26.5
65	23.6	22.8	24.3	21.5	24.3	23.1	25.5
66	22.7	21.9	23.3	20.6	23.4	22.1	24.5
67	21.8	21.0	22.4	19.7	22.4	21.2	23.6
68	20.9	20.1	21.5	18.8	21.5	20.3	22.6
69	19.9	19.2	20.6	17.9	20.6	19.4	21.7
70	19.1	18.3	19.7	17.1	19.8	18.5	20.7
71	18.2	17.5	18.8	16.2	18.9	17.6	19.8
72	17.3	16.6	17.9	15.4	18.0	16.7	18.9
73	16.5	15.8	17.1	14.6	17.2	15.9	18.0
74	15.6	15.0	16.2	13.8	16.4	15.1	17.1
75	14.8	14.2	15.4	13.0	15.6	14.2	16.3
76	14.0	13.5	14.6	12.3	14.8	13.5	15.4
77	13.2	12.7	13.8	11.6	14.0	12.7	14.6
78	12.5	12.0	13.0	10.9	13.3	11.9	13.8
79	11.8	11.3	12.3	10.2	12.5	11.2	13.0
80	11.0	10.6	11.5	9.6	11.8	10.5	12.2

**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)**  
**Actuarial Equivalency Factors Effective January 1, 2024**

**Average Remaining Life Expectancy of Disabled PERS Members Retiring in 2024**

Age	Weighted Average	Disabled			
		General Service		Police & Fire	
		Male	Female	Male	Female
50	28.5	26.2	29.6	31.0	33.4
51	27.8	25.5	28.9	30.1	32.6
52	27.0	24.8	28.1	29.3	31.7
53	26.3	24.1	27.4	28.5	30.9
54	25.6	23.4	26.7	27.6	30.1
55	24.9	22.7	26.0	26.8	29.2
56	24.2	22.1	25.3	26.0	28.4
57	23.5	21.4	24.6	25.2	27.6
58	22.8	20.7	23.9	24.4	26.8
59	22.1	20.1	23.2	23.7	26.0
60	21.4	19.4	22.5	22.9	25.2
61	20.7	18.8	21.8	22.1	24.4
62	20.0	18.1	21.0	21.3	23.6
63	19.3	17.5	20.3	20.6	22.8
64	18.6	16.8	19.6	19.8	22.0
65	17.9	16.2	18.9	19.0	21.2
66	17.2	15.6	18.2	18.3	20.4
67	16.5	14.9	17.5	17.6	19.6
68	15.9	14.3	16.8	16.8	18.8
69	15.2	13.7	16.1	16.1	18.1
70	14.5	13.1	15.4	15.4	17.3
71	13.9	12.5	14.7	14.7	16.6
72	13.3	11.9	14.0	14.0	15.8
73	12.6	11.4	13.4	13.3	15.1
74	12.0	10.8	12.7	12.7	14.4
75	11.4	10.3	12.1	12.0	13.7
76	10.8	9.7	11.5	11.4	13.0
77	10.3	9.2	10.9	10.8	12.3
78	9.7	8.7	10.3	10.2	11.7
79	9.2	8.2	9.7	9.6	11.0
80	8.6	7.7	9.2	9.1	10.4

**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)**  
**Actuarial Equivalency Factors Effective January 1, 2024**

**Table 1: Early Retirement Factors**

Age at Retirement Years      Months		Tier One / Tier Two						OPSRP				
		General Service			P&F			General Service		P&F		
		Less than 30 years		30+ years	Less than 25 years		25+ years	30+ years	Less than 30 years	30+ years	Less than 25 years	25+ years
		Tier One	Tier Two									
Less than 50		N/A	N/A	1.000	N/A	N/A	1.000	N/A	N/A	N/A	N/A	
50	0	N/A	N/A	1.000	0.659	1.000	1.000	N/A	N/A	0.442	0.777	
	1			1.000	0.664	1.000	1.000			0.445	0.783	
	2			1.000	0.668	1.000	1.000			0.448	0.788	
	3			1.000	0.673	1.000	1.000			0.451	0.794	
	4			1.000	0.678	1.000	1.000			0.454	0.799	
	5			1.000	0.682	1.000	1.000			0.457	0.805	
	6			1.000	0.687	1.000	1.000			0.460	0.811	
	7			1.000	0.692	1.000	1.000			0.463	0.816	
	8			1.000	0.696	1.000	1.000			0.466	0.822	
	9			1.000	0.701	1.000	1.000			0.469	0.827	
	10			1.000	0.706	1.000	1.000			0.472	0.833	
	11			1.000	0.710	1.000	1.000			0.475	0.838	
51	0	N/A	N/A	1.000	0.715	1.000	1.000	N/A	N/A	0.478	0.844	
	1			1.000	0.720	1.000	1.000			0.481	0.850	
	2			1.000	0.725	1.000	1.000			0.484	0.856	
	3			1.000	0.730	1.000	1.000			0.488	0.863	
	4			1.000	0.736	1.000	1.000			0.491	0.869	
	5			1.000	0.741	1.000	1.000			0.494	0.875	
	6			1.000	0.746	1.000	1.000			0.497	0.881	
	7			1.000	0.751	1.000	1.000			0.501	0.887	
	8			1.000	0.756	1.000	1.000			0.504	0.893	
	9			1.000	0.761	1.000	1.000			0.507	0.900	
	10			1.000	0.767	1.000	1.000			0.510	0.906	
	11			1.000	0.772	1.000	1.000			0.514	0.912	
52	0	N/A	N/A	1.000	0.777	1.000	1.000	N/A	N/A	0.517	0.918	
	1			1.000	0.783	1.000	1.000			0.521	0.925	
	2			1.000	0.788	1.000	1.000			0.524	0.932	
	3			1.000	0.794	1.000	1.000			0.528	0.939	
	4			1.000	0.799	1.000	1.000			0.531	0.945	
	5			1.000	0.805	1.000	1.000			0.535	0.952	
	6			1.000	0.811	1.000	1.000			0.538	0.959	
	7			1.000	0.816	1.000	1.000			0.542	0.966	
	8			1.000	0.822	1.000	1.000			0.546	0.973	
	9			1.000	0.827	1.000	1.000			0.549	0.980	
	10			1.000	0.833	1.000	1.000			0.553	0.986	
	11			1.000	0.838	1.000	1.000			0.556	0.993	
53	0	N/A	N/A	1.000	0.844	1.000	1.000	N/A	N/A	0.560	1.000	
	1			1.000	0.850	1.000	1.000			0.564	1.000	
	2			1.000	0.856	1.000	1.000			0.568	1.000	
	3			1.000	0.863	1.000	1.000			0.572	1.000	
	4			1.000	0.869	1.000	1.000			0.576	1.000	
	5			1.000	0.875	1.000	1.000			0.580	1.000	
	6			1.000	0.881	1.000	1.000			0.583	1.000	
	7			1.000	0.887	1.000	1.000			0.587	1.000	
	8			1.000	0.893	1.000	1.000			0.591	1.000	
	9			1.000	0.900	1.000	1.000			0.595	1.000	
	10			1.000	0.906	1.000	1.000			0.599	1.000	
	11			1.000	0.912	1.000	1.000			0.603	1.000	
54	0	N/A	N/A	1.000	0.918	1.000	1.000	N/A	N/A	0.607	1.000	
	1			1.000	0.925	1.000	1.000			0.611	1.000	
	2			1.000	0.932	1.000	1.000			0.616	1.000	
	3			1.000	0.939	1.000	1.000			0.620	1.000	
	4			1.000	0.945	1.000	1.000			0.624	1.000	
	5			1.000	0.952	1.000	1.000			0.629	1.000	
	6			1.000	0.959	1.000	1.000			0.633	1.000	
	7			1.000	0.966	1.000	1.000			0.637	1.000	
	8			1.000	0.973	1.000	1.000			0.642	1.000	
	9			1.000	0.980	1.000	1.000			0.646	1.000	
	10			1.000	0.986	1.000	1.000			0.650	1.000	
	11			1.000	0.993	1.000	1.000			0.655	1.000	



**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)**  
**Actuarial Equivalency Factors Effective January 1, 2024**

**Table 1: Early Retirement Factors**

Age at Retirement Years      Months		Tier One / Tier Two						OPSRP				
		General Service			P&F			General Service		P&F		
		Less than 30 years		30+ years	Less than 25 years		25+ years	30+ years	Less than 30 years	30+ years	Less than	
		Tier One	Tier Two		25 years	25+ years					25 years	25+ years
55	0	0.777	0.659	1.000	1.000	1.000	1.000	0.442	0.777	0.659	1.000	
	1	0.783	0.664	1.000	1.000	1.000	1.000	0.445	0.783	0.664	1.000	
	2	0.788	0.668	1.000	1.000	1.000	1.000	0.448	0.788	0.668	1.000	
	3	0.794	0.673	1.000	1.000	1.000	1.000	0.451	0.794	0.673	1.000	
	4	0.799	0.678	1.000	1.000	1.000	1.000	0.454	0.799	0.678	1.000	
	5	0.805	0.682	1.000	1.000	1.000	1.000	0.457	0.805	0.682	1.000	
	6	0.811	0.687	1.000	1.000	1.000	1.000	0.460	0.811	0.687	1.000	
	7	0.816	0.692	1.000	1.000	1.000	1.000	0.463	0.816	0.692	1.000	
	8	0.822	0.696	1.000	1.000	1.000	1.000	0.466	0.822	0.696	1.000	
	9	0.827	0.701	1.000	1.000	1.000	1.000	0.469	0.827	0.701	1.000	
	10	0.833	0.706	1.000	1.000	1.000	1.000	0.472	0.833	0.706	1.000	
	11	0.838	0.710	1.000	1.000	1.000	1.000	0.475	0.838	0.710	1.000	
56	0	0.844	0.715	1.000	1.000	1.000	1.000	0.478	0.844	0.715	1.000	
	1	0.850	0.720	1.000	1.000	1.000	1.000	0.481	0.850	0.720	1.000	
	2	0.856	0.725	1.000	1.000	1.000	1.000	0.484	0.856	0.725	1.000	
	3	0.863	0.730	1.000	1.000	1.000	1.000	0.488	0.863	0.730	1.000	
	4	0.869	0.736	1.000	1.000	1.000	1.000	0.491	0.869	0.736	1.000	
	5	0.875	0.741	1.000	1.000	1.000	1.000	0.494	0.875	0.741	1.000	
	6	0.881	0.746	1.000	1.000	1.000	1.000	0.497	0.881	0.746	1.000	
	7	0.887	0.751	1.000	1.000	1.000	1.000	0.501	0.887	0.751	1.000	
	8	0.893	0.756	1.000	1.000	1.000	1.000	0.504	0.893	0.756	1.000	
	9	0.900	0.761	1.000	1.000	1.000	1.000	0.507	0.900	0.761	1.000	
	10	0.906	0.767	1.000	1.000	1.000	1.000	0.510	0.906	0.767	1.000	
	11	0.912	0.772	1.000	1.000	1.000	1.000	0.514	0.912	0.772	1.000	
57	0	0.918	0.777	1.000	1.000	1.000	1.000	0.517	0.918	0.777	1.000	
	1	0.925	0.783	1.000	1.000	1.000	1.000	0.521	0.925	0.783	1.000	
	2	0.932	0.788	1.000	1.000	1.000	1.000	0.524	0.932	0.788	1.000	
	3	0.939	0.794	1.000	1.000	1.000	1.000	0.528	0.939	0.794	1.000	
	4	0.945	0.799	1.000	1.000	1.000	1.000	0.531	0.945	0.799	1.000	
	5	0.952	0.805	1.000	1.000	1.000	1.000	0.535	0.952	0.805	1.000	
	6	0.959	0.811	1.000	1.000	1.000	1.000	0.538	0.959	0.811	1.000	
	7	0.966	0.816	1.000	1.000	1.000	1.000	0.542	0.966	0.816	1.000	
	8	0.973	0.822	1.000	1.000	1.000	1.000	0.546	0.973	0.822	1.000	
	9	0.980	0.827	1.000	1.000	1.000	1.000	0.549	0.980	0.827	1.000	
	10	0.986	0.833	1.000	1.000	1.000	1.000	0.553	0.986	0.833	1.000	
	11	0.993	0.838	1.000	1.000	1.000	1.000	0.556	0.993	0.838	1.000	
58	0	1.000	0.844	1.000	1.000	1.000	1.000	0.560	1.000	0.844	1.000	
	1	1.000	0.850	1.000	1.000	1.000	1.000	0.564	1.000	0.850	1.000	
	2	1.000	0.856	1.000	1.000	1.000	1.000	0.568	1.000	0.856	1.000	
	3	1.000	0.863	1.000	1.000	1.000	1.000	0.572	1.000	0.863	1.000	
	4	1.000	0.869	1.000	1.000	1.000	1.000	0.576	1.000	0.869	1.000	
	5	1.000	0.875	1.000	1.000	1.000	1.000	0.580	1.000	0.875	1.000	
	6	1.000	0.881	1.000	1.000	1.000	1.000	0.583	1.000	0.881	1.000	
	7	1.000	0.887	1.000	1.000	1.000	1.000	0.587	1.000	0.887	1.000	
	8	1.000	0.893	1.000	1.000	1.000	1.000	0.591	1.000	0.893	1.000	
	9	1.000	0.900	1.000	1.000	1.000	1.000	0.595	1.000	0.900	1.000	
	10	1.000	0.906	1.000	1.000	1.000	1.000	0.599	1.000	0.906	1.000	
	11	1.000	0.912	1.000	1.000	1.000	1.000	0.603	1.000	0.912	1.000	
59	0	1.000	0.918	1.000	1.000	1.000	1.000	0.607	1.000	0.918	1.000	
	1	1.000	0.925	1.000	1.000	1.000	1.000	0.611	1.000	0.925	1.000	
	2	1.000	0.932	1.000	1.000	1.000	1.000	0.616	1.000	0.932	1.000	
	3	1.000	0.939	1.000	1.000	1.000	1.000	0.620	1.000	0.939	1.000	
	4	1.000	0.945	1.000	1.000	1.000	1.000	0.624	1.000	0.945	1.000	
	5	1.000	0.952	1.000	1.000	1.000	1.000	0.629	1.000	0.952	1.000	
	6	1.000	0.959	1.000	1.000	1.000	1.000	0.633	1.000	0.959	1.000	
	7	1.000	0.966	1.000	1.000	1.000	1.000	0.637	1.000	0.966	1.000	
	8	1.000	0.973	1.000	1.000	1.000	1.000	0.642	1.000	0.973	1.000	
	9	1.000	0.980	1.000	1.000	1.000	1.000	0.646	1.000	0.980	1.000	
	10	1.000	0.986	1.000	1.000	1.000	1.000	0.650	1.000	0.986	1.000	
	11	1.000	0.993	1.000	1.000	1.000	1.000	0.655	1.000	0.993	1.000	

**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)**  
**Actuarial Equivalency Factors Effective January 1, 2024**

**Table 1: Early Retirement Factors**

Age at Retirement Years      Months		Tier One / Tier Two						OPSRP				
		General Service			P&F			General Service		P&F		
		Less than 30 years		30+ years	Less than 25 years		25+ years	30+ years	Less than 30 years	30+ years	Less than	
		Tier One	Tier Two		25 years	25+ years					25 years	25+ years
60	0	1.000	1.000	1.000	1.000	1.000	1.000	0.659	1.000	1.000	1.000	
	1	1.000	1.000	1.000	1.000	1.000	1.000	0.664	1.000	1.000	1.000	
	2	1.000	1.000	1.000	1.000	1.000	1.000	0.668	1.000	1.000	1.000	
	3	1.000	1.000	1.000	1.000	1.000	1.000	0.673	1.000	1.000	1.000	
	4	1.000	1.000	1.000	1.000	1.000	1.000	0.678	1.000	1.000	1.000	
	5	1.000	1.000	1.000	1.000	1.000	1.000	0.682	1.000	1.000	1.000	
	6	1.000	1.000	1.000	1.000	1.000	1.000	0.687	1.000	1.000	1.000	
	7	1.000	1.000	1.000	1.000	1.000	1.000	0.692	1.000	1.000	1.000	
	8	1.000	1.000	1.000	1.000	1.000	1.000	0.696	1.000	1.000	1.000	
	9	1.000	1.000	1.000	1.000	1.000	1.000	0.701	1.000	1.000	1.000	
	10	1.000	1.000	1.000	1.000	1.000	1.000	0.706	1.000	1.000	1.000	
	11	1.000	1.000	1.000	1.000	1.000	1.000	0.710	1.000	1.000	1.000	
61	0	1.000	1.000	1.000	1.000	1.000	1.000	0.715	1.000	1.000	1.000	
	1	1.000	1.000	1.000	1.000	1.000	1.000	0.720	1.000	1.000	1.000	
	2	1.000	1.000	1.000	1.000	1.000	1.000	0.725	1.000	1.000	1.000	
	3	1.000	1.000	1.000	1.000	1.000	1.000	0.730	1.000	1.000	1.000	
	4	1.000	1.000	1.000	1.000	1.000	1.000	0.736	1.000	1.000	1.000	
	5	1.000	1.000	1.000	1.000	1.000	1.000	0.741	1.000	1.000	1.000	
	6	1.000	1.000	1.000	1.000	1.000	1.000	0.746	1.000	1.000	1.000	
	7	1.000	1.000	1.000	1.000	1.000	1.000	0.751	1.000	1.000	1.000	
	8	1.000	1.000	1.000	1.000	1.000	1.000	0.756	1.000	1.000	1.000	
	9	1.000	1.000	1.000	1.000	1.000	1.000	0.761	1.000	1.000	1.000	
	10	1.000	1.000	1.000	1.000	1.000	1.000	0.767	1.000	1.000	1.000	
	11	1.000	1.000	1.000	1.000	1.000	1.000	0.772	1.000	1.000	1.000	
62	0	1.000	1.000	1.000	1.000	1.000	1.000	0.777	1.000	1.000	1.000	
	1	1.000	1.000	1.000	1.000	1.000	1.000	0.783	1.000	1.000	1.000	
	2	1.000	1.000	1.000	1.000	1.000	1.000	0.788	1.000	1.000	1.000	
	3	1.000	1.000	1.000	1.000	1.000	1.000	0.794	1.000	1.000	1.000	
	4	1.000	1.000	1.000	1.000	1.000	1.000	0.799	1.000	1.000	1.000	
	5	1.000	1.000	1.000	1.000	1.000	1.000	0.805	1.000	1.000	1.000	
	6	1.000	1.000	1.000	1.000	1.000	1.000	0.811	1.000	1.000	1.000	
	7	1.000	1.000	1.000	1.000	1.000	1.000	0.816	1.000	1.000	1.000	
	8	1.000	1.000	1.000	1.000	1.000	1.000	0.822	1.000	1.000	1.000	
	9	1.000	1.000	1.000	1.000	1.000	1.000	0.827	1.000	1.000	1.000	
	10	1.000	1.000	1.000	1.000	1.000	1.000	0.833	1.000	1.000	1.000	
	11	1.000	1.000	1.000	1.000	1.000	1.000	0.838	1.000	1.000	1.000	
63	0	1.000	1.000	1.000	1.000	1.000	1.000	0.844	1.000	1.000	1.000	
	1	1.000	1.000	1.000	1.000	1.000	1.000	0.850	1.000	1.000	1.000	
	2	1.000	1.000	1.000	1.000	1.000	1.000	0.856	1.000	1.000	1.000	
	3	1.000	1.000	1.000	1.000	1.000	1.000	0.863	1.000	1.000	1.000	
	4	1.000	1.000	1.000	1.000	1.000	1.000	0.869	1.000	1.000	1.000	
	5	1.000	1.000	1.000	1.000	1.000	1.000	0.875	1.000	1.000	1.000	
	6	1.000	1.000	1.000	1.000	1.000	1.000	0.881	1.000	1.000	1.000	
	7	1.000	1.000	1.000	1.000	1.000	1.000	0.887	1.000	1.000	1.000	
	8	1.000	1.000	1.000	1.000	1.000	1.000	0.893	1.000	1.000	1.000	
	9	1.000	1.000	1.000	1.000	1.000	1.000	0.900	1.000	1.000	1.000	
	10	1.000	1.000	1.000	1.000	1.000	1.000	0.906	1.000	1.000	1.000	
	11	1.000	1.000	1.000	1.000	1.000	1.000	0.912	1.000	1.000	1.000	
64	0	1.000	1.000	1.000	1.000	1.000	1.000	0.918	1.000	1.000	1.000	
	1	1.000	1.000	1.000	1.000	1.000	1.000	0.925	1.000	1.000	1.000	
	2	1.000	1.000	1.000	1.000	1.000	1.000	0.932	1.000	1.000	1.000	
	3	1.000	1.000	1.000	1.000	1.000	1.000	0.939	1.000	1.000	1.000	
	4	1.000	1.000	1.000	1.000	1.000	1.000	0.945	1.000	1.000	1.000	
	5	1.000	1.000	1.000	1.000	1.000	1.000	0.952	1.000	1.000	1.000	
	6	1.000	1.000	1.000	1.000	1.000	1.000	0.959	1.000	1.000	1.000	
	7	1.000	1.000	1.000	1.000	1.000	1.000	0.966	1.000	1.000	1.000	
	8	1.000	1.000	1.000	1.000	1.000	1.000	0.973	1.000	1.000	1.000	
	9	1.000	1.000	1.000	1.000	1.000	1.000	0.980	1.000	1.000	1.000	
	10	1.000	1.000	1.000	1.000	1.000	1.000	0.986	1.000	1.000	1.000	
	11	1.000	1.000	1.000	1.000	1.000	1.000	0.993	1.000	1.000	1.000	
65	0	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	

**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)**  
**Actuarial Equivalency Factors Effective January 1, 2024**

**Table 2a: Refund Annuity Conversion Factors - Option 0 - Healthy Members (Tier One / Tier Two only)**  
 (Amount of Monthly Annuity per \$1,000 of Account Balance)

Age	Months of Attained Age at Retirement											
	0	1	2	3	4	5	6	7	8	9	10	11
15	5.60	5.60	5.60	5.60	5.60	5.60	5.61	5.61	5.61	5.61	5.61	5.61
16	5.61	5.61	5.61	5.61	5.61	5.61	5.61	5.61	5.61	5.61	5.61	5.61
17	5.61	5.61	5.61	5.61	5.61	5.61	5.61	5.61	5.61	5.61	5.61	5.61
18	5.61	5.61	5.61	5.61	5.61	5.61	5.62	5.62	5.62	5.62	5.62	5.62
19	5.62	5.62	5.62	5.62	5.62	5.62	5.62	5.62	5.62	5.62	5.62	5.62
20	5.62	5.62	5.62	5.62	5.62	5.62	5.63	5.63	5.63	5.63	5.63	5.63
21	5.63	5.63	5.63	5.63	5.63	5.63	5.63	5.63	5.63	5.63	5.63	5.63
22	5.63	5.63	5.63	5.63	5.63	5.63	5.64	5.64	5.64	5.64	5.64	5.64
23	5.64	5.64	5.64	5.64	5.64	5.64	5.65	5.65	5.65	5.65	5.65	5.65
24	5.65	5.65	5.65	5.65	5.65	5.65	5.65	5.65	5.65	5.65	5.65	5.65
25	5.65	5.65	5.65	5.65	5.65	5.65	5.66	5.66	5.66	5.66	5.66	5.66
26	5.66	5.66	5.66	5.66	5.66	5.66	5.67	5.67	5.67	5.67	5.67	5.67
27	5.67	5.67	5.67	5.67	5.67	5.67	5.68	5.68	5.68	5.68	5.68	5.68
28	5.68	5.68	5.68	5.68	5.68	5.68	5.69	5.69	5.69	5.69	5.69	5.69
29	5.69	5.69	5.69	5.69	5.69	5.69	5.70	5.70	5.70	5.70	5.70	5.70
30	5.70	5.70	5.70	5.70	5.70	5.70	5.71	5.71	5.71	5.71	5.71	5.71
31	5.71	5.71	5.71	5.71	5.71	5.71	5.72	5.72	5.72	5.72	5.72	5.72
32	5.72	5.72	5.72	5.72	5.72	5.72	5.73	5.73	5.73	5.73	5.73	5.73
33	5.73	5.73	5.73	5.74	5.74	5.74	5.74	5.74	5.74	5.75	5.75	5.75
34	5.75	5.75	5.75	5.75	5.75	5.75	5.76	5.76	5.76	5.76	5.76	5.76
35	5.76	5.76	5.76	5.77	5.77	5.77	5.77	5.77	5.77	5.78	5.78	5.78
36	5.78	5.78	5.78	5.78	5.78	5.78	5.79	5.79	5.79	5.79	5.79	5.79
37	5.79	5.79	5.79	5.80	5.80	5.80	5.80	5.80	5.80	5.81	5.81	5.81
38	5.81	5.81	5.81	5.82	5.82	5.82	5.82	5.82	5.82	5.83	5.83	5.83
39	5.83	5.83	5.83	5.84	5.84	5.84	5.84	5.84	5.84	5.85	5.85	5.85
40	5.85	5.85	5.85	5.86	5.86	5.86	5.86	5.86	5.86	5.87	5.87	5.87
41	5.87	5.87	5.87	5.88	5.88	5.88	5.88	5.88	5.88	5.89	5.89	5.89
42	5.89	5.89	5.89	5.90	5.90	5.90	5.90	5.90	5.90	5.91	5.91	5.91
43	5.91	5.91	5.92	5.92	5.92	5.92	5.93	5.93	5.93	5.93	5.94	5.94
44	5.94	5.94	5.95	5.95	5.95	5.95	5.96	5.96	5.96	5.96	5.97	5.97

**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)**  
**Actuarial Equivalency Factors Effective January 1, 2024**

**Table 2a: Refund Annuity Conversion Factors - Option 0 - Healthy Members (Tier One / Tier Two only)**  
 (Amount of Monthly Annuity per \$1,000 of Account Balance)

Age	Months of Attained Age at Retirement											
	0	1	2	3	4	5	6	7	8	9	10	11
45	5.97	5.97	5.98	5.98	5.98	5.98	5.99	5.99	5.99	5.99	6.00	6.00
46	6.00	6.00	6.01	6.01	6.01	6.01	6.02	6.02	6.02	6.02	6.03	6.03
47	6.03	6.03	6.04	6.04	6.04	6.04	6.05	6.05	6.05	6.05	6.06	6.06
48	6.06	6.06	6.07	6.07	6.07	6.07	6.08	6.08	6.08	6.08	6.09	6.09
49	6.09	6.09	6.10	6.10	6.10	6.11	6.11	6.11	6.12	6.12	6.12	6.13
50	6.13	6.13	6.14	6.14	6.14	6.15	6.15	6.15	6.16	6.16	6.16	6.17
51	6.17	6.17	6.18	6.18	6.18	6.19	6.19	6.19	6.20	6.20	6.20	6.21
52	6.21	6.21	6.22	6.22	6.22	6.23	6.23	6.23	6.24	6.24	6.24	6.25
53	6.25	6.25	6.26	6.26	6.27	6.27	6.28	6.28	6.28	6.29	6.29	6.30
54	6.30	6.30	6.31	6.31	6.32	6.32	6.33	6.33	6.33	6.34	6.34	6.35
55	6.35	6.36	6.36	6.37	6.37	6.38	6.38	6.39	6.39	6.40	6.40	6.41
56	6.41	6.42	6.42	6.43	6.43	6.44	6.44	6.45	6.45	6.46	6.46	6.47
57	6.47	6.48	6.48	6.49	6.49	6.50	6.50	6.51	6.51	6.52	6.52	6.53
58	6.53	6.54	6.54	6.55	6.55	6.56	6.56	6.57	6.57	6.58	6.58	6.59
59	6.59	6.60	6.60	6.61	6.62	6.62	6.63	6.64	6.64	6.65	6.66	6.66
60	6.67	6.68	6.68	6.69	6.69	6.70	6.71	6.71	6.72	6.72	6.73	6.73
61	6.74	6.75	6.75	6.76	6.77	6.77	6.78	6.79	6.79	6.80	6.81	6.81
62	6.82	6.83	6.84	6.84	6.85	6.86	6.87	6.87	6.88	6.89	6.90	6.90
63	6.91	6.92	6.93	6.94	6.94	6.95	6.96	6.97	6.98	6.99	6.99	7.00
64	7.01	7.02	7.03	7.04	7.04	7.05	7.06	7.07	7.08	7.09	7.09	7.10
65	7.11	7.12	7.13	7.14	7.14	7.15	7.16	7.17	7.18	7.19	7.19	7.20
66	7.21	7.22	7.23	7.24	7.25	7.26	7.27	7.28	7.29	7.30	7.31	7.32
67	7.33	7.34	7.35	7.36	7.37	7.38	7.39	7.40	7.41	7.42	7.43	7.44
68	7.45	7.46	7.47	7.48	7.49	7.50	7.52	7.53	7.54	7.55	7.56	7.57
69	7.58	7.59	7.60	7.62	7.63	7.64	7.65	7.66	7.67	7.69	7.70	7.71
70	7.72	7.73	7.75	7.76	7.77	7.78	7.80	7.81	7.82	7.83	7.85	7.86
71	7.87	7.88	7.90	7.91	7.93	7.94	7.96	7.97	7.98	8.00	8.01	8.03
72	8.04	8.05	8.07	8.08	8.10	8.11	8.13	8.14	8.15	8.17	8.18	8.20
73	8.21	8.23	8.24	8.26	8.27	8.29	8.31	8.32	8.34	8.35	8.37	8.38
74	8.40	8.42	8.43	8.45	8.46	8.48	8.50	8.51	8.53	8.54	8.56	8.57

**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)**  
**Actuarial Equivalency Factors Effective January 1, 2024**

**Table 2a: Refund Annuity Conversion Factors - Option 0 - Healthy Members (Tier One / Tier Two only)**  
 (Amount of Monthly Annuity per \$1,000 of Account Balance)

Age	Months of Attained Age at Retirement											
	0	1	2	3	4	5	6	7	8	9	10	11
75	8.59	8.61	8.63	8.64	8.66	8.68	8.70	8.71	8.73	8.75	8.77	8.78
76	8.80	8.82	8.84	8.86	8.88	8.90	8.92	8.93	8.95	8.97	8.99	9.01
77	9.03	9.05	9.07	9.09	9.11	9.13	9.15	9.17	9.19	9.21	9.23	9.25
78	9.27	9.29	9.31	9.34	9.36	9.38	9.40	9.42	9.44	9.47	9.49	9.51
79	9.53	9.55	9.58	9.60	9.62	9.64	9.67	9.69	9.71	9.73	9.76	9.78
80	9.80	9.82	9.85	9.87	9.90	9.92	9.95	9.97	9.99	10.02	10.04	10.07
81	10.09	10.12	10.14	10.17	10.19	10.22	10.25	10.27	10.30	10.32	10.35	10.37
82	10.40	10.43	10.46	10.48	10.51	10.54	10.57	10.59	10.62	10.65	10.68	10.70
83	10.73	10.76	10.79	10.82	10.84	10.87	10.90	10.93	10.96	10.99	11.01	11.04
84	11.07	11.10	11.13	11.16	11.19	11.22	11.26	11.29	11.32	11.35	11.38	11.41
85	11.44	11.47	11.51	11.54	11.57	11.61	11.64	11.67	11.71	11.74	11.77	11.81
86	11.84	11.87	11.91	11.94	11.98	12.01	12.05	12.08	12.11	12.15	12.18	12.22
87	12.25	12.29	12.32	12.36	12.39	12.43	12.47	12.50	12.54	12.57	12.61	12.64
88	12.68	12.72	12.76	12.80	12.84	12.88	12.92	12.95	12.99	13.03	13.07	13.11
89	13.15	13.19	13.24	13.28	13.32	13.36	13.41	13.45	13.49	13.53	13.58	13.62
90	13.66	13.70	13.75	13.79	13.83	13.88	13.92	13.96	14.01	14.05	14.09	14.14
91	14.18	14.23	14.27	14.32	14.36	14.41	14.45	14.50	14.54	14.59	14.63	14.68
92	14.72	14.77	14.82	14.87	14.91	14.96	15.01	15.06	15.11	15.16	15.20	15.25
93	15.30	15.35	15.41	15.46	15.51	15.56	15.62	15.67	15.72	15.77	15.83	15.88
94	15.93	15.99	16.04	16.10	16.16	16.21	16.27	16.33	16.38	16.44	16.50	16.55
95	16.61	16.67	16.72	16.78	16.83	16.89	16.94	17.00	17.05	17.11	17.16	17.22
96	17.27	17.33	17.39	17.45	17.51	17.57	17.63	17.68	17.74	17.80	17.86	17.92
97	17.98	18.04	18.11	18.17	18.23	18.29	18.36	18.42	18.48	18.54	18.61	18.67
98	18.73	18.80	18.87	18.93	19.00	19.07	19.14	19.20	19.27	19.34	19.41	19.47
99	19.54	19.61	19.68	19.75	19.82	19.89	19.97	20.04	20.11	20.18	20.25	20.32
100	20.39											

**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)**  
**Actuarial Equivalency Factors Effective January 1, 2024**

**Table 2b: Refund Annuity Conversion Factors - Option 0 - Disabled Members (Tier One / Tier Two only)**  
 (Amount of Monthly Annuity per \$1,000 of Account Balance)

Age	Months of Attained Age at Retirement											
	0	1	2	3	4	5	6	7	8	9	10	11
15	5.78	5.78	5.78	5.79	5.79	5.79	5.79	5.79	5.79	5.80	5.80	5.80
16	5.80	5.80	5.80	5.80	5.80	5.80	5.81	5.81	5.81	5.81	5.81	5.81
17	5.81	5.81	5.81	5.81	5.81	5.81	5.82	5.82	5.82	5.82	5.82	5.82
18	5.82	5.82	5.82	5.83	5.83	5.83	5.83	5.83	5.83	5.84	5.84	5.84
19	5.84	5.84	5.84	5.84	5.84	5.84	5.85	5.85	5.85	5.85	5.85	5.85
20	5.85	5.85	5.85	5.85	5.85	5.85	5.86	5.86	5.86	5.86	5.86	5.86
21	5.86	5.86	5.86	5.87	5.87	5.87	5.87	5.87	5.87	5.88	5.88	5.88
22	5.88	5.88	5.88	5.89	5.89	5.89	5.89	5.89	5.89	5.90	5.90	5.90
23	5.90	5.90	5.90	5.90	5.90	5.90	5.91	5.91	5.91	5.91	5.91	5.91
24	5.91	5.91	5.91	5.92	5.92	5.92	5.92	5.92	5.92	5.93	5.93	5.93
25	5.93	5.93	5.93	5.94	5.94	5.94	5.94	5.94	5.94	5.95	5.95	5.95
26	5.95	5.95	5.95	5.96	5.96	5.96	5.96	5.96	5.96	5.97	5.97	5.97
27	5.97	5.97	5.98	5.98	5.98	5.98	5.99	5.99	5.99	5.99	6.00	6.00
28	6.00	6.00	6.00	6.01	6.01	6.01	6.01	6.01	6.01	6.02	6.02	6.02
29	6.02	6.02	6.02	6.03	6.03	6.03	6.03	6.03	6.03	6.04	6.04	6.04
30	6.04	6.04	6.05	6.05	6.05	6.05	6.06	6.06	6.06	6.06	6.07	6.07
31	6.07	6.07	6.07	6.08	6.08	6.08	6.08	6.08	6.08	6.09	6.09	6.09
32	6.09	6.09	6.10	6.10	6.10	6.10	6.11	6.11	6.11	6.11	6.12	6.12
33	6.12	6.12	6.13	6.13	6.13	6.13	6.14	6.14	6.14	6.14	6.15	6.15
34	6.15	6.15	6.16	6.16	6.16	6.16	6.17	6.17	6.17	6.17	6.18	6.18
35	6.18	6.18	6.19	6.19	6.19	6.19	6.20	6.20	6.20	6.20	6.21	6.21
36	6.21	6.21	6.22	6.22	6.22	6.22	6.23	6.23	6.23	6.23	6.24	6.24
37	6.24	6.24	6.25	6.25	6.25	6.25	6.26	6.26	6.26	6.26	6.27	6.27
38	6.27	6.27	6.28	6.28	6.28	6.28	6.29	6.29	6.29	6.29	6.30	6.30
39	6.30	6.30	6.31	6.31	6.31	6.32	6.32	6.32	6.32	6.33	6.33	6.34
40	6.34	6.34	6.35	6.35	6.35	6.35	6.36	6.36	6.36	6.36	6.37	6.37
41	6.37	6.37	6.38	6.38	6.38	6.39	6.39	6.39	6.39	6.40	6.40	6.41
42	6.41	6.41	6.42	6.42	6.42	6.42	6.43	6.43	6.43	6.43	6.44	6.44
43	6.44	6.44	6.45	6.45	6.45	6.46	6.46	6.46	6.46	6.47	6.47	6.48
44	6.48	6.48	6.49	6.49	6.49	6.50	6.50	6.50	6.50	6.51	6.51	6.52

**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)**  
**Actuarial Equivalency Factors Effective January 1, 2024**

**Table 2b: Refund Annuity Conversion Factors - Option 0 - Disabled Members (Tier One / Tier Two only)**  
 (Amount of Monthly Annuity per \$1,000 of Account Balance)

Age	Months of Attained Age at Retirement											
	0	1	2	3	4	5	6	7	8	9	10	11
45	6.52	6.52	6.53	6.53	6.53	6.54	6.54	6.54	6.55	6.55	6.55	6.56
46	6.56	6.56	6.57	6.57	6.57	6.58	6.58	6.58	6.59	6.59	6.59	6.60
47	6.60	6.60	6.61	6.61	6.61	6.62	6.62	6.62	6.63	6.63	6.63	6.64
48	6.64	6.64	6.65	6.65	6.66	6.66	6.67	6.67	6.67	6.68	6.68	6.69
49	6.69	6.69	6.70	6.70	6.70	6.71	6.71	6.71	6.72	6.72	6.72	6.73
50	6.73	6.73	6.74	6.74	6.75	6.75	6.76	6.76	6.76	6.77	6.77	6.78
51	6.78	6.78	6.79	6.79	6.80	6.80	6.81	6.81	6.81	6.82	6.82	6.83
52	6.83	6.83	6.84	6.84	6.85	6.85	6.86	6.86	6.86	6.87	6.87	6.88
53	6.88	6.89	6.89	6.90	6.90	6.91	6.91	6.92	6.92	6.93	6.93	6.94
54	6.94	6.95	6.95	6.96	6.96	6.97	6.97	6.98	6.98	6.99	6.99	7.00
55	7.00	7.01	7.01	7.02	7.02	7.03	7.04	7.04	7.05	7.05	7.06	7.06
56	7.07	7.08	7.08	7.09	7.09	7.10	7.10	7.11	7.11	7.12	7.12	7.13
57	7.13	7.14	7.14	7.15	7.16	7.16	7.17	7.18	7.18	7.19	7.20	7.20
58	7.21	7.22	7.22	7.23	7.23	7.24	7.25	7.25	7.26	7.26	7.27	7.27
59	7.28	7.29	7.30	7.30	7.31	7.32	7.33	7.33	7.34	7.35	7.36	7.36
60	7.37	7.38	7.39	7.39	7.40	7.41	7.42	7.42	7.43	7.44	7.45	7.45
61	7.46	7.47	7.48	7.48	7.49	7.50	7.51	7.51	7.52	7.53	7.54	7.54
62	7.55	7.56	7.57	7.58	7.59	7.60	7.61	7.61	7.62	7.63	7.64	7.65
63	7.66	7.67	7.68	7.69	7.69	7.70	7.71	7.72	7.73	7.74	7.74	7.75
64	7.76	7.77	7.78	7.79	7.80	7.81	7.82	7.83	7.84	7.85	7.86	7.87
65	7.88	7.89	7.90	7.91	7.92	7.93	7.94	7.95	7.96	7.97	7.98	7.99
66	8.00	8.01	8.02	8.03	8.04	8.05	8.07	8.08	8.09	8.10	8.11	8.12
67	8.13	8.14	8.16	8.17	8.18	8.19	8.21	8.22	8.23	8.24	8.26	8.27
68	8.28	8.29	8.31	8.32	8.33	8.34	8.36	8.37	8.38	8.39	8.41	8.42
69	8.43	8.44	8.46	8.47	8.48	8.49	8.51	8.52	8.53	8.54	8.56	8.57
70	8.58	8.59	8.61	8.62	8.64	8.65	8.67	8.68	8.69	8.71	8.72	8.74
71	8.75	8.77	8.78	8.80	8.81	8.83	8.84	8.86	8.87	8.89	8.90	8.92
72	8.93	8.95	8.96	8.98	9.00	9.01	9.03	9.05	9.06	9.08	9.10	9.11
73	9.13	9.15	9.16	9.18	9.20	9.21	9.23	9.25	9.26	9.28	9.30	9.31
74	9.33	9.35	9.37	9.39	9.40	9.42	9.44	9.46	9.48	9.50	9.51	9.53

**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)**  
**Actuarial Equivalency Factors Effective January 1, 2024**

**Table 2b: Refund Annuity Conversion Factors - Option 0 - Disabled Members (Tier One / Tier Two only)**  
 (Amount of Monthly Annuity per \$1,000 of Account Balance)

Age	Months of Attained Age at Retirement											
	0	1	2	3	4	5	6	7	8	9	10	11
75	9.55	9.57	9.59	9.61	9.63	9.65	9.67	9.68	9.70	9.72	9.74	9.76
76	9.78	9.80	9.82	9.84	9.86	9.88	9.90	9.92	9.94	9.96	9.98	10.00
77	10.02	10.04	10.07	10.09	10.11	10.13	10.16	10.18	10.20	10.22	10.25	10.27
78	10.29	10.31	10.34	10.36	10.38	10.40	10.43	10.45	10.47	10.49	10.52	10.54
79	10.56	10.58	10.61	10.63	10.65	10.68	10.70	10.72	10.75	10.77	10.79	10.82
80	10.84	10.87	10.89	10.92	10.94	10.97	11.00	11.02	11.05	11.07	11.10	11.12
81	11.15	11.18	11.20	11.23	11.26	11.28	11.31	11.34	11.36	11.39	11.42	11.44
82	11.47	11.50	11.53	11.56	11.59	11.62	11.65	11.67	11.70	11.73	11.76	11.79
83	11.82	11.85	11.88	11.91	11.94	11.97	12.00	12.02	12.05	12.08	12.11	12.14
84	12.17	12.20	12.23	12.27	12.30	12.33	12.36	12.39	12.42	12.46	12.49	12.52
85	12.55	12.58	12.62	12.65	12.68	12.71	12.75	12.78	12.81	12.84	12.88	12.91
86	12.94	12.98	13.01	13.05	13.08	13.12	13.16	13.19	13.23	13.26	13.30	13.33
87	13.37	13.41	13.45	13.49	13.52	13.56	13.60	13.64	13.68	13.72	13.75	13.79
88	13.83	13.87	13.91	13.94	13.98	14.02	14.06	14.09	14.13	14.17	14.21	14.24
89	14.28	14.32	14.36	14.40	14.44	14.48	14.53	14.57	14.61	14.65	14.69	14.73
90	14.77	14.81	14.86	14.90	14.94	14.98	15.03	15.07	15.11	15.15	15.20	15.24
91	15.28	15.33	15.37	15.42	15.47	15.51	15.56	15.61	15.65	15.70	15.75	15.79
92	15.84	15.89	15.94	15.99	16.04	16.09	16.15	16.20	16.25	16.30	16.35	16.40
93	16.45	16.50	16.55	16.60	16.65	16.70	16.76	16.81	16.86	16.91	16.96	17.01
94	17.06	17.11	17.17	17.22	17.27	17.32	17.38	17.43	17.48	17.53	17.59	17.64
95	17.69	17.75	17.81	17.86	17.92	17.98	18.04	18.09	18.15	18.21	18.27	18.32
96	18.38	18.44	18.51	18.57	18.63	18.69	18.76	18.82	18.88	18.94	19.01	19.07
97	19.13	19.20	19.27	19.33	19.40	19.47	19.54	19.60	19.67	19.74	19.81	19.87
98	19.94	20.01	20.09	20.16	20.23	20.30	20.38	20.45	20.52	20.59	20.67	20.74
99	20.81	20.88	20.95	21.02	21.09	21.16	21.23	21.29	21.36	21.43	21.50	21.57
100	21.64											



**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)**  
**Actuarial Equivalency Factors Effective January 1, 2024**

**Table 3a: Non-Refund Annuity Conversion Factors - Option 1 - Healthy Members (Tier One / Tier Two only)**  
 (Amount of Monthly Annuity per \$1,000 of Account Balance)

Age	Months of Attained Age at Retirement											
	0	1	2	3	4	5	6	7	8	9	10	11
15	5.61	5.61	5.61	5.61	5.61	5.61	5.61	5.61	5.61	5.61	5.61	5.61
16	5.61	5.61	5.61	5.61	5.61	5.61	5.62	5.62	5.62	5.62	5.62	5.62
17	5.62	5.62	5.62	5.62	5.62	5.62	5.62	5.62	5.62	5.62	5.62	5.62
18	5.62	5.62	5.62	5.62	5.62	5.62	5.63	5.63	5.63	5.63	5.63	5.63
19	5.63	5.63	5.63	5.63	5.63	5.63	5.63	5.63	5.63	5.63	5.63	5.63
20	5.63	5.63	5.63	5.63	5.63	5.63	5.64	5.64	5.64	5.64	5.64	5.64
21	5.64	5.64	5.64	5.64	5.64	5.64	5.64	5.64	5.64	5.64	5.64	5.64
22	5.64	5.64	5.64	5.64	5.64	5.64	5.65	5.65	5.65	5.65	5.65	5.65
23	5.65	5.65	5.65	5.65	5.65	5.65	5.66	5.66	5.66	5.66	5.66	5.66
24	5.66	5.66	5.66	5.66	5.66	5.66	5.66	5.66	5.66	5.66	5.66	5.66
25	5.66	5.66	5.66	5.66	5.66	5.66	5.67	5.67	5.67	5.67	5.67	5.67
26	5.67	5.67	5.67	5.67	5.67	5.67	5.68	5.68	5.68	5.68	5.68	5.68
27	5.68	5.68	5.68	5.68	5.68	5.68	5.69	5.69	5.69	5.69	5.69	5.69
28	5.69	5.69	5.69	5.69	5.69	5.69	5.70	5.70	5.70	5.70	5.70	5.70
29	5.70	5.70	5.70	5.70	5.70	5.70	5.71	5.71	5.71	5.71	5.71	5.71
30	5.71	5.71	5.71	5.71	5.71	5.71	5.72	5.72	5.72	5.72	5.72	5.72
31	5.72	5.72	5.72	5.72	5.72	5.72	5.73	5.73	5.73	5.73	5.73	5.73
32	5.73	5.73	5.73	5.74	5.74	5.74	5.74	5.74	5.74	5.75	5.75	5.75
33	5.75	5.75	5.75	5.75	5.75	5.75	5.76	5.76	5.76	5.76	5.76	5.76
34	5.76	5.76	5.76	5.76	5.76	5.76	5.77	5.77	5.77	5.77	5.77	5.77
35	5.77	5.77	5.77	5.78	5.78	5.78	5.78	5.78	5.78	5.79	5.79	5.79
36	5.79	5.79	5.79	5.80	5.80	5.80	5.80	5.80	5.80	5.81	5.81	5.81
37	5.81	5.81	5.81	5.82	5.82	5.82	5.82	5.82	5.82	5.83	5.83	5.83
38	5.83	5.83	5.83	5.84	5.84	5.84	5.84	5.84	5.84	5.85	5.85	5.85
39	5.85	5.85	5.85	5.86	5.86	5.86	5.86	5.86	5.86	5.87	5.87	5.87
40	5.87	5.87	5.87	5.88	5.88	5.88	5.88	5.88	5.88	5.89	5.89	5.89
41	5.89	5.89	5.90	5.90	5.90	5.90	5.91	5.91	5.91	5.91	5.92	5.92
42	5.92	5.92	5.92	5.93	5.93	5.93	5.93	5.93	5.93	5.94	5.94	5.94
43	5.94	5.94	5.95	5.95	5.95	5.95	5.96	5.96	5.96	5.96	5.97	5.97
44	5.97	5.97	5.98	5.98	5.98	5.98	5.99	5.99	5.99	5.99	6.00	6.00

**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)**  
**Actuarial Equivalency Factors Effective January 1, 2024**

**Table 3a: Non-Refund Annuity Conversion Factors - Option 1 - Healthy Members (Tier One / Tier Two only)**  
 (Amount of Monthly Annuity per \$1,000 of Account Balance)

Age	Months of Attained Age at Retirement											
	0	1	2	3	4	5	6	7	8	9	10	11
45	6.00	6.00	6.01	6.01	6.01	6.02	6.02	6.02	6.03	6.03	6.03	6.04
46	6.04	6.04	6.05	6.05	6.05	6.05	6.06	6.06	6.06	6.06	6.07	6.07
47	6.07	6.07	6.08	6.08	6.08	6.09	6.09	6.09	6.10	6.10	6.10	6.11
48	6.11	6.11	6.12	6.12	6.12	6.13	6.13	6.13	6.14	6.14	6.14	6.15
49	6.15	6.15	6.16	6.16	6.17	6.17	6.18	6.18	6.18	6.19	6.19	6.20
50	6.20	6.20	6.21	6.21	6.22	6.22	6.23	6.23	6.23	6.24	6.24	6.25
51	6.25	6.25	6.26	6.26	6.27	6.27	6.28	6.28	6.28	6.29	6.29	6.30
52	6.30	6.30	6.31	6.31	6.32	6.32	6.33	6.33	6.33	6.34	6.34	6.35
53	6.35	6.35	6.36	6.36	6.37	6.37	6.38	6.38	6.38	6.39	6.39	6.40
54	6.40	6.41	6.41	6.42	6.42	6.43	6.43	6.44	6.44	6.45	6.45	6.46
55	6.46	6.47	6.47	6.48	6.48	6.49	6.50	6.50	6.51	6.51	6.52	6.52
56	6.53	6.54	6.54	6.55	6.55	6.56	6.56	6.57	6.57	6.58	6.58	6.59
57	6.59	6.60	6.60	6.61	6.62	6.62	6.63	6.64	6.64	6.65	6.66	6.66
58	6.67	6.68	6.68	6.69	6.70	6.70	6.71	6.72	6.72	6.73	6.74	6.74
59	6.75	6.76	6.76	6.77	6.78	6.78	6.79	6.80	6.80	6.81	6.82	6.82
60	6.83	6.84	6.85	6.86	6.86	6.87	6.88	6.89	6.90	6.91	6.91	6.92
61	6.93	6.94	6.95	6.96	6.96	6.97	6.98	6.99	7.00	7.01	7.01	7.02
62	7.03	7.04	7.05	7.06	7.07	7.08	7.09	7.09	7.10	7.11	7.12	7.13
63	7.14	7.15	7.16	7.17	7.18	7.19	7.20	7.21	7.22	7.23	7.24	7.25
64	7.26	7.27	7.28	7.29	7.30	7.31	7.32	7.33	7.34	7.35	7.36	7.37
65	7.38	7.39	7.40	7.42	7.43	7.44	7.45	7.46	7.47	7.49	7.50	7.51
66	7.52	7.53	7.55	7.56	7.57	7.59	7.60	7.61	7.63	7.64	7.65	7.67
67	7.68	7.69	7.71	7.72	7.73	7.75	7.76	7.77	7.79	7.80	7.81	7.83
68	7.84	7.86	7.87	7.89	7.90	7.92	7.93	7.95	7.96	7.98	7.99	8.01
69	8.02	8.04	8.05	8.07	8.09	8.10	8.12	8.14	8.15	8.17	8.19	8.20
70	8.22	8.24	8.26	8.27	8.29	8.31	8.33	8.34	8.36	8.38	8.40	8.41
71	8.43	8.45	8.47	8.49	8.51	8.53	8.55	8.56	8.58	8.60	8.62	8.64
72	8.66	8.68	8.70	8.73	8.75	8.77	8.79	8.81	8.83	8.86	8.88	8.90
73	8.92	8.94	8.97	8.99	9.01	9.03	9.06	9.08	9.10	9.12	9.15	9.17
74	9.19	9.22	9.24	9.27	9.29	9.32	9.35	9.37	9.40	9.42	9.45	9.47

**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)**  
**Actuarial Equivalency Factors Effective January 1, 2024**

**Table 3a: Non-Refund Annuity Conversion Factors - Option 1 - Healthy Members (Tier One / Tier Two only)**  
 (Amount of Monthly Annuity per \$1,000 of Account Balance)

Age	Months of Attained Age at Retirement											
	0	1	2	3	4	5	6	7	8	9	10	11
75	9.50	9.53	9.56	9.58	9.61	9.64	9.67	9.69	9.72	9.75	9.78	9.80
76	9.83	9.86	9.89	9.92	9.95	9.98	10.01	10.04	10.07	10.10	10.13	10.16
77	10.19	10.22	10.26	10.29	10.32	10.36	10.39	10.42	10.46	10.49	10.52	10.56
78	10.59	10.63	10.66	10.70	10.73	10.77	10.81	10.84	10.88	10.91	10.95	10.98
79	11.02	11.06	11.10	11.14	11.18	11.22	11.26	11.30	11.34	11.38	11.42	11.46
80	11.50	11.54	11.59	11.63	11.68	11.72	11.77	11.81	11.85	11.90	11.94	11.99
81	12.03	12.08	12.13	12.18	12.23	12.28	12.33	12.37	12.42	12.47	12.52	12.57
82	12.62	12.67	12.73	12.78	12.83	12.89	12.94	12.99	13.05	13.10	13.15	13.21
83	13.26	13.32	13.38	13.44	13.50	13.56	13.62	13.67	13.73	13.79	13.85	13.91
84	13.97	14.04	14.10	14.17	14.23	14.30	14.36	14.43	14.49	14.56	14.62	14.69
85	14.75	14.82	14.89	14.96	15.03	15.10	15.18	15.25	15.32	15.39	15.46	15.53
86	15.60	15.68	15.76	15.83	15.91	15.99	16.07	16.14	16.22	16.30	16.38	16.45
87	16.53	16.61	16.70	16.78	16.87	16.95	17.04	17.12	17.20	17.29	17.37	17.46
88	17.54	17.63	17.72	17.82	17.91	18.00	18.09	18.18	18.27	18.37	18.46	18.55
89	18.64	18.74	18.84	18.94	19.03	19.13	19.23	19.33	19.43	19.53	19.62	19.72
90	19.82	19.93	20.03	20.14	20.24	20.35	20.46	20.56	20.67	20.77	20.88	20.98
91	21.09	21.20	21.32	21.43	21.54	21.66	21.77	21.88	22.00	22.11	22.22	22.34
92	22.45	22.57	22.69	22.81	22.93	23.05	23.17	23.29	23.41	23.53	23.65	23.77
93	23.89	24.02	24.14	24.27	24.40	24.52	24.65	24.78	24.90	25.03	25.16	25.28
94	25.41	25.54	25.68	25.81	25.95	26.08	26.22	26.35	26.48	26.62	26.75	26.89
95	27.02	27.16	27.30	27.44	27.58	27.72	27.86	28.00	28.14	28.28	28.42	28.56
96	28.70	28.85	28.99	29.14	29.29	29.43	29.58	29.73	29.87	30.02	30.17	30.31
97	30.46	30.61	30.77	30.92	31.07	31.22	31.38	31.53	31.68	31.83	31.99	32.14
98	32.29	32.45	32.61	32.77	32.93	33.09	33.25	33.40	33.56	33.72	33.88	34.04
99	34.20	34.37	34.53	34.70	34.86	35.03	35.19	35.36	35.52	35.69	35.85	36.02
100	36.18											

**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)**  
**Actuarial Equivalency Factors Effective January 1, 2024**

**Table 3b: Non-Refund Annuity Conversion Factors - Option 1 - Disabled Members (Tier One / Tier Two only)**  
 (Amount of Monthly Annuity per \$1,000 of Account Balance)

Age	Months of Attained Age at Retirement											
	0	1	2	3	4	5	6	7	8	9	10	11
15	5.84	5.84	5.85	5.85	5.85	5.85	5.86	5.86	5.86	5.86	5.87	5.87
16	5.87	5.87	5.87	5.88	5.88	5.88	5.88	5.88	5.88	5.89	5.89	5.89
17	5.89	5.89	5.89	5.89	5.89	5.89	5.90	5.90	5.90	5.90	5.90	5.90
18	5.90	5.90	5.90	5.90	5.90	5.90	5.91	5.91	5.91	5.91	5.91	5.91
19	5.91	5.91	5.91	5.91	5.91	5.91	5.92	5.92	5.92	5.92	5.92	5.92
20	5.92	5.92	5.92	5.93	5.93	5.93	5.93	5.93	5.93	5.94	5.94	5.94
21	5.94	5.94	5.94	5.95	5.95	5.95	5.95	5.95	5.95	5.96	5.96	5.96
22	5.96	5.96	5.96	5.97	5.97	5.97	5.97	5.97	5.97	5.98	5.98	5.98
23	5.98	5.98	5.98	5.99	5.99	5.99	5.99	5.99	5.99	6.00	6.00	6.00
24	6.00	6.00	6.00	6.01	6.01	6.01	6.01	6.01	6.01	6.02	6.02	6.02
25	6.02	6.02	6.03	6.03	6.03	6.03	6.04	6.04	6.04	6.04	6.05	6.05
26	6.05	6.05	6.06	6.06	6.06	6.06	6.07	6.07	6.07	6.07	6.08	6.08
27	6.08	6.08	6.09	6.09	6.09	6.09	6.10	6.10	6.10	6.10	6.11	6.11
28	6.11	6.11	6.12	6.12	6.12	6.12	6.13	6.13	6.13	6.13	6.14	6.14
29	6.14	6.14	6.15	6.15	6.15	6.15	6.16	6.16	6.16	6.16	6.17	6.17
30	6.17	6.17	6.18	6.18	6.18	6.18	6.19	6.19	6.19	6.19	6.20	6.20
31	6.20	6.20	6.21	6.21	6.21	6.22	6.22	6.22	6.23	6.23	6.23	6.24
32	6.24	6.24	6.25	6.25	6.25	6.26	6.26	6.26	6.27	6.27	6.27	6.28
33	6.28	6.28	6.29	6.29	6.29	6.30	6.30	6.30	6.31	6.31	6.31	6.32
34	6.32	6.32	6.33	6.33	6.33	6.34	6.34	6.34	6.35	6.35	6.35	6.36
35	6.36	6.36	6.37	6.37	6.37	6.38	6.38	6.38	6.39	6.39	6.39	6.40
36	6.40	6.40	6.41	6.41	6.42	6.42	6.43	6.43	6.43	6.44	6.44	6.45
37	6.45	6.45	6.46	6.46	6.47	6.47	6.48	6.48	6.48	6.49	6.49	6.50
38	6.50	6.50	6.51	6.51	6.52	6.52	6.53	6.53	6.53	6.54	6.54	6.55
39	6.55	6.55	6.56	6.56	6.57	6.57	6.58	6.58	6.58	6.59	6.59	6.60
40	6.60	6.61	6.61	6.62	6.62	6.63	6.63	6.64	6.64	6.65	6.65	6.66
41	6.66	6.66	6.67	6.67	6.68	6.68	6.69	6.69	6.69	6.70	6.70	6.71
42	6.71	6.72	6.72	6.73	6.73	6.74	6.74	6.75	6.75	6.76	6.76	6.77
43	6.77	6.78	6.78	6.79	6.79	6.80	6.81	6.81	6.82	6.82	6.83	6.83
44	6.84	6.85	6.85	6.86	6.86	6.87	6.87	6.88	6.88	6.89	6.89	6.90

**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)**  
**Actuarial Equivalency Factors Effective January 1, 2024**

**Table 3b: Non-Refund Annuity Conversion Factors - Option 1 - Disabled Members (Tier One / Tier Two only)**  
 (Amount of Monthly Annuity per \$1,000 of Account Balance)

Age	Months of Attained Age at Retirement											
	0	1	2	3	4	5	6	7	8	9	10	11
45	6.90	6.91	6.91	6.92	6.92	6.93	6.93	6.94	6.94	6.95	6.95	6.96
46	6.96	6.97	6.97	6.98	6.98	6.99	7.00	7.00	7.01	7.01	7.02	7.02
47	7.03	7.04	7.04	7.05	7.05	7.06	7.06	7.07	7.07	7.08	7.08	7.09
48	7.09	7.10	7.10	7.11	7.11	7.12	7.13	7.13	7.14	7.14	7.15	7.15
49	7.16	7.17	7.17	7.18	7.18	7.19	7.19	7.20	7.20	7.21	7.21	7.22
50	7.22	7.23	7.23	7.24	7.24	7.25	7.26	7.26	7.27	7.27	7.28	7.28
51	7.29	7.30	7.30	7.31	7.31	7.32	7.33	7.33	7.34	7.34	7.35	7.35
52	7.36	7.37	7.37	7.38	7.38	7.39	7.40	7.40	7.41	7.41	7.42	7.42
53	7.43	7.44	7.44	7.45	7.46	7.46	7.47	7.48	7.48	7.49	7.50	7.50
54	7.51	7.52	7.52	7.53	7.53	7.54	7.55	7.55	7.56	7.56	7.57	7.57
55	7.58	7.59	7.60	7.60	7.61	7.62	7.63	7.63	7.64	7.65	7.66	7.66
56	7.67	7.68	7.69	7.69	7.70	7.71	7.72	7.72	7.73	7.74	7.75	7.75
57	7.76	7.77	7.78	7.78	7.79	7.80	7.81	7.81	7.82	7.83	7.84	7.84
58	7.85	7.86	7.87	7.88	7.88	7.89	7.90	7.91	7.92	7.93	7.93	7.94
59	7.95	7.96	7.97	7.98	7.99	8.00	8.01	8.02	8.03	8.04	8.05	8.06
60	8.07	8.08	8.09	8.10	8.11	8.12	8.13	8.14	8.15	8.16	8.17	8.18
61	8.19	8.20	8.21	8.22	8.23	8.24	8.26	8.27	8.28	8.29	8.30	8.31
62	8.32	8.33	8.34	8.36	8.37	8.38	8.39	8.40	8.41	8.43	8.44	8.45
63	8.46	8.47	8.49	8.50	8.51	8.52	8.54	8.55	8.56	8.57	8.59	8.60
64	8.61	8.62	8.64	8.65	8.67	8.68	8.70	8.71	8.72	8.74	8.75	8.77
65	8.78	8.80	8.81	8.83	8.84	8.86	8.87	8.89	8.90	8.92	8.93	8.95
66	8.96	8.98	8.99	9.01	9.03	9.04	9.06	9.08	9.09	9.11	9.13	9.14
67	9.16	9.18	9.20	9.21	9.23	9.25	9.27	9.28	9.30	9.32	9.34	9.35
68	9.37	9.39	9.41	9.43	9.45	9.47	9.49	9.50	9.52	9.54	9.56	9.58
69	9.60	9.62	9.64	9.66	9.68	9.70	9.73	9.75	9.77	9.79	9.81	9.83
70	9.85	9.87	9.90	9.92	9.94	9.96	9.99	10.01	10.03	10.05	10.08	10.10
71	10.12	10.14	10.17	10.19	10.22	10.24	10.27	10.29	10.31	10.34	10.36	10.39
72	10.41	10.44	10.46	10.49	10.52	10.54	10.57	10.60	10.62	10.65	10.68	10.70
73	10.73	10.76	10.79	10.82	10.85	10.88	10.91	10.93	10.96	10.99	11.02	11.05
74	11.08	11.11	11.14	11.17	11.20	11.23	11.27	11.30	11.33	11.36	11.39	11.42

**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)**  
**Actuarial Equivalency Factors Effective January 1, 2024**

**Table 3b: Non-Refund Annuity Conversion Factors - Option 1 - Disabled Members (Tier One / Tier Two only)**  
 (Amount of Monthly Annuity per \$1,000 of Account Balance)

Age	Months of Attained Age at Retirement											
	0	1	2	3	4	5	6	7	8	9	10	11
75	11.45	11.48	11.52	11.55	11.59	11.62	11.66	11.69	11.72	11.76	11.79	11.83
76	11.86	11.90	11.93	11.97	12.01	12.04	12.08	12.12	12.15	12.19	12.23	12.26
77	12.30	12.34	12.38	12.42	12.46	12.50	12.55	12.59	12.63	12.67	12.71	12.75
78	12.79	12.83	12.88	12.92	12.96	13.01	13.05	13.09	13.14	13.18	13.22	13.27
79	13.31	13.36	13.41	13.45	13.50	13.55	13.60	13.64	13.69	13.74	13.79	13.83
80	13.88	13.93	13.99	14.04	14.09	14.14	14.20	14.25	14.30	14.35	14.41	14.46
81	14.51	14.57	14.62	14.68	14.73	14.79	14.85	14.90	14.96	15.01	15.07	15.12
82	15.18	15.24	15.30	15.36	15.42	15.48	15.55	15.61	15.67	15.73	15.79	15.85
83	15.91	15.98	16.04	16.11	16.17	16.24	16.30	16.37	16.43	16.50	16.56	16.63
84	16.69	16.76	16.83	16.90	16.97	17.04	17.11	17.18	17.25	17.32	17.39	17.46
85	17.53	17.61	17.68	17.76	17.83	17.91	17.98	18.06	18.13	18.21	18.28	18.36
86	18.43	18.51	18.59	18.67	18.75	18.83	18.91	18.99	19.07	19.15	19.23	19.31
87	19.39	19.48	19.56	19.65	19.73	19.82	19.91	19.99	20.08	20.16	20.25	20.33
88	20.42	20.51	20.60	20.70	20.79	20.88	20.97	21.06	21.15	21.25	21.34	21.43
89	21.52	21.62	21.71	21.81	21.91	22.00	22.10	22.20	22.29	22.39	22.49	22.58
90	22.68	22.78	22.89	22.99	23.09	23.20	23.30	23.40	23.51	23.61	23.71	23.82
91	23.92	24.03	24.14	24.25	24.36	24.47	24.58	24.68	24.79	24.90	25.01	25.12
92	25.23	25.35	25.47	25.58	25.70	25.82	25.94	26.05	26.17	26.29	26.41	26.52
93	26.64	26.76	26.89	27.01	27.14	27.26	27.39	27.51	27.63	27.76	27.88	28.01
94	28.13	28.26	28.40	28.53	28.66	28.80	28.93	29.06	29.20	29.33	29.46	29.60
95	29.73	29.87	30.01	30.16	30.30	30.44	30.58	30.72	30.86	31.01	31.15	31.29
96	31.43	31.58	31.73	31.88	32.03	32.18	32.33	32.48	32.63	32.78	32.93	33.08
97	33.23	33.39	33.55	33.71	33.86	34.02	34.18	34.34	34.50	34.66	34.81	34.97
98	35.13	35.30	35.46	35.63	35.79	35.96	36.13	36.29	36.46	36.62	36.79	36.95
99	37.12	37.29	37.47	37.64	37.81	37.98	38.16	38.33	38.50	38.67	38.85	39.02
100	39.19											

**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)**  
**Actuarial Equivalency Factors Effective January 1, 2024**

**Table 4a: 15-Year Certain and Life Annuity Conversion Factors - Option 4 - Healthy Members (Tier One / Tier Two only)**  
 (Amount of Monthly Annuity per \$1,000 of Account Balance)

Age	Months of Attained Age at Retirement											
	0	1	2	3	4	5	6	7	8	9	10	11
15	5.61	5.61	5.61	5.61	5.61	5.61	5.61	5.61	5.61	5.61	5.61	5.61
16	5.61	5.61	5.61	5.61	5.61	5.61	5.61	5.61	5.61	5.61	5.61	5.61
17	5.61	5.61	5.61	5.61	5.61	5.61	5.62	5.62	5.62	5.62	5.62	5.62
18	5.62	5.62	5.62	5.62	5.62	5.62	5.62	5.62	5.62	5.62	5.62	5.62
19	5.62	5.62	5.62	5.62	5.62	5.62	5.63	5.63	5.63	5.63	5.63	5.63
20	5.63	5.63	5.63	5.63	5.63	5.63	5.63	5.63	5.63	5.63	5.63	5.63
21	5.63	5.63	5.63	5.63	5.63	5.63	5.64	5.64	5.64	5.64	5.64	5.64
22	5.64	5.64	5.64	5.64	5.64	5.64	5.64	5.64	5.64	5.64	5.64	5.64
23	5.64	5.64	5.64	5.64	5.64	5.64	5.65	5.65	5.65	5.65	5.65	5.65
24	5.65	5.65	5.65	5.65	5.65	5.65	5.66	5.66	5.66	5.66	5.66	5.66
25	5.66	5.66	5.66	5.66	5.66	5.66	5.67	5.67	5.67	5.67	5.67	5.67
26	5.67	5.67	5.67	5.67	5.67	5.67	5.67	5.67	5.67	5.67	5.67	5.67
27	5.67	5.67	5.67	5.67	5.67	5.67	5.68	5.68	5.68	5.68	5.68	5.68
28	5.68	5.68	5.68	5.68	5.68	5.68	5.69	5.69	5.69	5.69	5.69	5.69
29	5.69	5.69	5.69	5.69	5.69	5.69	5.70	5.70	5.70	5.70	5.70	5.70
30	5.70	5.70	5.70	5.70	5.70	5.70	5.71	5.71	5.71	5.71	5.71	5.71
31	5.71	5.71	5.71	5.72	5.72	5.72	5.72	5.72	5.72	5.73	5.73	5.73
32	5.73	5.73	5.73	5.73	5.73	5.73	5.74	5.74	5.74	5.74	5.74	5.74
33	5.74	5.74	5.74	5.74	5.74	5.74	5.75	5.75	5.75	5.75	5.75	5.75
34	5.75	5.75	5.75	5.76	5.76	5.76	5.76	5.76	5.76	5.77	5.77	5.77
35	5.77	5.77	5.77	5.77	5.77	5.77	5.78	5.78	5.78	5.78	5.78	5.78
36	5.78	5.78	5.78	5.79	5.79	5.79	5.79	5.79	5.79	5.80	5.80	5.80
37	5.80	5.80	5.80	5.81	5.81	5.81	5.81	5.81	5.81	5.82	5.82	5.82
38	5.82	5.82	5.82	5.82	5.82	5.82	5.83	5.83	5.83	5.83	5.83	5.83
39	5.83	5.83	5.83	5.84	5.84	5.84	5.84	5.84	5.84	5.85	5.85	5.85
40	5.85	5.85	5.86	5.86	5.86	5.86	5.87	5.87	5.87	5.87	5.88	5.88
41	5.88	5.88	5.88	5.89	5.89	5.89	5.89	5.89	5.89	5.90	5.90	5.90
42	5.90	5.90	5.90	5.91	5.91	5.91	5.91	5.91	5.91	5.92	5.92	5.92
43	5.92	5.92	5.93	5.93	5.93	5.93	5.94	5.94	5.94	5.94	5.95	5.95
44	5.95	5.95	5.96	5.96	5.96	5.96	5.97	5.97	5.97	5.97	5.98	5.98

**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)**  
**Actuarial Equivalency Factors Effective January 1, 2024**

**Table 4a: 15-Year Certain and Life Annuity Conversion Factors - Option 4 - Healthy Members (Tier One / Tier Two only)**  
 (Amount of Monthly Annuity per \$1,000 of Account Balance)

Age	Months of Attained Age at Retirement											
	0	1	2	3	4	5	6	7	8	9	10	11
45	5.98	5.98	5.98	5.99	5.99	5.99	5.99	5.99	5.99	6.00	6.00	6.00
46	6.00	6.00	6.01	6.01	6.01	6.02	6.02	6.02	6.03	6.03	6.03	6.04
47	6.04	6.04	6.05	6.05	6.05	6.05	6.06	6.06	6.06	6.06	6.07	6.07
48	6.07	6.07	6.08	6.08	6.08	6.08	6.09	6.09	6.09	6.09	6.10	6.10
49	6.10	6.10	6.11	6.11	6.11	6.12	6.12	6.12	6.13	6.13	6.13	6.14
50	6.14	6.14	6.15	6.15	6.15	6.16	6.16	6.16	6.17	6.17	6.17	6.18
51	6.18	6.18	6.19	6.19	6.19	6.20	6.20	6.20	6.21	6.21	6.21	6.22
52	6.22	6.22	6.23	6.23	6.24	6.24	6.25	6.25	6.25	6.26	6.26	6.27
53	6.27	6.27	6.28	6.28	6.28	6.29	6.29	6.29	6.30	6.30	6.30	6.31
54	6.31	6.31	6.32	6.32	6.33	6.33	6.34	6.34	6.34	6.35	6.35	6.36
55	6.36	6.37	6.37	6.38	6.38	6.39	6.39	6.40	6.40	6.41	6.41	6.42
56	6.42	6.42	6.43	6.43	6.44	6.44	6.45	6.45	6.45	6.46	6.46	6.47
57	6.47	6.48	6.48	6.49	6.49	6.50	6.50	6.51	6.51	6.52	6.52	6.53
58	6.53	6.54	6.54	6.55	6.55	6.56	6.57	6.57	6.58	6.58	6.59	6.59
59	6.60	6.61	6.61	6.62	6.62	6.63	6.64	6.64	6.65	6.65	6.66	6.66
60	6.67	6.68	6.68	6.69	6.69	6.70	6.71	6.71	6.72	6.72	6.73	6.73
61	6.74	6.75	6.75	6.76	6.76	6.77	6.78	6.78	6.79	6.79	6.80	6.80
62	6.81	6.82	6.82	6.83	6.84	6.84	6.85	6.86	6.86	6.87	6.88	6.88
63	6.89	6.90	6.91	6.91	6.92	6.93	6.94	6.94	6.95	6.96	6.97	6.97
64	6.98	6.99	7.00	7.00	7.01	7.02	7.03	7.03	7.04	7.05	7.06	7.06
65	7.07	7.08	7.09	7.09	7.10	7.11	7.12	7.12	7.13	7.14	7.15	7.15
66	7.16	7.17	7.18	7.18	7.19	7.20	7.21	7.21	7.22	7.23	7.24	7.24
67	7.25	7.26	7.27	7.28	7.28	7.29	7.30	7.31	7.32	7.33	7.33	7.34
68	7.35	7.36	7.37	7.38	7.39	7.40	7.41	7.41	7.42	7.43	7.44	7.45
69	7.46	7.47	7.48	7.49	7.49	7.50	7.51	7.52	7.53	7.54	7.54	7.55
70	7.56	7.57	7.58	7.59	7.60	7.61	7.62	7.62	7.63	7.64	7.65	7.66
71	7.67	7.68	7.69	7.70	7.70	7.71	7.72	7.73	7.74	7.75	7.75	7.76
72	7.77	7.78	7.79	7.80	7.81	7.82	7.83	7.83	7.84	7.85	7.86	7.87
73	7.88	7.89	7.90	7.91	7.91	7.92	7.93	7.94	7.95	7.96	7.96	7.97
74	7.98	7.99	8.00	8.01	8.01	8.02	8.03	8.04	8.05	8.06	8.06	8.07



**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)**  
**Actuarial Equivalency Factors Effective January 1, 2024**

**Table 4a: 15-Year Certain and Life Annuity Conversion Factors - Option 4 - Healthy Members (Tier One / Tier Two only)**  
 (Amount of Monthly Annuity per \$1,000 of Account Balance)

Age	Months of Attained Age at Retirement											
	0	1	2	3	4	5	6	7	8	9	10	11
75	8.08	8.09	8.10	8.11	8.11	8.12	8.13	8.14	8.15	8.16	8.16	8.17
76	8.18	8.19	8.20	8.20	8.21	8.22	8.23	8.23	8.24	8.25	8.26	8.26
77	8.27	8.28	8.28	8.29	8.30	8.30	8.31	8.32	8.32	8.33	8.34	8.34
78	8.35	8.36	8.36	8.37	8.38	8.38	8.39	8.40	8.40	8.41	8.42	8.42
79	8.43	8.44	8.44	8.45	8.45	8.46	8.46	8.47	8.47	8.48	8.48	8.49
80	8.49	8.50	8.50	8.51	8.51	8.52	8.52	8.53	8.53	8.54	8.54	8.55
81	8.55	8.55	8.56	8.56	8.57	8.57	8.58	8.58	8.58	8.59	8.59	8.60
82	8.60	8.60	8.61	8.61	8.61	8.62	8.62	8.62	8.63	8.63	8.63	8.64
83	8.64	8.64	8.65	8.65	8.65	8.65	8.66	8.66	8.66	8.66	8.67	8.67
84	8.67	8.67	8.68	8.68	8.68	8.68	8.69	8.69	8.69	8.69	8.70	8.70
85	8.70	8.70	8.70	8.71	8.71	8.71	8.71	8.71	8.71	8.72	8.72	8.72
86	8.72	8.72	8.72	8.72	8.72	8.72	8.73	8.73	8.73	8.73	8.73	8.73
87	8.73	8.73	8.73	8.73	8.73	8.73	8.74	8.74	8.74	8.74	8.74	8.74
88	8.74	8.74	8.74	8.74	8.74	8.74	8.75	8.75	8.75	8.75	8.75	8.75
89	8.75	8.75	8.75	8.75	8.75	8.75	8.76	8.76	8.76	8.76	8.76	8.76
90	8.76	8.76	8.76	8.76	8.76	8.76	8.76	8.76	8.76	8.76	8.76	8.76
91	8.76	8.76	8.76	8.76	8.76	8.76	8.76	8.76	8.76	8.76	8.76	8.76
92	8.76	8.76	8.76	8.76	8.76	8.76	8.76	8.76	8.76	8.76	8.76	8.76
93	8.76	8.76	8.76	8.76	8.76	8.76	8.77	8.77	8.77	8.77	8.77	8.77
94	8.77	8.77	8.77	8.77	8.77	8.77	8.77	8.77	8.77	8.77	8.77	8.77
95	8.77	8.77	8.77	8.77	8.77	8.77	8.77	8.77	8.77	8.77	8.77	8.77
96	8.77	8.77	8.77	8.77	8.77	8.77	8.77	8.77	8.77	8.77	8.77	8.77
97	8.77	8.77	8.77	8.77	8.77	8.77	8.77	8.77	8.77	8.77	8.77	8.77
98	8.77	8.77	8.77	8.77	8.77	8.77	8.77	8.77	8.77	8.77	8.77	8.77
99	8.77	8.77	8.77	8.77	8.77	8.77	8.77	8.77	8.77	8.77	8.77	8.77
100	8.77											

**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)**  
**Actuarial Equivalency Factors Effective January 1, 2024**

**Table 4b: 15-Year Certain and Life Annuity Conversion Factors - Option 4 - Disabled Members (Tier One / Tier Two only)**  
 (Amount of Monthly Annuity per \$1,000 of Account Balance)

Age	Months of Attained Age at Retirement											
	0	1	2	3	4	5	6	7	8	9	10	11
15	5.80	5.80	5.80	5.81	5.81	5.81	5.81	5.81	5.81	5.82	5.82	5.82
16	5.82	5.82	5.82	5.82	5.82	5.82	5.83	5.83	5.83	5.83	5.83	5.83
17	5.83	5.83	5.83	5.83	5.83	5.83	5.84	5.84	5.84	5.84	5.84	5.84
18	5.84	5.84	5.84	5.84	5.84	5.84	5.85	5.85	5.85	5.85	5.85	5.85
19	5.85	5.85	5.85	5.86	5.86	5.86	5.86	5.86	5.86	5.87	5.87	5.87
20	5.87	5.87	5.87	5.87	5.87	5.87	5.88	5.88	5.88	5.88	5.88	5.88
21	5.88	5.88	5.88	5.89	5.89	5.89	5.89	5.89	5.89	5.90	5.90	5.90
22	5.90	5.90	5.90	5.91	5.91	5.91	5.91	5.91	5.91	5.92	5.92	5.92
23	5.92	5.92	5.92	5.92	5.92	5.92	5.93	5.93	5.93	5.93	5.93	5.93
24	5.93	5.93	5.93	5.94	5.94	5.94	5.94	5.94	5.94	5.95	5.95	5.95
25	5.95	5.95	5.95	5.96	5.96	5.96	5.96	5.96	5.96	5.97	5.97	5.97
26	5.97	5.97	5.98	5.98	5.98	5.98	5.99	5.99	5.99	5.99	6.00	6.00
27	6.00	6.00	6.00	6.01	6.01	6.01	6.01	6.01	6.01	6.02	6.02	6.02
28	6.02	6.02	6.02	6.03	6.03	6.03	6.03	6.03	6.03	6.04	6.04	6.04
29	6.04	6.04	6.05	6.05	6.05	6.05	6.06	6.06	6.06	6.06	6.07	6.07
30	6.07	6.07	6.07	6.08	6.08	6.08	6.08	6.08	6.08	6.09	6.09	6.09
31	6.09	6.09	6.10	6.10	6.10	6.10	6.11	6.11	6.11	6.11	6.12	6.12
32	6.12	6.12	6.13	6.13	6.13	6.13	6.14	6.14	6.14	6.14	6.15	6.15
33	6.15	6.15	6.15	6.16	6.16	6.16	6.16	6.16	6.16	6.17	6.17	6.17
34	6.17	6.17	6.18	6.18	6.18	6.18	6.19	6.19	6.19	6.19	6.20	6.20
35	6.20	6.20	6.21	6.21	6.21	6.21	6.22	6.22	6.22	6.22	6.23	6.23
36	6.23	6.23	6.24	6.24	6.24	6.25	6.25	6.25	6.26	6.26	6.26	6.27
37	6.27	6.27	6.28	6.28	6.28	6.28	6.29	6.29	6.29	6.29	6.30	6.30
38	6.30	6.30	6.31	6.31	6.31	6.31	6.32	6.32	6.32	6.32	6.33	6.33
39	6.33	6.33	6.34	6.34	6.34	6.34	6.35	6.35	6.35	6.35	6.36	6.36
40	6.36	6.36	6.37	6.37	6.37	6.38	6.38	6.38	6.39	6.39	6.39	6.40
41	6.40	6.40	6.41	6.41	6.41	6.41	6.42	6.42	6.42	6.42	6.43	6.43
42	6.43	6.43	6.44	6.44	6.44	6.44	6.45	6.45	6.45	6.46	6.46	6.47
43	6.47	6.47	6.48	6.48	6.48	6.48	6.49	6.49	6.49	6.49	6.50	6.50
44	6.50	6.50	6.51	6.51	6.51	6.52	6.52	6.52	6.53	6.53	6.53	6.54

**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)**  
**Actuarial Equivalency Factors Effective January 1, 2024**

**Table 4b: 15-Year Certain and Life Annuity Conversion Factors - Option 4 - Disabled Members (Tier One / Tier Two only)**  
 (Amount of Monthly Annuity per \$1,000 of Account Balance)

Age	Months of Attained Age at Retirement											
	0	1	2	3	4	5	6	7	8	9	10	11
45	6.54	6.54	6.55	6.55	6.55	6.56	6.56	6.56	6.57	6.57	6.57	6.58
46	6.58	6.58	6.59	6.59	6.59	6.60	6.60	6.60	6.61	6.61	6.61	6.62
47	6.62	6.62	6.63	6.63	6.63	6.64	6.64	6.64	6.65	6.65	6.65	6.66
48	6.66	6.66	6.67	6.67	6.67	6.68	6.68	6.68	6.69	6.69	6.69	6.70
49	6.70	6.70	6.71	6.71	6.71	6.72	6.72	6.72	6.73	6.73	6.73	6.74
50	6.74	6.74	6.75	6.75	6.75	6.76	6.76	6.76	6.77	6.77	6.77	6.78
51	6.78	6.78	6.79	6.79	6.79	6.80	6.80	6.80	6.81	6.81	6.81	6.82
52	6.82	6.82	6.83	6.83	6.84	6.84	6.85	6.85	6.85	6.86	6.86	6.87
53	6.87	6.87	6.88	6.88	6.89	6.89	6.90	6.90	6.90	6.91	6.91	6.92
54	6.92	6.92	6.93	6.93	6.94	6.94	6.95	6.95	6.95	6.96	6.96	6.97
55	6.97	6.97	6.98	6.98	6.99	6.99	7.00	7.00	7.00	7.01	7.01	7.02
56	7.02	7.03	7.03	7.04	7.04	7.05	7.05	7.06	7.06	7.07	7.07	7.08
57	7.08	7.09	7.09	7.10	7.10	7.11	7.11	7.12	7.12	7.13	7.13	7.14
58	7.14	7.15	7.15	7.16	7.16	7.17	7.17	7.18	7.18	7.19	7.19	7.20
59	7.20	7.21	7.21	7.22	7.22	7.23	7.24	7.24	7.25	7.25	7.26	7.26
60	7.27	7.28	7.28	7.29	7.29	7.30	7.30	7.31	7.31	7.32	7.32	7.33
61	7.33	7.34	7.34	7.35	7.35	7.36	7.37	7.37	7.38	7.38	7.39	7.39
62	7.40	7.41	7.41	7.42	7.43	7.43	7.44	7.45	7.45	7.46	7.47	7.47
63	7.48	7.49	7.49	7.50	7.50	7.51	7.52	7.52	7.53	7.53	7.54	7.54
64	7.55	7.56	7.56	7.57	7.58	7.58	7.59	7.60	7.60	7.61	7.62	7.62
65	7.63	7.64	7.64	7.65	7.66	7.66	7.67	7.68	7.68	7.69	7.70	7.70
66	7.71	7.72	7.72	7.73	7.74	7.74	7.75	7.76	7.76	7.77	7.78	7.78
67	7.79	7.80	7.80	7.81	7.82	7.82	7.83	7.84	7.84	7.85	7.86	7.86
68	7.87	7.88	7.88	7.89	7.90	7.90	7.91	7.92	7.92	7.93	7.94	7.94
69	7.95	7.96	7.96	7.97	7.98	7.98	7.99	8.00	8.00	8.01	8.02	8.02
70	8.03	8.04	8.04	8.05	8.06	8.06	8.07	8.08	8.08	8.09	8.10	8.10
71	8.11	8.12	8.12	8.13	8.13	8.14	8.15	8.15	8.16	8.16	8.17	8.17
72	8.18	8.19	8.19	8.20	8.21	8.21	8.22	8.23	8.23	8.24	8.25	8.25
73	8.26	8.27	8.27	8.28	8.28	8.29	8.30	8.30	8.31	8.31	8.32	8.32
74	8.33	8.34	8.34	8.35	8.35	8.36	8.36	8.37	8.37	8.38	8.38	8.39

**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)**  
**Actuarial Equivalency Factors Effective January 1, 2024**

**Table 4b: 15-Year Certain and Life Annuity Conversion Factors - Option 4 - Disabled Members (Tier One / Tier Two only)**  
 (Amount of Monthly Annuity per \$1,000 of Account Balance)

Age	Months of Attained Age at Retirement											
	0	1	2	3	4	5	6	7	8	9	10	11
75	8.39	8.40	8.40	8.41	8.41	8.42	8.42	8.43	8.43	8.44	8.44	8.45
76	8.45	8.45	8.46	8.46	8.47	8.47	8.48	8.48	8.48	8.49	8.49	8.50
77	8.50	8.50	8.51	8.51	8.52	8.52	8.53	8.53	8.53	8.54	8.54	8.55
78	8.55	8.55	8.56	8.56	8.56	8.57	8.57	8.57	8.58	8.58	8.58	8.59
79	8.59	8.59	8.60	8.60	8.60	8.61	8.61	8.61	8.62	8.62	8.62	8.63
80	8.63	8.63	8.64	8.64	8.64	8.64	8.65	8.65	8.65	8.65	8.66	8.66
81	8.66	8.66	8.66	8.67	8.67	8.67	8.67	8.67	8.67	8.68	8.68	8.68
82	8.68	8.68	8.68	8.69	8.69	8.69	8.69	8.69	8.69	8.70	8.70	8.70
83	8.70	8.70	8.70	8.71	8.71	8.71	8.71	8.71	8.71	8.72	8.72	8.72
84	8.72	8.72	8.72	8.72	8.72	8.72	8.73	8.73	8.73	8.73	8.73	8.73
85	8.73	8.73	8.73	8.73	8.73	8.73	8.74	8.74	8.74	8.74	8.74	8.74
86	8.74	8.74	8.74	8.74	8.74	8.74	8.74	8.75	8.75	8.75	8.75	8.75
87	8.75	8.75	8.75	8.75	8.75	8.75	8.75	8.75	8.75	8.75	8.75	8.75
88	8.75	8.75	8.75	8.75	8.75	8.75	8.75	8.76	8.76	8.76	8.76	8.76
89	8.76	8.76	8.76	8.76	8.76	8.76	8.76	8.76	8.76	8.76	8.76	8.76
90	8.76	8.76	8.76	8.76	8.76	8.76	8.76	8.76	8.76	8.76	8.76	8.76
91	8.76	8.76	8.76	8.76	8.76	8.76	8.76	8.76	8.76	8.76	8.76	8.76
92	8.76	8.76	8.76	8.76	8.76	8.76	8.76	8.77	8.77	8.77	8.77	8.77
93	8.77	8.77	8.77	8.77	8.77	8.77	8.77	8.77	8.77	8.77	8.77	8.77
94	8.77	8.77	8.77	8.77	8.77	8.77	8.77	8.77	8.77	8.77	8.77	8.77
95	8.77	8.77	8.77	8.77	8.77	8.77	8.77	8.77	8.77	8.77	8.77	8.77
96	8.77	8.77	8.77	8.77	8.77	8.77	8.77	8.77	8.77	8.77	8.77	8.77
97	8.77	8.77	8.77	8.77	8.77	8.77	8.77	8.77	8.77	8.77	8.77	8.77
98	8.77	8.77	8.77	8.77	8.77	8.77	8.77	8.77	8.77	8.77	8.77	8.77
99	8.77	8.77	8.77	8.77	8.77	8.77	8.77	8.77	8.77	8.77	8.77	8.77
100	8.77	8.77	8.77	8.77	8.77	8.77	8.77	8.77	8.77	8.77	8.77	8.77

**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)**  
**Actuarial Equivalency Factors Effective January 1, 2024**

**Table 5: Commutation of Option 4 Death Benefit - Healthy and Disabled Members (Tier One / Tier Two only)**  
(Present Value of \$1.00 of Monthly Annuity)

Rem. Months	Pres. Value	Rem. Months	Pres. Value	Rem. Months	Pres. Value	Rem. Months	Pres. Value	Rem. Months	Pres. Value	Rem. Months	Pres. Value
180	114.06	150	102.02	120	87.81	90	71.01	60	51.16	30	27.71
179	113.69	149	101.59	119	87.29	89	70.40	59	50.44	29	26.86
178	113.32	148	101.15	118	86.77	88	69.78	58	49.71	28	26.00
177	112.94	147	100.71	117	86.25	87	69.17	57	48.99	27	25.14
176	112.57	146	100.26	116	85.73	86	68.55	56	48.25	26	24.28
175	112.19	145	99.82	115	85.20	85	67.93	55	47.52	25	23.41
174	111.81	144	99.37	114	84.67	84	67.30	54	46.78	24	22.53
173	111.43	143	98.92	113	84.13	83	66.67	53	46.03	23	21.65
172	111.04	142	98.46	112	83.60	82	66.03	52	45.28	22	20.77
171	110.66	141	98.00	111	83.06	81	65.40	51	44.53	21	19.88
170	110.27	140	97.55	110	82.52	80	64.76	50	43.77	20	18.98
169	109.88	139	97.08	109	81.97	79	64.11	49	43.01	19	18.08
168	109.48	138	96.62	108	81.42	78	63.46	48	42.25	18	17.18
167	109.09	137	96.15	107	80.87	77	62.81	47	41.48	17	16.27
166	108.69	136	95.68	106	80.31	76	62.16	46	40.70	16	15.35
165	108.29	135	95.21	105	79.76	75	61.50	45	39.92	15	14.43
164	107.89	134	94.74	104	79.20	74	60.83	44	39.14	14	13.51
163	107.49	133	94.26	103	78.63	73	60.17	43	38.35	13	12.58
162	107.08	132	93.78	102	78.07	72	59.50	42	37.56	12	11.64
161	106.67	131	93.30	101	77.49	71	58.82	41	36.76	11	10.70
160	106.26	130	92.81	100	76.92	70	58.15	40	35.96	10	9.75
159	105.85	129	92.32	99	76.34	69	57.47	39	35.16	9	8.80
158	105.43	128	91.83	98	75.76	68	56.78	38	34.35	8	7.85
157	105.01	127	91.34	97	75.18	67	56.09	37	33.54	7	6.88
156	104.59	126	90.84	96	74.60	66	55.40	36	32.72	6	5.92
155	104.17	125	90.34	95	74.01	65	54.70	35	31.89	5	4.94
154	103.75	124	89.84	94	73.41	64	54.00	34	31.07	4	3.97
153	103.32	123	89.34	93	72.82	63	53.30	33	30.23	3	2.98
152	102.89	122	88.83	92	72.22	62	52.59	32	29.40	2	1.99
151	102.46	121	88.32	91	71.61	61	51.88	31	28.55	1	1.00

**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)**  
**Actuarial Equivalency Factors Effective January 1, 2024**

**Table 6a: 100% Joint and Survivor Annuity - Option 2 - Healthy Members**  
 (Factor Multiplied by Option 1 Non-Refund Life Annuity)

	Beneficiary Age Difference	Attained Age at Retirement																			
		45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64
Beneficiary	100																				
younger	99																				
than	98																				
Retiree	97																				
	96																				
	95																				
	94																				
	93																				
	92																				
	91																				
	90																				
	89																				
	88																				
	87																				
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	74																				
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	72																				
	71																				
	70																				
	69																				
	68																				
	67																				
	66																				

**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)**  
**Actuarial Equivalency Factors Effective January 1, 2024**

**Table 6a: 100% Joint and Survivor Annuity - Option 2 - Healthy Members**  
 (Factor Multiplied by Option 1 Non-Refund Life Annuity)

	Beneficiary Age Difference	Attained Age at Retirement																					
		45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64		
Beneficiary younger than Retiree	65																						
	64																				0.689		
	63																						
	62																			0.703	0.689		
	61																		0.716	0.703	0.690		
Beneficiary younger than Retiree	60																			0.729	0.717	0.704	0.691
	59																0.742	0.730	0.717	0.704	0.691		
	58															0.754	0.742	0.730	0.718	0.705	0.692		
	57														0.765	0.754	0.743	0.731	0.719	0.706	0.692		
	56												0.776	0.766	0.755	0.743	0.731	0.719	0.706	0.693			
	55											0.787	0.777	0.766	0.755	0.744	0.732	0.720	0.707	0.694			
	54										0.797	0.787	0.777	0.767	0.756	0.745	0.733	0.721	0.708	0.695			
	53									0.807	0.797	0.788	0.778	0.767	0.757	0.745	0.734	0.721	0.709	0.695			
	52								0.816	0.807	0.798	0.788	0.778	0.768	0.757	0.746	0.734	0.722	0.709	0.696			
	51							0.825	0.816	0.808	0.798	0.789	0.779	0.769	0.758	0.747	0.735	0.723	0.710	0.697			
	50						0.834	0.825	0.817	0.808	0.799	0.790	0.780	0.770	0.759	0.748	0.736	0.724	0.711	0.698			
	49					0.842	0.834	0.826	0.818	0.809	0.800	0.790	0.781	0.770	0.760	0.748	0.737	0.725	0.712	0.699			
	48				0.850	0.843	0.835	0.827	0.818	0.810	0.800	0.791	0.781	0.771	0.760	0.749	0.738	0.726	0.713	0.700			
	47			0.858	0.851	0.843	0.835	0.827	0.819	0.810	0.801	0.792	0.782	0.772	0.761	0.750	0.739	0.727	0.714	0.701			
	46		0.866	0.859	0.852	0.844	0.836	0.828	0.820	0.811	0.802	0.793	0.783	0.773	0.762	0.751	0.740	0.728	0.715	0.702			
	45	0.873	0.867	0.860	0.852	0.845	0.837	0.829	0.821	0.812	0.803	0.794	0.784	0.774	0.763	0.752	0.741	0.729	0.717	0.704			
	44	0.880	0.874	0.867	0.860	0.853	0.845	0.837	0.830	0.821	0.813	0.804	0.795	0.785	0.775	0.764	0.753	0.742	0.730	0.718	0.705		
	43	0.881	0.874	0.868	0.861	0.854	0.846	0.838	0.830	0.822	0.814	0.805	0.796	0.786	0.776	0.766	0.755	0.743	0.731	0.719	0.706		
	42	0.881	0.875	0.869	0.862	0.854	0.847	0.839	0.831	0.823	0.815	0.806	0.797	0.787	0.777	0.767	0.756	0.745	0.733	0.720	0.708		
	41	0.882	0.876	0.869	0.862	0.855	0.848	0.840	0.832	0.824	0.816	0.807	0.798	0.788	0.778	0.768	0.757	0.746	0.734	0.722	0.709		
	40	0.883	0.876	0.870	0.863	0.856	0.849	0.841	0.833	0.825	0.817	0.808	0.799	0.789	0.780	0.769	0.758	0.747	0.736	0.723	0.711		
	39	0.883	0.877	0.871	0.864	0.857	0.849	0.842	0.834	0.826	0.818	0.809	0.800	0.791	0.781	0.771	0.760	0.749	0.737	0.725	0.712		
	38	0.884	0.878	0.872	0.865	0.858	0.850	0.843	0.835	0.827	0.819	0.810	0.801	0.792	0.782	0.772	0.761	0.750	0.739	0.727	0.714		
	37	0.885	0.879	0.873	0.866	0.859	0.851	0.844	0.836	0.828	0.820	0.812	0.803	0.793	0.784	0.774	0.763	0.752	0.740	0.728	0.716		
	36	0.886	0.880	0.873	0.867	0.860	0.852	0.845	0.838	0.830	0.822	0.813	0.804	0.795	0.785	0.775	0.765	0.754	0.742	0.730	0.718		
	35	0.887	0.881	0.874	0.868	0.861	0.854	0.846	0.839	0.831	0.823	0.814	0.806	0.796	0.787	0.777	0.766	0.756	0.744	0.732	0.720		
	34	0.888	0.882	0.875	0.869	0.862	0.855	0.847	0.840	0.832	0.824	0.816	0.807	0.798	0.789	0.779	0.768	0.757	0.746	0.734	0.722		
	33	0.889	0.883	0.877	0.870	0.863	0.856	0.849	0.841	0.834	0.826	0.817	0.809	0.800	0.790	0.780	0.770	0.760	0.748	0.737	0.725		
	32	0.890	0.884	0.878	0.871	0.864	0.857	0.850	0.843	0.835	0.827	0.819	0.810	0.801	0.792	0.782	0.772	0.762	0.751	0.739	0.727		
	31	0.891	0.885	0.879	0.872	0.866	0.859	0.852	0.844	0.837	0.829	0.821	0.812	0.803	0.794	0.784	0.774	0.764	0.753	0.741	0.730		

**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)**  
**Actuarial Equivalency Factors Effective January 1, 2024**

**Table 6a: 100% Joint and Survivor Annuity - Option 2 - Healthy Members**  
 (Factor Multiplied by Option 1 Non-Refund Life Annuity)

Beneficiary Age Difference	Attained Age at Retirement																				
	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	
30	0.892	0.886	0.880	0.874	0.867	0.860	0.853	0.846	0.838	0.831	0.822	0.814	0.805	0.796	0.787	0.777	0.766	0.755	0.744	0.732	
29	0.893	0.887	0.881	0.875	0.868	0.862	0.855	0.848	0.840	0.832	0.824	0.816	0.807	0.798	0.789	0.779	0.769	0.758	0.747	0.735	
28	0.894	0.889	0.883	0.876	0.870	0.863	0.856	0.849	0.842	0.834	0.826	0.818	0.810	0.801	0.791	0.782	0.771	0.761	0.750	0.738	
27	0.895	0.890	0.884	0.878	0.872	0.865	0.858	0.851	0.844	0.836	0.828	0.820	0.812	0.803	0.794	0.784	0.774	0.764	0.753	0.741	
26	0.897	0.891	0.886	0.880	0.873	0.866	0.860	0.853	0.846	0.838	0.831	0.823	0.814	0.806	0.796	0.787	0.777	0.767	0.756	0.744	
Beneficiary younger than Retiree	25	0.898	0.893	0.887	0.881	0.875	0.868	0.862	0.855	0.848	0.841	0.833	0.825	0.817	0.808	0.799	0.790	0.780	0.770	0.759	0.748
	24	0.900	0.894	0.889	0.883	0.877	0.870	0.864	0.857	0.850	0.843	0.835	0.828	0.819	0.811	0.802	0.793	0.783	0.773	0.762	0.751
	23	0.901	0.896	0.890	0.885	0.878	0.872	0.866	0.859	0.852	0.845	0.838	0.830	0.822	0.814	0.805	0.796	0.786	0.776	0.766	0.755
	22	0.903	0.898	0.892	0.886	0.880	0.874	0.868	0.861	0.855	0.848	0.840	0.833	0.825	0.817	0.808	0.799	0.790	0.780	0.770	0.759
	21	0.904	0.899	0.894	0.888	0.882	0.876	0.870	0.864	0.857	0.850	0.843	0.836	0.828	0.820	0.812	0.803	0.794	0.784	0.774	0.763
	20	0.906	0.901	0.896	0.890	0.885	0.878	0.872	0.866	0.860	0.853	0.846	0.839	0.831	0.823	0.815	0.806	0.797	0.788	0.778	0.768
	19	0.908	0.903	0.898	0.892	0.887	0.881	0.875	0.869	0.862	0.856	0.849	0.842	0.834	0.827	0.819	0.810	0.801	0.792	0.782	0.772
	18	0.910	0.905	0.900	0.895	0.889	0.883	0.877	0.871	0.865	0.859	0.852	0.845	0.838	0.830	0.822	0.814	0.805	0.796	0.787	0.777
	17	0.912	0.907	0.902	0.897	0.891	0.886	0.880	0.874	0.868	0.862	0.855	0.848	0.841	0.834	0.826	0.818	0.810	0.801	0.792	0.782
	16	0.914	0.909	0.904	0.899	0.894	0.888	0.883	0.877	0.871	0.865	0.859	0.852	0.845	0.838	0.830	0.822	0.814	0.806	0.797	0.787
	15	0.916	0.911	0.907	0.902	0.896	0.891	0.886	0.880	0.874	0.868	0.862	0.856	0.849	0.842	0.835	0.827	0.819	0.810	0.802	0.793
	14	0.918	0.914	0.909	0.904	0.899	0.894	0.888	0.883	0.878	0.872	0.866	0.859	0.853	0.846	0.839	0.832	0.824	0.816	0.807	0.798
	13	0.920	0.916	0.911	0.907	0.902	0.897	0.891	0.886	0.881	0.875	0.869	0.863	0.857	0.850	0.843	0.836	0.829	0.821	0.813	0.804
	12	0.922	0.918	0.914	0.909	0.905	0.900	0.895	0.890	0.884	0.879	0.873	0.867	0.861	0.855	0.848	0.841	0.834	0.826	0.818	0.810
	11	0.925	0.921	0.917	0.912	0.907	0.903	0.898	0.893	0.888	0.883	0.877	0.871	0.866	0.859	0.853	0.846	0.839	0.832	0.824	0.816
	10	0.927	0.923	0.919	0.915	0.910	0.906	0.901	0.896	0.891	0.886	0.881	0.876	0.870	0.864	0.858	0.851	0.845	0.837	0.830	0.822
	9	0.930	0.926	0.922	0.918	0.913	0.909	0.904	0.900	0.895	0.890	0.885	0.880	0.875	0.869	0.863	0.857	0.850	0.843	0.836	0.828
	8	0.932	0.928	0.925	0.921	0.916	0.912	0.908	0.903	0.899	0.894	0.889	0.884	0.879	0.874	0.868	0.862	0.856	0.849	0.842	0.835
	7	0.935	0.931	0.927	0.924	0.920	0.915	0.911	0.907	0.903	0.898	0.894	0.889	0.884	0.879	0.873	0.867	0.861	0.855	0.848	0.841
	6	0.937	0.934	0.930	0.927	0.923	0.919	0.915	0.911	0.907	0.902	0.898	0.893	0.889	0.884	0.878	0.873	0.867	0.861	0.855	0.848
Beneficiary younger than Retiree	5	0.940	0.936	0.933	0.930	0.926	0.922	0.918	0.914	0.910	0.906	0.902	0.898	0.893	0.888	0.883	0.878	0.873	0.867	0.861	0.855
	4	0.942	0.939	0.936	0.932	0.929	0.925	0.922	0.918	0.914	0.911	0.906	0.902	0.898	0.893	0.889	0.884	0.879	0.873	0.868	0.862
	3	0.945	0.942	0.939	0.935	0.932	0.928	0.925	0.922	0.918	0.915	0.911	0.907	0.903	0.898	0.894	0.889	0.885	0.879	0.874	0.869
	2	0.947	0.944	0.941	0.938	0.935	0.932	0.929	0.925	0.922	0.919	0.915	0.911	0.907	0.903	0.899	0.895	0.890	0.886	0.881	0.875
	1	0.950	0.947	0.944	0.941	0.938	0.935	0.932	0.929	0.926	0.923	0.919	0.916	0.912	0.908	0.905	0.900	0.896	0.892	0.887	0.882
Beneficiary same age as Retiree	0	<b>0.952</b>	<b>0.950</b>	<b>0.947</b>	<b>0.944</b>	<b>0.941</b>	<b>0.938</b>	<b>0.935</b>	<b>0.933</b>	<b>0.930</b>	<b>0.926</b>	<b>0.923</b>	<b>0.920</b>	<b>0.917</b>	<b>0.913</b>	<b>0.910</b>	<b>0.906</b>	<b>0.902</b>	<b>0.898</b>	<b>0.894</b>	<b>0.889</b>
Beneficiary older than	-1	0.954	0.952	0.950	0.947	0.944	0.941	0.939	0.936	0.933	0.930	0.927	0.924	0.921	0.918	0.915	0.911	0.908	0.904	0.900	0.896
	-2	0.957	0.955	0.952	0.950	0.947	0.944	0.942	0.939	0.937	0.934	0.931	0.929	0.926	0.923	0.920	0.917	0.913	0.910	0.906	0.903
	-3	0.959	0.957	0.955	0.952	0.950	0.947	0.945	0.943	0.940	0.938	0.935	0.933	0.930	0.928	0.925	0.922	0.919	0.916	0.913	0.909



**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)**  
**Actuarial Equivalency Factors Effective January 1, 2024**

**Table 6a: 100% Joint and Survivor Annuity - Option 2 - Healthy Members**  
 (Factor Multiplied by Option 1 Non-Refund Life Annuity)

Beneficiary Age Difference	Attained Age at Retirement																				
	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	
Retiree	-4	0.961	0.959	0.957	0.955	0.953	0.950	0.948	0.946	0.944	0.941	0.939	0.937	0.935	0.932	0.930	0.927	0.924	0.922	0.919	0.916
	-5	0.963	0.962	0.960	0.958	0.955	0.953	0.951	0.949	0.947	0.945	0.943	0.941	0.939	0.936	0.934	0.932	0.930	0.927	0.924	0.922
	-6	0.965	0.964	0.962	0.960	0.958	0.956	0.954	0.952	0.950	0.948	0.946	0.945	0.943	0.941	0.939	0.937	0.935	0.932	0.930	0.928
	-7	0.967	0.966	0.964	0.962	0.960	0.958	0.957	0.955	0.953	0.952	0.950	0.948	0.947	0.945	0.943	0.941	0.939	0.937	0.935	0.933
	-8	0.969	0.968	0.966	0.965	0.963	0.961	0.959	0.958	0.956	0.955	0.953	0.952	0.950	0.949	0.947	0.946	0.944	0.942	0.941	0.939
	-9	0.971	0.970	0.968	0.967	0.965	0.963	0.962	0.961	0.959	0.958	0.956	0.955	0.954	0.953	0.951	0.950	0.948	0.947	0.946	0.944
	-10	0.973	0.972	0.970	0.969	0.967	0.966	0.964	0.963	0.962	0.961	0.959	0.958	0.957	0.956	0.955	0.954	0.953	0.951	0.950	0.949
	-11	0.974	0.973	0.972	0.971	0.969	0.968	0.967	0.966	0.965	0.963	0.962	0.961	0.961	0.960	0.959	0.958	0.957	0.956	0.955	0.954
	-12	0.976	0.975	0.974	0.973	0.971	0.970	0.969	0.968	0.967	0.966	0.965	0.964	0.964	0.963	0.962	0.961	0.960	0.960	0.959	0.958
	-13	0.978	0.977	0.975	0.974	0.973	0.972	0.971	0.970	0.969	0.969	0.968	0.967	0.966	0.966	0.965	0.965	0.964	0.963	0.963	0.962
	-14	0.979	0.978	0.977	0.976	0.975	0.974	0.973	0.972	0.972	0.971	0.970	0.970	0.969	0.969	0.968	0.968	0.967	0.967	0.966	0.966
	-15	0.980	0.980	0.979	0.978	0.977	0.976	0.975	0.974	0.974	0.973	0.973	0.972	0.972	0.971	0.971	0.971	0.970	0.970	0.970	0.969
	Beneficiary older than Retiree	-16	0.982	0.981	0.980	0.979	0.978	0.977	0.977	0.976	0.976	0.975	0.975	0.974	0.974	0.974	0.973	0.973	0.973	0.973	0.972
		-17	0.983	0.982	0.981	0.981	0.980	0.979	0.979	0.978	0.978	0.977	0.977	0.977	0.977	0.976	0.976	0.976	0.976	0.976	0.975
		-18	0.984	0.983	0.983	0.982	0.981	0.981	0.980	0.980	0.980	0.979	0.979	0.979	0.979	0.979	0.978	0.978	0.978	0.978	0.978
-19		0.985	0.985	0.984	0.983	0.983	0.982	0.982	0.981	0.981	0.981	0.981	0.981	0.981	0.981	0.981	0.981	0.981	0.981	0.981	
-20		0.986	0.986	0.985	0.985	0.984	0.984	0.983	0.983	0.983	0.983	0.983	0.983	0.983	0.983	0.983	0.983	0.983	0.983	0.983	
-21		0.987	0.987	0.986	0.986	0.985	0.985	0.985	0.984	0.984	0.984	0.984	0.984	0.984	0.984	0.984	0.985	0.985	0.985	0.985	
-22		0.988	0.988	0.987	0.987	0.987	0.986	0.986	0.986	0.986	0.986	0.986	0.986	0.986	0.986	0.986	0.986	0.986	0.987	0.987	
-23		0.989	0.989	0.988	0.988	0.988	0.987	0.987	0.987	0.987	0.987	0.987	0.987	0.987	0.987	0.988	0.988	0.988	0.988	0.988	
-24		0.990	0.990	0.989	0.989	0.989	0.988	0.988	0.988	0.988	0.988	0.988	0.988	0.989	0.989	0.989	0.989	0.989	0.989	0.990	
-25		0.991	0.991	0.990	0.990	0.990	0.989	0.989	0.989	0.989	0.989	0.990	0.990	0.990	0.990	0.990	0.990	0.991	0.991	0.991	
-26		0.992	0.991	0.991	0.991	0.991	0.990	0.990	0.990	0.990	0.991	0.991	0.991	0.991	0.991	0.991	0.992	0.992	0.992	0.992	
-27		0.992	0.992	0.992	0.992	0.992	0.991	0.991	0.991	0.991	0.992	0.992	0.992	0.992	0.992	0.992	0.993	0.993	0.993	0.993	
-28		0.993	0.993	0.993	0.993	0.992	0.992	0.992	0.992	0.992	0.992	0.993	0.993	0.993	0.993	0.993	0.994	0.994	0.994	0.994	
-29		0.994	0.994	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.994	0.994	0.994	0.994	0.994	0.994	0.995	0.995	
-30		0.994	0.994	0.994	0.994	0.994	0.994	0.994	0.994	0.994	0.994	0.994	0.994	0.995	0.995	0.995	0.995	0.995	0.995	0.995	
-31		0.995	0.995	0.995	0.995	0.994	0.994	0.994	0.994	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.996	0.996	0.996	0.996	
-32		0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	
-33		0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.997	0.997	0.997	0.997	0.997	
-34		0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997	
-35		0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.998	0.998	
-36		0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.998	0.998	0.998	0.998	0.998	0.998	
-37		0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	
-38		0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	
-39		0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	

**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)**  
**Actuarial Equivalency Factors Effective January 1, 2024**

**Table 6a: 100% Joint and Survivor Annuity - Option 2 - Healthy Members**  
 (Factor Multiplied by Option 1 Non-Refund Life Annuity)

Beneficiary Age Difference	Attained Age at Retirement																			
	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64
-40	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.999	0.999	0.999	0.999	0.999	0.999	0.999
-41	0.999	0.999	0.999	0.998	0.998	0.998	0.998	0.998	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999
-42	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999
-43	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999
-44	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999
-45	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999
-46	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999
-47	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999
-48	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999
-49	1.000	1.000	1.000	1.000	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999
-50	1.000	1.000	1.000	1.000	1.000	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999
Beneficiary older than Retiree	-51	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.999					
	-52	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000						
	-53	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000						
	-54	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000							
	-55	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000								
Beneficiary older than Retiree	-56	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000										
	-57	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000										
	-58	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000										
	-59	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000											
	-60	1.000	1.000	1.000	1.000	1.000	1.000													
Beneficiary older than Retiree	-61	1.000	1.000	1.000	1.000	1.000														
	-62	1.000	1.000	1.000	1.000															
	-63	1.000	1.000	1.000																
	-64	1.000	1.000																	
	-65	1.000																		

**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)**  
**Actuarial Equivalency Factors Effective January 1, 2024**

**Table 6a: 100% Joint and Survivor Annuity - Option 2 - Healthy Members**  
 (Factor Multiplied by Option 1 Non-Refund Life Annuity)

Beneficiary Age Difference	Attained Age at Retirement																			
	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84
100																				
99																				
98																				
97																				
96																				
95																				
94																				
93																				
92																				
91																				
90																				
89																				
88																				
87																				
86																				
85																				
84																				
83																				0.331
82																			0.350	0.331
81																		0.369	0.350	0.331
80																	0.389	0.370	0.350	0.332
79																0.408	0.389	0.370	0.351	0.332
78															0.428	0.408	0.389	0.370	0.351	0.332
77														0.447	0.428	0.409	0.390	0.370	0.351	0.333
76													0.466	0.447	0.428	0.409	0.390	0.371	0.352	0.333
75												0.486	0.467	0.448	0.429	0.410	0.390	0.371	0.352	0.333
74											0.504	0.486	0.467	0.448	0.429	0.410	0.391	0.372	0.353	0.334
73										0.523	0.505	0.486	0.467	0.449	0.429	0.410	0.391	0.372	0.353	0.334
72								0.542	0.524	0.505	0.487	0.468	0.449	0.430	0.411	0.392	0.372	0.353	0.335	
71							0.560	0.542	0.524	0.506	0.487	0.468	0.449	0.430	0.411	0.392	0.373	0.354	0.335	
70						0.577	0.560	0.542	0.524	0.506	0.488	0.469	0.450	0.431	0.412	0.392	0.373	0.354	0.336	
69					0.595	0.578	0.560	0.543	0.525	0.507	0.488	0.469	0.450	0.431	0.412	0.393	0.374	0.355	0.337	
68				0.612	0.595	0.578	0.561	0.543	0.525	0.507	0.488	0.470	0.451	0.432	0.413	0.393	0.374	0.355	0.337	
67			0.628	0.612	0.596	0.579	0.561	0.544	0.526	0.508	0.489	0.470	0.451	0.432	0.413	0.394	0.375	0.356	0.337	
66		0.644	0.628	0.612	0.596	0.579	0.562	0.544	0.526	0.508	0.490	0.471	0.452	0.433	0.414	0.395	0.375	0.356	0.338	

**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)**  
**Actuarial Equivalency Factors Effective January 1, 2024**

**Table 6a: 100% Joint and Survivor Annuity - Option 2 - Healthy Members**  
 (Factor Multiplied by Option 1 Non-Refund Life Annuity)

	Beneficiary Age Difference	Attained Age at Retirement																			
		65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84
Beneficiary younger than Retiree	65		0.660	0.644	0.629	0.613	0.597	0.580	0.562	0.545	0.527	0.509	0.490	0.471	0.453	0.434	0.414	0.395	0.376	0.357	0.338
	64	0.675	0.660	0.645	0.629	0.613	0.597	0.580	0.563	0.545	0.527	0.509	0.491	0.472	0.453	0.434	0.415	0.396	0.377	0.358	0.339
	63	0.675	0.660	0.645	0.630	0.614	0.598	0.581	0.564	0.546	0.528	0.510	0.491	0.473	0.454	0.435	0.416	0.397	0.377	0.358	0.340
	62	0.675	0.661	0.646	0.631	0.615	0.598	0.581	0.564	0.547	0.529	0.511	0.492	0.473	0.455	0.436	0.416	0.397	0.378	0.359	0.340
	61	0.676	0.662	0.647	0.631	0.615	0.599	0.582	0.565	0.547	0.529	0.511	0.493	0.474	0.455	0.436	0.417	0.398	0.379	0.360	0.341
Beneficiary younger than Retiree	60	0.677	0.662	0.647	0.632	0.616	0.600	0.583	0.566	0.548	0.530	0.512	0.494	0.475	0.456	0.437	0.418	0.399	0.380	0.361	0.342
	59	0.677	0.663	0.648	0.632	0.617	0.600	0.584	0.566	0.549	0.531	0.513	0.494	0.476	0.457	0.438	0.419	0.400	0.380	0.361	0.343
	58	0.678	0.663	0.649	0.633	0.617	0.601	0.584	0.567	0.550	0.532	0.514	0.495	0.477	0.458	0.439	0.420	0.401	0.381	0.362	0.344
	57	0.679	0.664	0.649	0.634	0.618	0.602	0.585	0.568	0.551	0.533	0.515	0.496	0.477	0.459	0.440	0.421	0.401	0.382	0.363	0.345
	56	0.679	0.665	0.650	0.635	0.619	0.603	0.586	0.569	0.551	0.534	0.515	0.497	0.478	0.460	0.441	0.422	0.402	0.383	0.364	0.346
	55	0.680	0.666	0.651	0.636	0.620	0.604	0.587	0.570	0.552	0.535	0.516	0.498	0.479	0.461	0.442	0.423	0.404	0.384	0.365	0.347
	54	0.681	0.666	0.652	0.636	0.621	0.604	0.588	0.571	0.553	0.536	0.517	0.499	0.480	0.462	0.443	0.424	0.405	0.386	0.367	0.348
	53	0.682	0.667	0.653	0.637	0.622	0.605	0.589	0.572	0.554	0.537	0.518	0.500	0.482	0.463	0.444	0.425	0.406	0.387	0.368	0.349
	52	0.682	0.668	0.654	0.638	0.623	0.606	0.590	0.573	0.555	0.538	0.520	0.501	0.483	0.464	0.445	0.426	0.407	0.388	0.369	0.350
	51	0.683	0.669	0.655	0.639	0.624	0.607	0.591	0.574	0.557	0.539	0.521	0.503	0.484	0.465	0.447	0.428	0.408	0.389	0.370	0.352
	50	0.684	0.670	0.656	0.640	0.625	0.609	0.592	0.575	0.558	0.540	0.522	0.504	0.485	0.467	0.448	0.429	0.410	0.391	0.372	0.353
	49	0.685	0.671	0.657	0.642	0.626	0.610	0.593	0.576	0.559	0.541	0.523	0.505	0.487	0.468	0.449	0.430	0.411	0.392	0.373	0.355
	48	0.687	0.672	0.658	0.643	0.627	0.611	0.595	0.578	0.560	0.543	0.525	0.507	0.488	0.470	0.451	0.432	0.413	0.394	0.375	0.356
	47	0.688	0.674	0.659	0.644	0.628	0.612	0.596	0.579	0.562	0.544	0.526	0.508	0.490	0.471	0.453	0.434	0.415	0.396	0.377	0.358
	46	0.689	0.675	0.660	0.645	0.630	0.614	0.597	0.581	0.563	0.546	0.528	0.510	0.492	0.473	0.454	0.435	0.416	0.397	0.379	0.360
	45	0.690	0.676	0.662	0.647	0.631	0.615	0.599	0.582	0.565	0.548	0.530	0.512	0.493	0.475	0.456	0.437	0.418	0.399	0.381	0.362
	44	0.691	0.677	0.663	0.648	0.633	0.617	0.601	0.584	0.567	0.549	0.532	0.514	0.495	0.477	0.458	0.439	0.420	0.401	0.383	0.364
	43	0.693	0.679	0.665	0.650	0.634	0.619	0.602	0.586	0.569	0.551	0.534	0.516	0.497	0.479	0.460	0.441	0.422	0.404	0.385	0.366
	42	0.694	0.680	0.666	0.651	0.636	0.620	0.604	0.588	0.571	0.553	0.536	0.518	0.499	0.481	0.462	0.444	0.425	0.406	0.387	0.368
	41	0.696	0.682	0.668	0.653	0.638	0.622	0.606	0.590	0.573	0.555	0.538	0.520	0.502	0.483	0.465	0.446	0.427	0.408	0.390	0.371
	40	0.698	0.684	0.670	0.655	0.640	0.624	0.608	0.592	0.575	0.558	0.540	0.522	0.504	0.486	0.467	0.448	0.430	0.411	0.392	0.374
	39	0.699	0.686	0.672	0.657	0.642	0.626	0.610	0.594	0.577	0.560	0.542	0.525	0.507	0.488	0.470	0.451	0.432	0.414	0.395	0.376
	38	0.701	0.688	0.673	0.659	0.644	0.628	0.612	0.596	0.579	0.562	0.545	0.527	0.509	0.491	0.473	0.454	0.435	0.416	0.398	0.379
	37	0.703	0.690	0.676	0.661	0.646	0.631	0.615	0.599	0.582	0.565	0.548	0.530	0.512	0.494	0.475	0.457	0.438	0.420	0.401	0.382
	36	0.705	0.692	0.678	0.663	0.649	0.633	0.617	0.601	0.585	0.568	0.550	0.533	0.515	0.497	0.479	0.460	0.441	0.423	0.404	0.386
	35	0.707	0.694	0.680	0.666	0.651	0.636	0.620	0.604	0.587	0.571	0.553	0.536	0.518	0.500	0.482	0.463	0.445	0.426	0.408	0.389
	34	0.710	0.696	0.683	0.668	0.654	0.638	0.623	0.607	0.590	0.574	0.557	0.539	0.521	0.504	0.485	0.467	0.449	0.430	0.411	0.393
	33	0.712	0.699	0.685	0.671	0.656	0.641	0.626	0.610	0.594	0.577	0.560	0.543	0.525	0.507	0.489	0.471	0.452	0.434	0.415	0.397
	32	0.714	0.701	0.688	0.674	0.659	0.644	0.629	0.613	0.597	0.580	0.563	0.546	0.529	0.511	0.493	0.475	0.456	0.438	0.419	0.401
	31	0.717	0.704	0.691	0.677	0.662	0.648	0.632	0.617	0.601	0.584	0.567	0.550	0.533	0.515	0.497	0.479	0.461	0.442	0.424	0.405

**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)**  
**Actuarial Equivalency Factors Effective January 1, 2024**

**Table 6a: 100% Joint and Survivor Annuity - Option 2 - Healthy Members**  
 (Factor Multiplied by Option 1 Non-Refund Life Annuity)

Beneficiary Age Difference	Attained Age at Retirement																				
	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	
30	0.720	0.707	0.694	0.680	0.666	0.651	0.636	0.620	0.604	0.588	0.571	0.554	0.537	0.519	0.501	0.483	0.465	0.447	0.428	0.410	
29	0.723	0.710	0.697	0.683	0.669	0.655	0.639	0.624	0.608	0.592	0.575	0.558	0.541	0.524	0.506	0.488	0.470	0.451	0.433	0.414	
28	0.726	0.713	0.700	0.687	0.673	0.658	0.643	0.628	0.612	0.596	0.580	0.563	0.546	0.529	0.511	0.493	0.475	0.456	0.438	0.419	
27	0.729	0.717	0.704	0.690	0.677	0.662	0.647	0.632	0.617	0.601	0.584	0.568	0.551	0.534	0.516	0.498	0.480	0.461	0.443	0.425	
26	0.733	0.720	0.708	0.694	0.681	0.666	0.652	0.637	0.621	0.606	0.589	0.573	0.556	0.539	0.521	0.503	0.485	0.467	0.449	0.430	
Beneficiary younger than Retiree	25	0.736	0.724	0.711	0.698	0.685	0.671	0.656	0.641	0.626	0.611	0.595	0.578	0.561	0.544	0.527	0.509	0.491	0.473	0.455	0.437
	24	0.740	0.728	0.715	0.703	0.689	0.675	0.661	0.646	0.631	0.616	0.600	0.583	0.567	0.550	0.532	0.515	0.497	0.479	0.461	0.443
	23	0.744	0.732	0.720	0.707	0.694	0.680	0.666	0.652	0.637	0.621	0.605	0.589	0.573	0.556	0.539	0.521	0.503	0.486	0.468	0.450
	22	0.748	0.736	0.724	0.712	0.699	0.685	0.671	0.657	0.642	0.627	0.611	0.595	0.579	0.562	0.545	0.528	0.510	0.493	0.475	0.457
	21	0.752	0.741	0.729	0.717	0.704	0.691	0.677	0.663	0.648	0.633	0.617	0.602	0.585	0.569	0.552	0.535	0.518	0.500	0.483	0.465
	20	0.757	0.746	0.734	0.722	0.709	0.696	0.683	0.669	0.654	0.639	0.624	0.608	0.592	0.576	0.559	0.543	0.525	0.508	0.491	0.474
	19	0.762	0.751	0.739	0.727	0.715	0.702	0.689	0.675	0.660	0.646	0.631	0.615	0.600	0.584	0.567	0.551	0.534	0.517	0.500	0.483
	18	0.767	0.756	0.745	0.733	0.721	0.708	0.695	0.681	0.667	0.653	0.638	0.623	0.607	0.592	0.575	0.559	0.543	0.526	0.509	0.492
	17	0.772	0.761	0.750	0.739	0.727	0.714	0.701	0.688	0.674	0.660	0.645	0.631	0.615	0.600	0.584	0.568	0.552	0.536	0.519	0.503
	16	0.777	0.767	0.756	0.745	0.733	0.721	0.708	0.695	0.681	0.668	0.653	0.639	0.624	0.609	0.594	0.578	0.562	0.546	0.530	0.514
	15	0.783	0.773	0.762	0.751	0.739	0.728	0.715	0.702	0.689	0.676	0.662	0.648	0.633	0.618	0.603	0.588	0.572	0.557	0.541	0.525
	14	0.789	0.779	0.768	0.758	0.746	0.735	0.723	0.710	0.697	0.684	0.671	0.657	0.643	0.628	0.614	0.599	0.584	0.568	0.553	0.537
	13	0.795	0.785	0.775	0.764	0.753	0.742	0.730	0.718	0.706	0.693	0.680	0.666	0.653	0.639	0.624	0.610	0.595	0.580	0.565	0.550
	12	0.801	0.791	0.781	0.771	0.761	0.750	0.738	0.727	0.715	0.702	0.689	0.676	0.663	0.650	0.636	0.622	0.608	0.593	0.578	0.564
	11	0.807	0.798	0.788	0.779	0.768	0.758	0.747	0.735	0.724	0.712	0.700	0.687	0.674	0.661	0.648	0.634	0.620	0.606	0.592	0.578
	10	0.813	0.805	0.796	0.786	0.776	0.766	0.755	0.745	0.733	0.722	0.710	0.698	0.686	0.673	0.660	0.647	0.634	0.620	0.607	0.593
	9	0.820	0.812	0.803	0.794	0.784	0.775	0.764	0.754	0.743	0.732	0.721	0.709	0.698	0.686	0.673	0.661	0.648	0.635	0.622	0.609
	8	0.827	0.819	0.810	0.802	0.793	0.783	0.774	0.764	0.753	0.743	0.732	0.721	0.710	0.698	0.687	0.675	0.663	0.650	0.638	0.625
	7	0.834	0.826	0.818	0.810	0.801	0.792	0.783	0.774	0.764	0.754	0.744	0.733	0.723	0.712	0.701	0.689	0.678	0.666	0.654	0.643
	6	0.841	0.834	0.826	0.818	0.810	0.802	0.793	0.784	0.775	0.765	0.756	0.746	0.736	0.725	0.715	0.704	0.693	0.682	0.671	0.660
Beneficiary younger than Retiree	5	0.848	0.841	0.834	0.827	0.819	0.811	0.803	0.794	0.786	0.777	0.768	0.758	0.749	0.739	0.730	0.720	0.709	0.699	0.689	0.678
	4	0.855	0.849	0.842	0.835	0.828	0.821	0.813	0.805	0.797	0.789	0.780	0.771	0.763	0.754	0.744	0.735	0.726	0.716	0.706	0.697
	3	0.863	0.857	0.850	0.844	0.837	0.830	0.823	0.816	0.808	0.800	0.792	0.784	0.776	0.768	0.760	0.751	0.742	0.733	0.724	0.716
	2	0.870	0.864	0.859	0.853	0.846	0.840	0.833	0.826	0.819	0.812	0.805	0.798	0.790	0.782	0.775	0.767	0.759	0.751	0.743	0.735
	1	0.877	0.872	0.867	0.861	0.855	0.849	0.843	0.837	0.831	0.824	0.817	0.811	0.804	0.797	0.790	0.783	0.776	0.768	0.761	0.754
Beneficiary same age as Retiree	0	<b>0.885</b>	<b>0.880</b>	<b>0.875</b>	<b>0.870</b>	<b>0.864</b>	<b>0.859</b>	<b>0.853</b>	<b>0.848</b>	<b>0.842</b>	<b>0.836</b>	<b>0.830</b>	<b>0.824</b>	<b>0.818</b>	<b>0.811</b>	<b>0.805</b>	<b>0.799</b>	<b>0.792</b>	<b>0.786</b>	<b>0.779</b>	<b>0.772</b>
Beneficiary older than	-1	0.892	0.887	0.883	0.878	0.873	0.868	0.863	0.858	0.853	0.848	0.842	0.837	0.831	0.826	0.820	0.814	0.808	0.803	0.797	0.791
	-2	0.899	0.895	0.891	0.887	0.882	0.878	0.873	0.868	0.864	0.859	0.854	0.849	0.844	0.840	0.835	0.830	0.824	0.819	0.814	0.808
	-3	0.906	0.902	0.899	0.895	0.891	0.887	0.883	0.879	0.874	0.870	0.866	0.862	0.857	0.853	0.849	0.844	0.840	0.835	0.830	0.826

**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)**  
**Actuarial Equivalency Factors Effective January 1, 2024**

**Table 6a: 100% Joint and Survivor Annuity - Option 2 - Healthy Members**  
 (Factor Multiplied by Option 1 Non-Refund Life Annuity)

Beneficiary Age Difference	Attained Age at Retirement																				
	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	
Retiree	-4	0.913	0.909	0.906	0.903	0.899	0.896	0.892	0.888	0.885	0.881	0.877	0.874	0.870	0.866	0.862	0.859	0.855	0.851	0.846	0.842
	-5	0.919	0.916	0.913	0.910	0.907	0.904	0.901	0.898	0.895	0.891	0.888	0.885	0.882	0.879	0.876	0.872	0.869	0.865	0.861	0.857
	-6	0.925	0.923	0.920	0.918	0.915	0.912	0.909	0.907	0.904	0.901	0.899	0.896	0.893	0.891	0.888	0.885	0.882	0.878	0.875	0.871
	-7	0.931	0.929	0.927	0.925	0.922	0.920	0.918	0.915	0.913	0.911	0.908	0.906	0.904	0.902	0.899	0.897	0.894	0.891	0.888	0.884
	-8	0.937	0.935	0.933	0.931	0.929	0.927	0.925	0.923	0.922	0.920	0.918	0.916	0.914	0.912	0.910	0.908	0.905	0.902	0.899	0.896
	-9	0.942	0.941	0.939	0.938	0.936	0.934	0.933	0.931	0.930	0.928	0.926	0.925	0.923	0.922	0.920	0.918	0.916	0.913	0.910	0.907
	-10	0.948	0.946	0.945	0.944	0.942	0.941	0.940	0.938	0.937	0.936	0.934	0.933	0.932	0.930	0.929	0.927	0.925	0.922	0.920	0.917
	-11	0.952	0.951	0.950	0.949	0.948	0.947	0.946	0.945	0.944	0.943	0.942	0.941	0.940	0.938	0.937	0.935	0.933	0.931	0.928	0.925
	-12	0.957	0.956	0.955	0.954	0.953	0.953	0.952	0.951	0.950	0.949	0.948	0.948	0.946	0.945	0.944	0.942	0.941	0.939	0.936	0.933
	-13	0.961	0.961	0.960	0.959	0.959	0.958	0.957	0.957	0.956	0.955	0.954	0.954	0.953	0.952	0.950	0.949	0.947	0.945	0.943	0.940
-14	0.965	0.965	0.964	0.964	0.963	0.963	0.962	0.962	0.961	0.960	0.960	0.959	0.958	0.957	0.956	0.955	0.953	0.951	0.949	0.947	
-15	0.969	0.968	0.968	0.968	0.967	0.967	0.967	0.966	0.966	0.965	0.965	0.964	0.963	0.962	0.961	0.960	0.959	0.957	0.955	0.952	
Beneficiary older than Retiree	-16	0.972	0.972	0.972	0.971	0.971	0.971	0.970	0.970	0.969	0.969	0.968	0.968	0.967	0.966	0.965	0.963	0.961	0.960	0.957	
	-17	0.975	0.975	0.975	0.975	0.975	0.974	0.974	0.974	0.973	0.973	0.972	0.971	0.971	0.970	0.969	0.967	0.966	0.964	0.962	
	-18	0.978	0.978	0.978	0.978	0.978	0.978	0.977	0.977	0.977	0.976	0.976	0.975	0.975	0.974	0.973	0.972	0.971	0.969	0.968	0.966
	-19	0.981	0.981	0.981	0.981	0.980	0.980	0.980	0.980	0.980	0.979	0.979	0.978	0.978	0.977	0.976	0.975	0.974	0.973	0.971	0.969
	-20	0.983	0.983	0.983	0.983	0.983	0.983	0.983	0.982	0.982	0.982	0.981	0.981	0.980	0.980	0.979	0.978	0.977	0.975	0.974	0.972
	-21	0.985	0.985	0.985	0.985	0.985	0.985	0.985	0.985	0.984	0.984	0.984	0.983	0.983	0.982	0.981	0.980	0.979	0.978	0.976	0.974
	-22	0.987	0.987	0.987	0.987	0.987	0.987	0.987	0.986	0.986	0.986	0.985	0.985	0.984	0.984	0.983	0.982	0.981	0.980	0.978	0.976
	-23	0.988	0.989	0.989	0.989	0.988	0.988	0.988	0.988	0.988	0.988	0.987	0.987	0.986	0.986	0.985	0.984	0.983	0.982	0.980	0.978
	-24	0.990	0.990	0.990	0.990	0.990	0.990	0.990	0.989	0.989	0.989	0.989	0.988	0.988	0.987	0.986	0.986	0.985	0.983	0.982	0.980
	-25	0.991	0.991	0.991	0.991	0.991	0.991	0.991	0.991	0.991	0.990	0.990	0.989	0.989	0.988	0.988	0.987	0.986	0.985	0.983	0.981
	-26	0.992	0.992	0.992	0.992	0.992	0.992	0.992	0.992	0.992	0.991	0.991	0.991	0.990	0.990	0.989	0.988	0.987	0.986	0.984	0.982
	-27	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.992	0.992	0.992	0.991	0.991	0.990	0.989	0.988	0.987	0.985	0.983
	-28	0.994	0.994	0.994	0.994	0.994	0.994	0.994	0.994	0.993	0.993	0.993	0.992	0.992	0.991	0.991	0.990	0.989	0.988	0.987	0.985
	-29	0.995	0.995	0.995	0.995	0.995	0.995	0.994	0.994	0.994	0.994	0.993	0.993	0.993	0.992	0.991	0.990	0.989	0.988	0.987	0.985
	-30	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.994	0.994	0.994	0.993	0.993	0.992	0.991	0.990	0.989	0.988	0.987
	-31	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.995	0.995	0.995	0.995	0.994	0.994	0.993	0.992					
	-32	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.995	0.995	0.995	0.994	0.993						
	-33	0.997	0.997	0.997	0.997	0.997	0.997	0.996	0.996	0.996	0.996	0.995	0.995	0.994							
	-34	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.996	0.996	0.996	0.995								
	-35	0.998	0.998	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.996	0.996									
	-36	0.998	0.998	0.998	0.998	0.998	0.997	0.997	0.997	0.997	0.997										
	-37	0.998	0.998	0.998	0.998	0.998	0.998	0.997	0.997	0.997											
	-38	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.997												
	-39	0.998	0.998	0.998	0.998	0.998	0.998	0.998													

**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)**  
**Actuarial Equivalency Factors Effective January 1, 2024**

**Table 6a: 100% Joint and Survivor Annuity - Option 2 - Healthy Members**  
 (Factor Multiplied by Option 1 Non-Refund Life Annuity)

Beneficiary Age Difference	Attained Age at Retirement																			
	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84
-40	0.999	0.999	0.998	0.998	0.998	0.998														
-41	0.999	0.999	0.999	0.998	0.998															
-42	0.999	0.999	0.999	0.999	0.999															
-43	0.999	0.999	0.999																	
-44	0.999	0.999																		
-45	0.999																			
-46																				
-47																				
-48																				
-49																				
-50																				
Beneficiary older than Retiree	-51																			
	-52																			
	-53																			
	-54																			
	-55																			
Beneficiary older than Retiree	-56																			
	-57																			
	-58																			
	-59																			
	-60																			
Beneficiary older than Retiree	-61																			
	-62																			
	-63																			
	-64																			
	-65																			

**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)**  
**Actuarial Equivalency Factors Effective January 1, 2024**

**Table 6a: 100% Joint and Survivor Annuity - Option 2 - Healthy Members**  
 (Factor Multiplied by Option 1 Non-Refund Life Annuity)

Beneficiary Age Difference	Attained Age at Retirement															
	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
Beneficiary younger than Retiree																
100																
99																0.122
98															0.130	0.122
97														0.138	0.130	0.123
96													0.146	0.138	0.130	0.123
95												0.156	0.146	0.138	0.130	0.123
94											0.166	0.156	0.146	0.138	0.130	0.123
93										0.176	0.166	0.156	0.147	0.138	0.130	0.123
92									0.188	0.177	0.166	0.156	0.147	0.138	0.130	0.123
91								0.201	0.188	0.177	0.166	0.156	0.147	0.138	0.131	0.123
90							0.214	0.201	0.188	0.177	0.166	0.156	0.147	0.138	0.131	0.123
89						0.229	0.214	0.201	0.189	0.177	0.166	0.156	0.147	0.139	0.131	0.124
88					0.244	0.229	0.215	0.201	0.189	0.177	0.166	0.156	0.147	0.139	0.131	0.124
87				0.260	0.244	0.229	0.215	0.201	0.189	0.177	0.167	0.157	0.147	0.139	0.131	0.124
86			0.277	0.260	0.244	0.229	0.215	0.202	0.189	0.177	0.167	0.157	0.148	0.139	0.131	0.124
85		0.294	0.277	0.260	0.244	0.229	0.215	0.202	0.189	0.178	0.167	0.157	0.148	0.139	0.132	0.124
84	0.312	0.295	0.277	0.261	0.245	0.230	0.215	0.202	0.189	0.178	0.167	0.157	0.148	0.140	0.132	0.124
83	0.313	0.295	0.277	0.261	0.245	0.230	0.216	0.202	0.190	0.178	0.167	0.157	0.148	0.140	0.132	0.125
82	0.313	0.295	0.278	0.261	0.245	0.230	0.216	0.202	0.190	0.178	0.168	0.158	0.148	0.140	0.132	0.125
81	0.313	0.295	0.278	0.261	0.245	0.230	0.216	0.203	0.190	0.179	0.168	0.158	0.149	0.140	0.132	0.125
80	0.313	0.296	0.278	0.262	0.246	0.231	0.216	0.203	0.190	0.179	0.168	0.158	0.149	0.140	0.133	0.125
79	0.314	0.296	0.279	0.262	0.246	0.231	0.217	0.203	0.191	0.179	0.168	0.158	0.149	0.141	0.133	0.126
78	0.314	0.296	0.279	0.262	0.246	0.231	0.217	0.204	0.191	0.179	0.169	0.159	0.149	0.141	0.133	0.126
77	0.314	0.296	0.279	0.262	0.247	0.231	0.217	0.204	0.191	0.180	0.169	0.159	0.150	0.141	0.133	0.126
76	0.315	0.297	0.279	0.263	0.247	0.232	0.218	0.204	0.192	0.180	0.169	0.159	0.150	0.142	0.134	0.126
75	0.315	0.297	0.280	0.263	0.247	0.232	0.218	0.204	0.192	0.180	0.170	0.160	0.150	0.142	0.134	0.127
74	0.315	0.298	0.280	0.264	0.248	0.233	0.218	0.205	0.192	0.181	0.170	0.160	0.151	0.142	0.134	0.127
73	0.316	0.298	0.281	0.264	0.248	0.233	0.219	0.205	0.193	0.181	0.170	0.160	0.151	0.143	0.135	0.127
72	0.316	0.298	0.281	0.264	0.248	0.233	0.219	0.206	0.193	0.181	0.171	0.161	0.151	0.143	0.135	0.128
71	0.317	0.299	0.281	0.265	0.249	0.234	0.219	0.206	0.193	0.182	0.171	0.161	0.152	0.143	0.136	0.128
70	0.317	0.299	0.282	0.265	0.249	0.234	0.220	0.206	0.194	0.182	0.171	0.161	0.152	0.144	0.136	0.129
69	0.318	0.300	0.282	0.266	0.250	0.235	0.220	0.207	0.194	0.183	0.172	0.162	0.153	0.144	0.136	0.129
68	0.318	0.300	0.283	0.266	0.250	0.235	0.221	0.207	0.195	0.183	0.172	0.162	0.153	0.145	0.137	0.130
67	0.319	0.301	0.283	0.267	0.251	0.236	0.221	0.208	0.195	0.184	0.173	0.163	0.154	0.145	0.137	0.130
66	0.319	0.301	0.284	0.267	0.251	0.236	0.222	0.208	0.196	0.184	0.173	0.163	0.154	0.146	0.138	0.131



**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)**  
**Actuarial Equivalency Factors Effective January 1, 2024**

**Table 6a: 100% Joint and Survivor Annuity - Option 2 - Healthy Members**  
 (Factor Multiplied by Option 1 Non-Refund Life Annuity)

	Beneficiary Age Difference	Attained Age at Retirement															
		85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
Beneficiary younger than Retiree	65	0.320	0.302	0.285	0.268	0.252	0.237	0.222	0.209	0.196	0.185	0.174	0.164	0.155	0.146	0.138	0.131
	64	0.321	0.303	0.285	0.269	0.253	0.237	0.223	0.210	0.197	0.185	0.175	0.165	0.155	0.147	0.139	0.132
	63	0.321	0.303	0.286	0.269	0.253	0.238	0.224	0.210	0.198	0.186	0.175	0.165	0.156	0.148	0.140	0.132
	62	0.322	0.304	0.287	0.270	0.254	0.239	0.224	0.211	0.198	0.187	0.176	0.166	0.157	0.148	0.140	0.133
	61	0.323	0.305	0.287	0.271	0.255	0.240	0.225	0.212	0.199	0.188	0.177	0.167	0.158	0.149	0.141	0.134
Beneficiary younger than Retiree	60	0.323	0.306	0.288	0.272	0.256	0.240	0.226	0.213	0.200	0.188	0.177	0.168	0.158	0.150	0.142	0.135
	59	0.324	0.306	0.289	0.272	0.256	0.241	0.227	0.213	0.201	0.189	0.178	0.168	0.159	0.151	0.143	0.136
	58	0.325	0.307	0.290	0.273	0.257	0.242	0.228	0.214	0.202	0.190	0.179	0.169	0.160	0.151	0.144	0.136
	57	0.326	0.308	0.291	0.274	0.258	0.243	0.229	0.215	0.203	0.191	0.180	0.170	0.161	0.152	0.145	0.137
	56	0.327	0.309	0.292	0.275	0.259	0.244	0.230	0.216	0.204	0.192	0.181	0.171	0.162	0.153	0.146	0.138
Beneficiary younger than Retiree	55	0.328	0.310	0.293	0.276	0.260	0.245	0.231	0.217	0.205	0.193	0.182	0.172	0.163	0.154	0.147	0.139
	54	0.329	0.312	0.294	0.277	0.261	0.246	0.232	0.218	0.206	0.194	0.183	0.173	0.164	0.156	0.148	0.141
	53	0.331	0.313	0.295	0.279	0.263	0.247	0.233	0.220	0.207	0.195	0.184	0.174	0.165	0.157	0.149	0.142
	52	0.332	0.314	0.297	0.280	0.264	0.249	0.234	0.221	0.208	0.197	0.186	0.176	0.167	0.158	0.150	0.143
	51	0.333	0.315	0.298	0.281	0.265	0.250	0.236	0.222	0.210	0.198	0.187	0.177	0.168	0.159	0.152	0.144
Beneficiary younger than Retiree	50	0.335	0.317	0.300	0.283	0.267	0.252	0.237	0.224	0.211	0.199	0.189	0.179	0.169	0.161	0.153	0.146
	49	0.336	0.318	0.301	0.284	0.268	0.253	0.239	0.225	0.213	0.201	0.190	0.180	0.171	0.162	0.155	0.147
	48	0.338	0.320	0.303	0.286	0.270	0.255	0.240	0.227	0.214	0.203	0.192	0.182	0.173	0.164	0.156	0.149
	47	0.340	0.322	0.304	0.288	0.272	0.256	0.242	0.229	0.216	0.204	0.193	0.184	0.174	0.166	0.158	0.151
	46	0.342	0.324	0.306	0.290	0.274	0.258	0.244	0.230	0.218	0.206	0.195	0.185	0.176	0.168	0.160	0.152
Beneficiary younger than Retiree	45	0.344	0.326	0.308	0.292	0.276	0.260	0.246	0.232	0.220	0.208	0.197	0.187	0.178	0.169	0.161	0.154
	44	0.346	0.328	0.310	0.294	0.278	0.262	0.248	0.235	0.222	0.210	0.199	0.189	0.180	0.171	0.163	0.156
	43	0.348	0.330	0.313	0.296	0.280	0.265	0.250	0.237	0.224	0.212	0.201	0.191	0.182	0.173	0.165	0.158
	42	0.350	0.332	0.315	0.298	0.282	0.267	0.253	0.239	0.226	0.215	0.204	0.193	0.184	0.176	0.168	0.161
	41	0.353	0.335	0.317	0.301	0.285	0.270	0.255	0.242	0.229	0.217	0.206	0.196	0.186	0.178	0.170	0.163
Beneficiary younger than Retiree	40	0.355	0.337	0.320	0.303	0.287	0.272	0.258	0.244	0.231	0.219	0.208	0.198	0.189	0.180	0.173	0.166
	39	0.358	0.340	0.323	0.306	0.290	0.275	0.260	0.247	0.234	0.222	0.211	0.201	0.192	0.183	0.175	0.168
	38	0.361	0.343	0.326	0.309	0.293	0.278	0.263	0.249	0.237	0.225	0.214	0.204	0.195	0.186	0.178	0.171
	37	0.364	0.347	0.329	0.312	0.296	0.281	0.266	0.252	0.240	0.228	0.217	0.207	0.198	0.189	0.182	0.175
	36	0.368	0.350	0.333	0.316	0.299	0.284	0.269	0.256	0.243	0.231	0.220	0.210	0.201	0.193	0.185	0.178
Beneficiary younger than Retiree	35	0.371	0.353	0.336	0.319	0.303	0.287	0.273	0.259	0.246	0.234	0.224	0.214	0.205	0.196	0.189	0.182
	34	0.375	0.357	0.339	0.323	0.306	0.291	0.276	0.263	0.250	0.238	0.227	0.217	0.208	0.200	0.193	0.186
	33	0.379	0.361	0.343	0.326	0.310	0.295	0.280	0.267	0.254	0.242	0.231	0.221	0.212	0.204	0.197	0.190
	32	0.383	0.365	0.347	0.330	0.314	0.299	0.284	0.271	0.258	0.246	0.236	0.226	0.217	0.209	0.202	0.195
	31	0.387	0.369	0.352	0.335	0.319	0.303	0.289	0.275	0.263	0.251	0.240	0.231	0.222	0.214	0.207	0.200

**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)**  
**Actuarial Equivalency Factors Effective January 1, 2024**

**Table 6a: 100% Joint and Survivor Annuity - Option 2 - Healthy Members**  
 (Factor Multiplied by Option 1 Non-Refund Life Annuity)

Beneficiary Age Difference	Attained Age at Retirement																
	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100	
30	0.391	0.374	0.356	0.339	0.323	0.308	0.294	0.280	0.268	0.256	0.245	0.236	0.227	0.219	0.212	0.206	
29	0.396	0.378	0.361	0.344	0.328	0.313	0.299	0.285	0.273	0.261	0.251	0.241	0.233	0.225	0.218	0.212	
28	0.401	0.384	0.366	0.350	0.334	0.319	0.304	0.291	0.278	0.267	0.257	0.247	0.239	0.231	0.224	0.218	
27	0.407	0.389	0.372	0.355	0.339	0.324	0.310	0.297	0.285	0.273	0.263	0.254	0.245	0.238	0.231	0.225	
26	0.413	0.395	0.378	0.361	0.346	0.331	0.316	0.303	0.291	0.280	0.270	0.260	0.252	0.245	0.238	0.233	
Beneficiary younger than Retiree	25	0.419	0.401	0.384	0.368	0.352	0.337	0.323	0.310	0.298	0.287	0.277	0.268	0.260	0.253	0.246	0.241
	24	0.425	0.408	0.391	0.375	0.359	0.345	0.331	0.318	0.306	0.295	0.285	0.276	0.268	0.261	0.255	0.250
	23	0.433	0.415	0.399	0.382	0.367	0.352	0.339	0.326	0.314	0.303	0.293	0.285	0.277	0.270	0.264	0.260
	22	0.440	0.423	0.407	0.391	0.375	0.361	0.347	0.334	0.323	0.312	0.303	0.294	0.287	0.280	0.275	0.270
	21	0.448	0.431	0.415	0.399	0.384	0.370	0.356	0.344	0.332	0.322	0.312	0.304	0.297	0.291	0.286	0.282
	20	0.457	0.440	0.424	0.408	0.393	0.379	0.366	0.354	0.342	0.332	0.323	0.315	0.308	0.302	0.298	0.294
	19	0.466	0.450	0.434	0.418	0.404	0.390	0.376	0.364	0.353	0.343	0.335	0.327	0.320	0.315	0.311	0.307
	18	0.476	0.460	0.444	0.429	0.414	0.401	0.388	0.376	0.365	0.355	0.347	0.340	0.334	0.329	0.325	0.322
	17	0.486	0.471	0.455	0.440	0.426	0.412	0.400	0.388	0.378	0.368	0.360	0.353	0.348	0.343	0.340	0.338
	16	0.498	0.482	0.467	0.452	0.438	0.425	0.413	0.402	0.391	0.382	0.375	0.368	0.363	0.359	0.356	0.355
	15	0.510	0.494	0.479	0.465	0.451	0.438	0.427	0.416	0.406	0.398	0.390	0.384	0.380	0.376	0.374	0.373
	14	0.522	0.507	0.493	0.479	0.465	0.453	0.441	0.431	0.422	0.414	0.407	0.402	0.397	0.394	0.393	0.392
	13	0.535	0.521	0.507	0.493	0.480	0.468	0.457	0.447	0.438	0.431	0.425	0.420	0.416	0.414	0.412	0.412
	12	0.550	0.535	0.522	0.509	0.496	0.485	0.474	0.465	0.456	0.449	0.444	0.439	0.436	0.434	0.433	0.433
	11	0.564	0.551	0.538	0.525	0.513	0.502	0.492	0.483	0.475	0.469	0.464	0.460	0.457	0.455	0.455	0.455
	10	0.580	0.567	0.554	0.542	0.531	0.520	0.511	0.502	0.495	0.489	0.485	0.481	0.479	0.478	0.477	0.477
	9	0.596	0.584	0.572	0.560	0.549	0.540	0.531	0.523	0.516	0.511	0.507	0.504	0.502	0.500	0.500	0.500
	8	0.613	0.601	0.590	0.579	0.569	0.560	0.551	0.544	0.538	0.533	0.529	0.527	0.525	0.524	0.523	0.524
	7	0.631	0.620	0.609	0.599	0.589	0.581	0.573	0.566	0.561	0.556	0.553	0.550	0.548	0.547	0.547	0.547
	6	0.649	0.639	0.629	0.619	0.611	0.602	0.595	0.589	0.584	0.580	0.576	0.574	0.572	0.571	0.570	0.570
Beneficiary younger than Retiree	5	0.668	0.658	0.649	0.640	0.632	0.625	0.618	0.612	0.607	0.603	0.600	0.597	0.595	0.594	0.593	0.593
	4	0.688	0.678	0.670	0.662	0.654	0.647	0.641	0.635	0.631	0.627	0.623	0.621	0.619	0.617	0.616	0.616
	3	0.707	0.699	0.691	0.683	0.676	0.670	0.664	0.658	0.654	0.650	0.647	0.644	0.642	0.640	0.639	0.638
	2	0.727	0.719	0.712	0.705	0.698	0.692	0.686	0.681	0.677	0.673	0.669	0.666	0.664	0.662	0.661	0.659
	1	0.746	0.739	0.733	0.726	0.720	0.714	0.709	0.704	0.699	0.695	0.691	0.688	0.686	0.683	0.682	0.680
Beneficiary same age as Retiree	0	<b>0.766</b>	<b>0.759</b>	<b>0.753</b>	<b>0.747</b>	<b>0.741</b>	<b>0.735</b>	<b>0.730</b>	<b>0.725</b>	<b>0.720</b>	<b>0.716</b>	<b>0.713</b>	<b>0.709</b>	<b>0.706</b>	<b>0.704</b>	<b>0.702</b>	<b>0.700</b>
Beneficiary older than	-1	0.785	0.779	0.773	0.767	0.762	0.756	0.751	0.746	0.741	0.737	0.733	0.730	0.726	0.724	0.721	0.719
	-2	0.803	0.798	0.792	0.787	0.781	0.776	0.770	0.765	0.761	0.756	0.752	0.749	0.745	0.742	0.739	0.737
	-3	0.820	0.815	0.810	0.805	0.800	0.794	0.789	0.784	0.779	0.775	0.771	0.767	0.763	0.760	0.756	0.753

**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)**  
**Actuarial Equivalency Factors Effective January 1, 2024**

**Table 6a: 100% Joint and Survivor Annuity - Option 2 - Healthy Members**  
 (Factor Multiplied by Option 1 Non-Refund Life Annuity)

Beneficiary Age Difference	Attained Age at Retirement																	
	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100		
Retiree	-4	0.837	0.832	0.827	0.822	0.817	0.812	0.807	0.802	0.797	0.792	0.788	0.784	0.780	0.776	0.772	0.768	
	-5	0.852	0.848	0.843	0.838	0.833	0.828	0.823	0.818	0.813	0.808	0.804	0.800	0.795	0.791	0.787	0.782	
	-6	0.867	0.863	0.858	0.853	0.848	0.843	0.838	0.833	0.828	0.824	0.819	0.814	0.810	0.805	0.800	0.795	
	-7	0.880	0.876	0.872	0.867	0.862	0.857	0.852	0.847	0.842	0.837	0.833	0.828	0.823	0.818	0.812	0.806	
	-8	0.892	0.888	0.884	0.880	0.875	0.870	0.865	0.860	0.855	0.850	0.845	0.840	0.835	0.829	0.823	0.817	
	-9	0.903	0.899	0.895	0.891	0.887	0.882	0.877	0.872	0.867	0.862	0.856	0.851	0.845	0.839	0.832	0.825	
	-10	0.913	0.910	0.906	0.902	0.897	0.892	0.888	0.883	0.878	0.872	0.867	0.861	0.855	0.848	0.840	0.832	
	-11	0.922	0.919	0.915	0.911	0.907	0.902	0.897	0.892	0.887	0.881	0.876	0.869	0.863	0.855	0.847		
	-12	0.930	0.927	0.923	0.919	0.915	0.911	0.906	0.901	0.895	0.890	0.884	0.877	0.870	0.861			
	-13	0.938	0.934	0.931	0.927	0.923	0.918	0.914	0.908	0.903	0.897	0.890	0.883	0.875				
	-14	0.944	0.941	0.938	0.934	0.930	0.925	0.920	0.915	0.909	0.903	0.896	0.888					
	-15	0.950	0.947	0.943	0.940	0.936	0.931	0.926	0.921	0.915	0.908	0.901						
	Beneficiary older than Retiree	-16	0.955	0.952	0.949	0.945	0.941	0.937	0.932	0.926	0.920	0.912						
		-17	0.959	0.956	0.953	0.950	0.946	0.941	0.936	0.930	0.923							
		-18	0.963	0.960	0.957	0.954	0.950	0.945	0.940	0.933								
-19		0.967	0.964	0.961	0.957	0.953	0.948	0.942										
-20		0.969	0.967	0.964	0.960	0.956	0.951											
-21		0.972	0.969	0.966	0.962	0.958												
-22		0.974	0.971	0.968	0.964													
-23		0.976	0.973	0.970														
-24		0.977	0.975															
-25		0.979																
-26																		
-27																		
-28																		
-29																		
-30																		
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-38																		
-39																		

**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)**  
**Actuarial Equivalency Factors Effective January 1, 2024**

**Table 6a: 100% Joint and Survivor Annuity - Option 2 - Healthy Members**  
 (Factor Multiplied by Option 1 Non-Refund Life Annuity)

Beneficiary Age Difference	Attained Age at Retirement															
	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
-40																
-41																
-42																
-43																
-44																
-45																
-46																
-47																
-48																
-49																
-50																
Beneficiary older than Retiree -51																
-52																
-53																
-54																
-55																
Beneficiary older than Retiree -56																
-57																
-58																
-59																
-60																
Beneficiary older than Retiree -61																
-62																
-63																
-64																
-65																

**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)**  
**Actuarial Equivalency Factors Effective January 1, 2024**

**Table 6b: 100% Joint and Survivor Annuity - Option 2 - Disabled Members**  
 (Factor Multiplied by Option 1 Non-Refund Life Annuity)

Beneficiary Age Difference	Attained Age at Retirement																			
	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39
75																				
74																				
73																				
72																				
71																				
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43																				
42																				
41																				
40																				
39																				
38																				0.797
37																			0.805	0.797
36																	0.812	0.805	0.798	

**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)**  
**Actuarial Equivalency Factors Effective January 1, 2024**

**Table 6b: 100% Joint and Survivor Annuity - Option 2 - Disabled Members**  
 (Factor Multiplied by Option 1 Non-Refund Life Annuity)

Beneficiary Age Difference	Attained Age at Retirement																				
	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	
Beneficiary younger than Retiree																					
35																	0.820	0.813	0.806	0.799	
34																0.827	0.820	0.814	0.806	0.799	
33															0.834	0.828	0.821	0.814	0.807	0.800	
32														0.841	0.835	0.828	0.822	0.815	0.808	0.801	
31													0.848	0.842	0.835	0.829	0.822	0.815	0.808	0.801	
30											0.854	0.848	0.842	0.836	0.830	0.823	0.816	0.809	0.802		
29											0.860	0.855	0.849	0.843	0.837	0.830	0.824	0.817	0.810	0.803	
28										0.866	0.861	0.855	0.849	0.843	0.837	0.831	0.824	0.818	0.811	0.804	
27									0.872	0.867	0.861	0.856	0.850	0.844	0.838	0.832	0.825	0.819	0.812	0.805	
26								0.877	0.872	0.867	0.862	0.856	0.850	0.845	0.839	0.832	0.826	0.819	0.813	0.806	
25							0.883	0.878	0.873	0.868	0.863	0.857	0.851	0.846	0.839	0.833	0.827	0.820	0.814	0.807	
24						0.888	0.883	0.879	0.874	0.868	0.863	0.858	0.852	0.846	0.840	0.834	0.828	0.821	0.815	0.808	
23					0.893	0.888	0.884	0.879	0.874	0.869	0.864	0.859	0.853	0.847	0.841	0.835	0.829	0.822	0.816	0.809	
22				0.898	0.893	0.889	0.885	0.880	0.875	0.870	0.865	0.859	0.854	0.848	0.842	0.836	0.830	0.823	0.817	0.810	
21			0.902	0.898	0.894	0.890	0.885	0.880	0.876	0.871	0.865	0.860	0.855	0.849	0.843	0.837	0.831	0.824	0.818	0.811	
20		0.906	0.903	0.899	0.895	0.890	0.886	0.881	0.876	0.871	0.866	0.861	0.855	0.850	0.844	0.838	0.832	0.826	0.819	0.812	
19	0.910	0.907	0.903	0.899	0.895	0.891	0.887	0.882	0.877	0.872	0.867	0.862	0.856	0.851	0.845	0.839	0.833	0.827	0.820	0.814	
18	0.910	0.907	0.904	0.900	0.896	0.892	0.887	0.883	0.878	0.873	0.868	0.863	0.857	0.852	0.846	0.840	0.834	0.828	0.822	0.815	
17	0.911	0.908	0.904	0.901	0.897	0.892	0.888	0.883	0.879	0.874	0.869	0.864	0.858	0.853	0.847	0.841	0.835	0.829	0.823	0.816	
16	0.911	0.908	0.905	0.901	0.897	0.893	0.889	0.884	0.880	0.875	0.870	0.865	0.860	0.854	0.848	0.843	0.837	0.831	0.824	0.818	
15	0.912	0.909	0.906	0.902	0.898	0.894	0.890	0.885	0.881	0.876	0.871	0.866	0.861	0.855	0.850	0.844	0.838	0.832	0.826	0.819	
14	0.913	0.910	0.906	0.903	0.899	0.895	0.891	0.886	0.882	0.877	0.872	0.867	0.862	0.856	0.851	0.845	0.839	0.833	0.827	0.821	
13	0.913	0.910	0.907	0.904	0.900	0.896	0.891	0.887	0.883	0.878	0.873	0.868	0.863	0.858	0.852	0.847	0.841	0.835	0.829	0.823	
12	0.914	0.911	0.908	0.904	0.901	0.897	0.892	0.888	0.884	0.879	0.874	0.869	0.864	0.859	0.854	0.848	0.842	0.837	0.831	0.825	
11	0.915	0.912	0.909	0.905	0.901	0.897	0.893	0.889	0.885	0.880	0.875	0.871	0.866	0.860	0.855	0.850	0.844	0.838	0.832	0.826	
10	0.915	0.913	0.910	0.906	0.902	0.898	0.894	0.890	0.886	0.881	0.877	0.872	0.867	0.862	0.857	0.851	0.846	0.840	0.834	0.828	
9	0.916	0.913	0.910	0.907	0.903	0.899	0.895	0.891	0.887	0.883	0.878	0.873	0.868	0.863	0.858	0.853	0.847	0.842	0.836	0.830	
8	0.917	0.914	0.911	0.908	0.904	0.900	0.896	0.892	0.888	0.884	0.879	0.875	0.870	0.865	0.860	0.855	0.849	0.844	0.838	0.832	
7	0.918	0.915	0.912	0.909	0.905	0.902	0.898	0.894	0.889	0.885	0.881	0.876	0.871	0.866	0.861	0.856	0.851	0.846	0.840	0.835	
6	0.919	0.916	0.913	0.910	0.906	0.903	0.899	0.895	0.891	0.886	0.882	0.878	0.873	0.868	0.863	0.858	0.853	0.848	0.842	0.837	
Beneficiary younger than Retiree																					
5	0.919	0.917	0.914	0.911	0.907	0.904	0.900	0.896	0.892	0.888	0.883	0.879	0.875	0.870	0.865	0.860	0.855	0.850	0.845	0.839	
4	0.920	0.918	0.915	0.912	0.909	0.905	0.901	0.897	0.893	0.889	0.885	0.881	0.876	0.872	0.867	0.862	0.857	0.852	0.847	0.842	
3	0.921	0.919	0.916	0.913	0.910	0.906	0.902	0.899	0.895	0.891	0.887	0.882	0.878	0.873	0.869	0.864	0.859	0.854	0.849	0.844	
2	0.922	0.920	0.917	0.914	0.911	0.907	0.904	0.900	0.896	0.892	0.888	0.884	0.880	0.875	0.871	0.866	0.861	0.856	0.852	0.846	
1	0.923	0.921	0.918	0.915	0.912	0.909	0.905	0.901	0.898	0.894	0.890	0.886	0.881	0.877	0.873	0.868	0.864	0.859	0.854	0.849	
Beneficiary same age as Retiree	<b>0</b>	<b>0.924</b>	<b>0.922</b>	<b>0.919</b>	<b>0.916</b>	<b>0.913</b>	<b>0.910</b>	<b>0.906</b>	<b>0.903</b>	<b>0.899</b>	<b>0.895</b>	<b>0.891</b>	<b>0.887</b>	<b>0.883</b>	<b>0.879</b>	<b>0.875</b>	<b>0.870</b>	<b>0.866</b>	<b>0.861</b>	<b>0.856</b>	<b>0.852</b>

**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)**  
**Actuarial Equivalency Factors Effective January 1, 2024**

**Table 6b: 100% Joint and Survivor Annuity - Option 2 - Disabled Members**  
 (Factor Multiplied by Option 1 Non-Refund Life Annuity)

Beneficiary Age Difference	Attained Age at Retirement																			
	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39
Beneficiary older than Retiree -1	0.925	0.923	0.920	0.918	0.914	0.911	0.908	0.904	0.901	0.897	0.893	0.889	0.885	0.881	0.877	0.873	0.868	0.864	0.859	0.854
-2	0.926	0.924	0.922	0.919	0.916	0.912	0.909	0.906	0.902	0.899	0.895	0.891	0.887	0.883	0.879	0.875	0.870	0.866	0.862	0.857
-3	0.927	0.925	0.923	0.920	0.917	0.914	0.911	0.907	0.904	0.900	0.897	0.893	0.889	0.885	0.881	0.877	0.873	0.869	0.864	0.860
-4	0.928	0.926	0.924	0.921	0.918	0.915	0.912	0.909	0.905	0.902	0.898	0.895	0.891	0.887	0.883	0.879	0.875	0.871	0.867	0.863
-5	0.929	0.927	0.925	0.922	0.920	0.917	0.913	0.910	0.907	0.904	0.900	0.897	0.893	0.889	0.886	0.882	0.878	0.874	0.870	0.866
-6	0.930	0.928	0.926	0.924	0.921	0.918	0.915	0.912	0.909	0.905	0.902	0.899	0.895	0.892	0.888	0.884	0.880	0.877	0.873	0.869
-7	0.931	0.930	0.927	0.925	0.922	0.919	0.916	0.913	0.910	0.907	0.904	0.901	0.897	0.894	0.890	0.887	0.883	0.879	0.876	0.872
-8	0.933	0.931	0.929	0.926	0.924	0.921	0.918	0.915	0.912	0.909	0.906	0.903	0.899	0.896	0.893	0.889	0.886	0.882	0.878	0.875
-9	0.934	0.932	0.930	0.928	0.925	0.922	0.920	0.917	0.914	0.911	0.908	0.905	0.901	0.898	0.895	0.892	0.888	0.885	0.881	0.878
-10	0.935	0.933	0.931	0.929	0.926	0.924	0.921	0.918	0.916	0.913	0.910	0.907	0.904	0.901	0.897	0.894	0.891	0.888	0.884	0.881
-11	0.936	0.934	0.932	0.930	0.928	0.925	0.923	0.920	0.917	0.915	0.912	0.909	0.906	0.903	0.900	0.897	0.894	0.890	0.887	0.884
-12	0.937	0.936	0.934	0.932	0.929	0.927	0.924	0.922	0.919	0.916	0.914	0.911	0.908	0.905	0.902	0.899	0.896	0.893	0.890	0.887
-13	0.938	0.937	0.935	0.933	0.931	0.928	0.926	0.923	0.921	0.918	0.916	0.913	0.910	0.908	0.905	0.902	0.899	0.896	0.893	0.890
-14	0.939	0.938	0.936	0.934	0.932	0.930	0.928	0.925	0.923	0.920	0.918	0.915	0.913	0.910	0.907	0.905	0.902	0.899	0.896	0.894
-15	0.941	0.939	0.938	0.936	0.934	0.932	0.929	0.927	0.925	0.922	0.920	0.917	0.915	0.912	0.910	0.907	0.905	0.902	0.899	0.897
-16	0.942	0.941	0.939	0.937	0.935	0.933	0.931	0.929	0.927	0.924	0.922	0.920	0.917	0.915	0.912	0.910	0.908	0.905	0.903	0.900
-17	0.943	0.942	0.940	0.939	0.937	0.935	0.933	0.931	0.928	0.926	0.924	0.922	0.920	0.917	0.915	0.913	0.910	0.908	0.906	0.903
-18	0.944	0.943	0.942	0.940	0.938	0.936	0.934	0.932	0.930	0.928	0.926	0.924	0.922	0.920	0.918	0.915	0.913	0.911	0.909	0.907
-19	0.946	0.945	0.943	0.942	0.940	0.938	0.936	0.934	0.932	0.930	0.928	0.926	0.924	0.922	0.920	0.918	0.916	0.914	0.912	0.910
-20	0.947	0.946	0.945	0.943	0.942	0.940	0.938	0.936	0.934	0.932	0.931	0.929	0.927	0.925	0.923	0.921	0.919	0.917	0.915	0.913
-21	0.948	0.947	0.946	0.945	0.943	0.941	0.940	0.938	0.936	0.935	0.933	0.931	0.929	0.927	0.925	0.924	0.922	0.920	0.918	0.917
-22	0.950	0.949	0.948	0.946	0.945	0.943	0.942	0.940	0.938	0.937	0.935	0.933	0.931	0.930	0.928	0.926	0.925	0.923	0.921	0.920
-23	0.951	0.950	0.949	0.948	0.946	0.945	0.943	0.942	0.940	0.939	0.937	0.935	0.934	0.932	0.931	0.929	0.928	0.926	0.925	0.923
-24	0.952	0.952	0.951	0.949	0.948	0.947	0.945	0.944	0.942	0.941	0.939	0.938	0.936	0.935	0.933	0.932	0.931	0.929	0.928	0.927
-25	0.954	0.953	0.952	0.951	0.950	0.948	0.947	0.946	0.944	0.943	0.941	0.940	0.939	0.937	0.936	0.935	0.934	0.932	0.931	0.930
-26	0.955	0.954	0.954	0.953	0.951	0.950	0.949	0.948	0.946	0.945	0.944	0.942	0.941	0.940	0.939	0.938	0.936	0.935	0.934	0.934
-27	0.956	0.956	0.955	0.954	0.953	0.952	0.951	0.949	0.948	0.947	0.946	0.945	0.944	0.942	0.941	0.940	0.939	0.939	0.938	0.937
-28	0.958	0.957	0.957	0.956	0.955	0.954	0.952	0.951	0.950	0.949	0.948	0.947	0.946	0.945	0.944	0.943	0.942	0.942	0.941	0.940
-29	0.959	0.959	0.958	0.957	0.956	0.955	0.954	0.953	0.952	0.951	0.950	0.949	0.949	0.948	0.947	0.946	0.945	0.945	0.944	0.944
-30	0.960	0.960	0.960	0.959	0.958	0.957	0.956	0.955	0.954	0.953	0.952	0.951	0.950	0.950	0.949	0.948	0.948	0.947	0.947	0.947
-31	0.962	0.962	0.961	0.960	0.960	0.959	0.958	0.957	0.956	0.956	0.955	0.954	0.953	0.953	0.952	0.952	0.951	0.951	0.950	0.950
-32	0.963	0.963	0.963	0.962	0.961	0.961	0.960	0.959	0.958	0.958	0.957	0.956	0.956	0.955	0.955	0.954	0.954	0.954	0.954	0.953
-33	0.965	0.964	0.964	0.964	0.963	0.962	0.962	0.961	0.960	0.960	0.959	0.959	0.958	0.958	0.957	0.957	0.957	0.957	0.957	0.957
-34	0.966	0.966	0.966	0.965	0.965	0.964	0.963	0.963	0.962	0.962	0.961	0.961	0.961	0.960	0.960	0.960	0.960	0.960	0.960	0.960
-35	0.967	0.967	0.967	0.967	0.966	0.966	0.965	0.965	0.964	0.964	0.963	0.963	0.963	0.963	0.963	0.962	0.962	0.962	0.962	0.963
Beneficiary older than Retiree -36	0.969	0.969	0.969	0.968	0.968	0.967	0.967	0.967	0.966	0.966	0.966	0.965	0.965	0.965	0.965	0.965	0.965	0.965	0.965	0.965
-37	0.970	0.970	0.970	0.970	0.969	0.969	0.969	0.968	0.968	0.968	0.968	0.968	0.967	0.967	0.967	0.967	0.967	0.967	0.967	0.968
-38	0.971	0.972	0.972	0.971	0.971	0.971	0.970	0.970	0.970	0.970	0.970	0.970	0.970	0.970	0.970	0.970	0.970	0.970	0.970	0.971
-39	0.973	0.973	0.973	0.973	0.973	0.972	0.972	0.972	0.972	0.972	0.972	0.972	0.972	0.972	0.972	0.972	0.972	0.972	0.973	0.973
-40	0.974	0.974	0.974	0.974	0.974	0.974	0.974	0.974	0.974	0.974	0.974	0.974	0.974	0.974	0.974	0.974	0.975	0.975	0.975	0.976

**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)**  
**Actuarial Equivalency Factors Effective January 1, 2024**

**Table 6b: 100% Joint and Survivor Annuity - Option 2 - Disabled Members**  
 (Factor Multiplied by Option 1 Non-Refund Life Annuity)

Beneficiary Age Difference	Attained Age at Retirement																			
	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39
Beneficiary older than Retiree -41	0.975	0.976	0.976	0.976	0.976	0.976	0.975	0.975	0.975	0.975	0.976	0.976	0.976	0.976	0.977	0.977	0.977	0.977	0.978	0.978
-42	0.977	0.977	0.977	0.977	0.977	0.977	0.977	0.977	0.977	0.977	0.977	0.977	0.978	0.978	0.979	0.979	0.979	0.979	0.980	0.980
-43	0.978	0.978	0.978	0.979	0.979	0.979	0.979	0.979	0.979	0.979	0.979	0.979	0.980	0.980	0.980	0.980	0.981	0.981	0.982	0.982
-44	0.979	0.979	0.980	0.980	0.980	0.980	0.980	0.980	0.980	0.980	0.981	0.981	0.981	0.982	0.982	0.982	0.983	0.983	0.984	0.984
-45	0.980	0.981	0.981	0.981	0.981	0.981	0.981	0.982	0.982	0.982	0.982	0.983	0.983	0.984	0.984	0.984	0.985	0.985	0.985	0.986
-46	0.981	0.982	0.982	0.982	0.983	0.983	0.983	0.983	0.983	0.984	0.984	0.984	0.984	0.985	0.985	0.986	0.986	0.986	0.987	0.987
-47	0.983	0.983	0.983	0.984	0.984	0.984	0.984	0.984	0.984	0.985	0.985	0.985	0.986	0.986	0.986	0.987	0.987	0.988	0.988	0.989
-48	0.984	0.984	0.985	0.985	0.985	0.985	0.985	0.986	0.986	0.986	0.987	0.987	0.987	0.988	0.988	0.988	0.989	0.989	0.990	0.990
-49	0.985	0.985	0.986	0.986	0.986	0.986	0.987	0.987	0.987	0.988	0.988	0.988	0.989	0.989	0.989	0.990	0.990	0.991	0.991	0.991
-50	0.986	0.986	0.987	0.987	0.987	0.988	0.988	0.988	0.988	0.989	0.989	0.989	0.990	0.990	0.991	0.991	0.991	0.992	0.992	0.992
-51	0.987	0.987	0.988	0.988	0.988	0.989	0.989	0.989	0.989	0.990	0.990	0.990	0.991	0.991	0.992	0.992	0.992	0.993	0.993	0.993
-52	0.988	0.988	0.989	0.989	0.989	0.990	0.990	0.990	0.990	0.991	0.991	0.992	0.992	0.992	0.993	0.993	0.993	0.993	0.994	0.994
-53	0.989	0.989	0.990	0.990	0.990	0.991	0.991	0.991	0.991	0.992	0.992	0.992	0.993	0.993	0.993	0.994	0.994	0.994	0.995	0.995
-54	0.989	0.990	0.991	0.991	0.991	0.991	0.992	0.992	0.992	0.993	0.993	0.993	0.994	0.994	0.994	0.995	0.995	0.995	0.995	0.995
-55	0.990	0.991	0.991	0.992	0.992	0.992	0.993	0.993	0.993	0.994	0.994	0.994	0.995	0.995	0.995	0.995	0.995	0.996	0.996	0.996
-56	0.991	0.992	0.992	0.993	0.993	0.993	0.993	0.994	0.994	0.994	0.994	0.995	0.995	0.995	0.995	0.996	0.996	0.996	0.996	0.996
-57	0.992	0.992	0.993	0.993	0.994	0.994	0.994	0.994	0.995	0.995	0.995	0.995	0.996	0.996	0.996	0.996	0.996	0.997	0.997	0.997
-58	0.993	0.993	0.994	0.994	0.994	0.994	0.995	0.995	0.995	0.995	0.996	0.996	0.996	0.996	0.997	0.997	0.997	0.997	0.997	0.997
-59	0.993	0.994	0.994	0.995	0.995	0.995	0.995	0.996	0.996	0.996	0.996	0.996	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.998
-60	0.994	0.994	0.995	0.995	0.995	0.996	0.996	0.996	0.996	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.998	0.998	0.998	0.998
-61	0.994	0.995	0.995	0.996	0.996	0.996	0.996	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.998	0.998	0.998	0.998	0.998	0.998
-62	0.995	0.996	0.996	0.996	0.996	0.997	0.997	0.997	0.997	0.997	0.997	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998
-63	0.996	0.996	0.996	0.997	0.997	0.997	0.997	0.997	0.997	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998
-64	0.996	0.996	0.997	0.997	0.997	0.997	0.997	0.997	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.999	0.999	0.999
-65	0.996	0.997	0.997	0.997	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.999	0.999	0.999	0.999	0.999	0.999
-66	0.997	0.997	0.997	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999
-67	0.997	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999
-68	0.997	0.998	0.998	0.998	0.998	0.998	0.998	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999
-69	0.998	0.998	0.998	0.998	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999
-70	0.998	0.998	0.998	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999
-71	0.998	0.998	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999
-72	0.998	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999
-73	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999
-74	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999
-75	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999
Beneficiary older than Retiree -76	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999
-77	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
-78	0.999	0.999	0.999	0.999	0.999	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
-79	0.999	0.999	0.999	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
-80	0.999	0.999	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000



**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)**  
**Actuarial Equivalency Factors Effective January 1, 2024**

**Table 6b: 100% Joint and Survivor Annuity - Option 2 - Disabled Members**  
 (Factor Multiplied by Option 1 Non-Refund Life Annuity)

	Beneficiary Age Difference	Attained Age at Retirement																			
		20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39
Beneficiary older than Retiree	-81	0.999	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
	-82	0.999	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
	-83	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
	-84	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
	-85	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
	-86	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
	-87	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
	-88	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
	-89	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
	-90	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)**  
**Actuarial Equivalency Factors Effective January 1, 2024**

**Table 6b: 100% Joint and Survivor Annuity - Option 2 - Disabled Members**  
 (Factor Multiplied by Option 1 Non-Refund Life Annuity)

Beneficiary Age Difference	Attained Age at Retirement																			
	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59
75																				
74																				
73																				
72																				
71																				
70																				
69																				
68																				
67																				
66																				
65																				
64																				
63																				
62																				
61																				
60																				
59																				
58																				0.625
57																			0.635	0.626
56																		0.645	0.636	0.626
55																	0.654	0.645	0.636	0.627
54																0.663	0.655	0.646	0.637	0.627
53															0.672	0.664	0.655	0.646	0.637	0.628
52															0.681	0.672	0.664	0.656	0.647	0.638
51													0.689	0.681	0.673	0.665	0.656	0.648	0.639	0.629
50											0.697	0.689	0.682	0.674	0.665	0.657	0.648	0.639	0.630	
49										0.705	0.698	0.690	0.682	0.674	0.666	0.658	0.649	0.640	0.630	
48									0.714	0.706	0.698	0.690	0.683	0.675	0.667	0.658	0.650	0.641	0.631	
47								0.722	0.714	0.706	0.699	0.691	0.683	0.675	0.667	0.659	0.650	0.641	0.632	
46							0.730	0.722	0.715	0.707	0.699	0.692	0.684	0.676	0.668	0.660	0.651	0.642	0.633	
45						0.738	0.731	0.723	0.715	0.708	0.700	0.692	0.685	0.677	0.669	0.660	0.652	0.643	0.634	
44					0.747	0.739	0.731	0.723	0.716	0.708	0.701	0.693	0.685	0.677	0.669	0.661	0.653	0.644	0.635	
43				0.755	0.747	0.739	0.732	0.724	0.716	0.709	0.701	0.694	0.686	0.678	0.670	0.662	0.654	0.645	0.635	
42			0.764	0.756	0.748	0.740	0.732	0.725	0.717	0.710	0.702	0.694	0.687	0.679	0.671	0.663	0.654	0.646	0.636	
41		0.772	0.764	0.756	0.749	0.741	0.733	0.725	0.718	0.710	0.703	0.695	0.688	0.680	0.672	0.664	0.655	0.647	0.638	
40	0.781	0.773	0.765	0.757	0.749	0.741	0.734	0.726	0.718	0.711	0.704	0.696	0.689	0.681	0.673	0.665	0.656	0.648	0.639	
39	0.789	0.781	0.773	0.766	0.758	0.750	0.742	0.734	0.727	0.719	0.712	0.704	0.697	0.689	0.682	0.674	0.666	0.658	0.649	0.640
38	0.789	0.782	0.774	0.766	0.758	0.750	0.743	0.735	0.727	0.720	0.713	0.705	0.698	0.690	0.683	0.675	0.667	0.659	0.650	0.641
37	0.790	0.782	0.775	0.767	0.759	0.751	0.743	0.736	0.728	0.721	0.714	0.706	0.699	0.691	0.684	0.676	0.668	0.660	0.651	0.642
36	0.791	0.783	0.775	0.767	0.760	0.752	0.744	0.737	0.729	0.722	0.715	0.707	0.700	0.692	0.685	0.677	0.669	0.661	0.653	0.644

**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)**  
**Actuarial Equivalency Factors Effective January 1, 2024**

**Table 6b: 100% Joint and Survivor Annuity - Option 2 - Disabled Members**  
 (Factor Multiplied by Option 1 Non-Refund Life Annuity)

Beneficiary Age Difference		Attained Age at Retirement																			
		40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59
Beneficiary younger than Retiree	35	0.791	0.784	0.776	0.768	0.760	0.753	0.745	0.737	0.730	0.723	0.716	0.708	0.701	0.694	0.686	0.678	0.671	0.662	0.654	0.645
	34	0.792	0.784	0.777	0.769	0.761	0.754	0.746	0.738	0.731	0.724	0.717	0.709	0.702	0.695	0.687	0.680	0.672	0.664	0.655	0.647
	33	0.793	0.785	0.777	0.770	0.762	0.754	0.747	0.739	0.732	0.725	0.718	0.711	0.703	0.696	0.689	0.681	0.673	0.665	0.657	0.648
	32	0.793	0.786	0.778	0.771	0.763	0.755	0.748	0.740	0.733	0.726	0.719	0.712	0.705	0.697	0.690	0.682	0.675	0.667	0.659	0.650
	31	0.794	0.787	0.779	0.772	0.764	0.756	0.749	0.741	0.734	0.727	0.720	0.713	0.706	0.699	0.691	0.684	0.676	0.669	0.660	0.652
	30	0.795	0.787	0.780	0.772	0.765	0.757	0.750	0.743	0.735	0.728	0.721	0.714	0.707	0.700	0.693	0.686	0.678	0.670	0.662	0.654
	29	0.796	0.788	0.781	0.773	0.766	0.758	0.751	0.744	0.736	0.729	0.723	0.716	0.709	0.702	0.695	0.687	0.680	0.672	0.664	0.656
	28	0.797	0.789	0.782	0.774	0.767	0.760	0.752	0.745	0.738	0.731	0.724	0.717	0.710	0.703	0.696	0.689	0.682	0.674	0.666	0.658
	27	0.798	0.790	0.783	0.776	0.768	0.761	0.753	0.746	0.739	0.732	0.725	0.719	0.712	0.705	0.698	0.691	0.684	0.676	0.668	0.660
	26	0.799	0.791	0.784	0.777	0.769	0.762	0.755	0.748	0.740	0.734	0.727	0.720	0.714	0.707	0.700	0.693	0.686	0.678	0.670	0.662
	25	0.800	0.792	0.785	0.778	0.771	0.763	0.756	0.749	0.742	0.735	0.729	0.722	0.715	0.709	0.702	0.695	0.688	0.680	0.673	0.665
	24	0.801	0.794	0.786	0.779	0.772	0.765	0.757	0.750	0.744	0.737	0.730	0.724	0.717	0.711	0.704	0.697	0.690	0.683	0.675	0.667
	23	0.802	0.795	0.788	0.780	0.773	0.766	0.759	0.752	0.745	0.739	0.732	0.726	0.719	0.713	0.706	0.699	0.692	0.685	0.678	0.670
	22	0.803	0.796	0.789	0.782	0.775	0.768	0.760	0.754	0.747	0.740	0.734	0.728	0.721	0.715	0.708	0.702	0.695	0.688	0.681	0.673
	21	0.804	0.797	0.790	0.783	0.776	0.769	0.762	0.755	0.749	0.742	0.736	0.730	0.724	0.717	0.711	0.704	0.698	0.691	0.684	0.676
	20	0.806	0.799	0.792	0.785	0.778	0.771	0.764	0.757	0.751	0.744	0.738	0.732	0.726	0.720	0.713	0.707	0.700	0.694	0.687	0.679
	19	0.807	0.800	0.793	0.786	0.779	0.772	0.766	0.759	0.753	0.746	0.740	0.734	0.728	0.722	0.716	0.710	0.703	0.697	0.690	0.683
	18	0.808	0.802	0.795	0.788	0.781	0.774	0.768	0.761	0.755	0.749	0.743	0.737	0.731	0.725	0.719	0.713	0.706	0.700	0.693	0.686
	17	0.810	0.803	0.796	0.790	0.783	0.776	0.770	0.763	0.757	0.751	0.745	0.739	0.733	0.728	0.722	0.716	0.710	0.703	0.697	0.690
	16	0.811	0.805	0.798	0.791	0.785	0.778	0.772	0.765	0.759	0.753	0.748	0.742	0.736	0.730	0.725	0.719	0.713	0.707	0.700	0.694
	15	0.813	0.807	0.800	0.793	0.787	0.780	0.774	0.768	0.762	0.756	0.750	0.745	0.739	0.734	0.728	0.722	0.717	0.711	0.704	0.698
	14	0.815	0.808	0.802	0.795	0.789	0.782	0.776	0.770	0.764	0.759	0.753	0.748	0.742	0.737	0.731	0.726	0.720	0.714	0.708	0.702
	13	0.817	0.810	0.804	0.797	0.791	0.785	0.779	0.773	0.767	0.761	0.756	0.751	0.745	0.740	0.735	0.730	0.724	0.718	0.713	0.707
	12	0.818	0.812	0.806	0.800	0.793	0.787	0.781	0.775	0.770	0.764	0.759	0.754	0.749	0.744	0.739	0.733	0.728	0.723	0.717	0.711
	11	0.820	0.814	0.808	0.802	0.796	0.790	0.784	0.778	0.772	0.767	0.762	0.757	0.752	0.747	0.742	0.737	0.732	0.727	0.722	0.716
	10	0.822	0.816	0.810	0.804	0.798	0.792	0.786	0.781	0.775	0.770	0.765	0.761	0.756	0.751	0.746	0.742	0.737	0.732	0.727	0.721
	9	0.825	0.819	0.813	0.807	0.801	0.795	0.789	0.784	0.778	0.774	0.769	0.764	0.760	0.755	0.751	0.746	0.741	0.737	0.732	0.726
	8	0.827	0.821	0.815	0.809	0.803	0.798	0.792	0.787	0.782	0.777	0.772	0.768	0.764	0.759	0.755	0.751	0.746	0.742	0.737	0.732
	7	0.829	0.823	0.817	0.812	0.806	0.801	0.795	0.790	0.785	0.780	0.776	0.772	0.768	0.763	0.759	0.755	0.751	0.747	0.742	0.737
	6	0.831	0.826	0.820	0.814	0.809	0.804	0.798	0.793	0.789	0.784	0.780	0.776	0.772	0.768	0.764	0.760	0.756	0.752	0.748	0.743
Beneficiary younger than Retiree	5	0.834	0.828	0.823	0.817	0.812	0.807	0.802	0.797	0.792	0.788	0.784	0.780	0.776	0.772	0.769	0.765	0.761	0.757	0.753	0.749
	4	0.836	0.831	0.825	0.820	0.815	0.810	0.805	0.800	0.796	0.792	0.788	0.784	0.781	0.777	0.774	0.770	0.767	0.763	0.759	0.755
	3	0.839	0.834	0.828	0.823	0.818	0.813	0.808	0.804	0.800	0.796	0.792	0.789	0.785	0.782	0.779	0.775	0.772	0.769	0.765	0.761
	2	0.841	0.836	0.831	0.826	0.821	0.816	0.812	0.808	0.804	0.800	0.796	0.793	0.790	0.787	0.784	0.781	0.778	0.775	0.771	0.768
	1	0.844	0.839	0.834	0.829	0.825	0.820	0.816	0.811	0.808	0.804	0.801	0.798	0.795	0.792	0.789	0.786	0.783	0.781	0.778	0.774
Beneficiary same age as Retiree	0	0.847	0.842	0.837	0.833	0.828	0.824	0.819	0.815	0.812	0.808	0.806	0.803	0.800	0.797	0.794	0.792	0.789	0.787	0.784	0.781

**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)**  
**Actuarial Equivalency Factors Effective January 1, 2024**

**Table 6b: 100% Joint and Survivor Annuity - Option 2 - Disabled Members**  
 (Factor Multiplied by Option 1 Non-Refund Life Annuity)

Beneficiary Age Difference	Attained Age at Retirement																			
	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59
Beneficiary older than Retiree -1	0.850	0.845	0.840	0.836	0.831	0.827	0.823	0.819	0.816	0.813	0.810	0.807	0.805	0.802	0.800	0.798	0.795	0.793	0.791	0.788
-2	0.853	0.848	0.844	0.839	0.835	0.831	0.827	0.824	0.820	0.817	0.815	0.812	0.810	0.808	0.805	0.803	0.801	0.800	0.798	0.795
-3	0.856	0.851	0.847	0.843	0.839	0.835	0.831	0.828	0.825	0.822	0.819	0.817	0.815	0.813	0.811	0.809	0.808	0.806	0.804	0.803
-4	0.859	0.854	0.850	0.846	0.842	0.839	0.835	0.832	0.829	0.826	0.824	0.822	0.820	0.818	0.817	0.815	0.814	0.813	0.811	0.810
-5	0.862	0.858	0.854	0.850	0.846	0.843	0.839	0.836	0.833	0.831	0.829	0.827	0.825	0.824	0.823	0.822	0.821	0.820	0.819	0.818
-6	0.865	0.861	0.857	0.853	0.850	0.846	0.843	0.840	0.838	0.836	0.834	0.832	0.831	0.830	0.829	0.828	0.827	0.827	0.826	0.825
-7	0.868	0.864	0.861	0.857	0.854	0.850	0.847	0.845	0.842	0.840	0.839	0.837	0.836	0.835	0.835	0.834	0.834	0.833	0.833	0.833
-8	0.871	0.868	0.864	0.861	0.857	0.854	0.852	0.849	0.847	0.845	0.844	0.843	0.842	0.841	0.841	0.841	0.841	0.840	0.841	0.841
-9	0.874	0.871	0.868	0.864	0.861	0.858	0.856	0.853	0.852	0.850	0.849	0.848	0.848	0.847	0.847	0.847	0.847	0.848	0.848	0.848
-10	0.878	0.874	0.871	0.868	0.865	0.862	0.860	0.858	0.856	0.855	0.854	0.854	0.853	0.853	0.853	0.854	0.854	0.855	0.855	0.856
-11	0.881	0.878	0.875	0.872	0.869	0.867	0.864	0.862	0.861	0.860	0.859	0.859	0.859	0.859	0.859	0.860	0.861	0.862	0.863	0.864
-12	0.884	0.881	0.878	0.876	0.873	0.871	0.869	0.867	0.866	0.865	0.865	0.864	0.865	0.865	0.866	0.867	0.868	0.869	0.870	0.871
-13	0.888	0.885	0.882	0.879	0.877	0.875	0.873	0.872	0.871	0.870	0.870	0.870	0.870	0.871	0.872	0.873	0.874	0.876	0.877	0.879
-14	0.891	0.888	0.886	0.883	0.881	0.879	0.878	0.876	0.875	0.875	0.875	0.876	0.876	0.877	0.878	0.880	0.881	0.883	0.884	0.886
-15	0.894	0.892	0.889	0.887	0.885	0.883	0.882	0.881	0.880	0.880	0.881	0.881	0.882	0.883	0.884	0.886	0.888	0.890	0.891	0.893
-16	0.898	0.895	0.893	0.891	0.889	0.888	0.887	0.886	0.885	0.885	0.886	0.887	0.888	0.889	0.891	0.892	0.894	0.896	0.898	0.900
-17	0.901	0.899	0.897	0.895	0.893	0.892	0.891	0.890	0.890	0.890	0.891	0.892	0.893	0.895	0.897	0.899	0.901	0.903	0.905	0.907
-18	0.904	0.903	0.901	0.899	0.898	0.896	0.896	0.895	0.895	0.896	0.897	0.898	0.899	0.901	0.903	0.905	0.907	0.909	0.912	0.914
-19	0.908	0.906	0.904	0.903	0.902	0.901	0.900	0.900	0.900	0.901	0.902	0.903	0.905	0.907	0.909	0.911	0.913	0.916	0.918	0.921
-20	0.911	0.910	0.908	0.907	0.906	0.905	0.905	0.905	0.905	0.906	0.907	0.909	0.910	0.912	0.914	0.917	0.919	0.922	0.924	0.927
-21	0.915	0.914	0.912	0.911	0.910	0.910	0.909	0.909	0.910	0.911	0.912	0.914	0.916	0.918	0.920	0.923	0.925	0.928	0.930	0.933
-22	0.919	0.917	0.916	0.915	0.914	0.914	0.914	0.914	0.915	0.916	0.917	0.919	0.921	0.923	0.926	0.928	0.931	0.934	0.936	0.939
-23	0.922	0.921	0.920	0.919	0.919	0.918	0.918	0.919	0.920	0.921	0.922	0.924	0.926	0.929	0.931	0.934	0.936	0.939	0.942	0.944
-24	0.926	0.925	0.924	0.923	0.923	0.923	0.923	0.923	0.924	0.926	0.927	0.929	0.931	0.934	0.936	0.939	0.942	0.944	0.947	0.950
-25	0.929	0.928	0.928	0.927	0.927	0.927	0.927	0.928	0.929	0.931	0.932	0.934	0.936	0.939	0.941	0.944	0.947	0.949	0.952	0.955
-26	0.933	0.932	0.932	0.931	0.931	0.931	0.932	0.933	0.934	0.935	0.937	0.939	0.941	0.944	0.946	0.949	0.951	0.954	0.957	0.959
-27	0.936	0.936	0.935	0.935	0.935	0.936	0.936	0.937	0.938	0.940	0.942	0.944	0.946	0.948	0.951	0.953	0.956	0.958	0.961	0.963
-28	0.940	0.939	0.939	0.939	0.939	0.940	0.940	0.941	0.943	0.944	0.946	0.948	0.950	0.953	0.955	0.958	0.960	0.963	0.965	0.967
-29	0.943	0.943	0.943	0.943	0.943	0.944	0.944	0.945	0.947	0.948	0.950	0.953	0.955	0.957	0.959	0.962	0.964	0.966	0.969	0.971
-30	0.947	0.947	0.947	0.947	0.947	0.948	0.948	0.950	0.951	0.953	0.955	0.957	0.959	0.961	0.963	0.966	0.968	0.970	0.972	0.974
-31	0.950	0.950	0.950	0.950	0.951	0.951	0.952	0.954	0.955	0.957	0.959	0.961	0.963	0.966	0.968	0.970	0.972	0.974	0.976	0.979
-32	0.953	0.953	0.954	0.954	0.954	0.955	0.956	0.957	0.959	0.960	0.962	0.964	0.966	0.968	0.970	0.972	0.974	0.976	0.978	0.979
-33	0.957	0.957	0.957	0.957	0.958	0.959	0.960	0.961	0.962	0.964	0.966	0.968	0.970	0.972	0.973	0.975	0.977	0.979	0.980	0.982
-34	0.960	0.960	0.960	0.961	0.961	0.962	0.963	0.964	0.966	0.967	0.969	0.971	0.973	0.975	0.976	0.978	0.980	0.981	0.982	0.984
-35	0.963	0.963	0.963	0.964	0.965	0.966	0.967	0.968	0.969	0.971	0.972	0.974	0.976	0.977	0.979	0.980	0.982	0.983	0.984	0.985
Beneficiary older than Retiree -36	0.966	0.966	0.967	0.967	0.968	0.969	0.970	0.971	0.972	0.974	0.975	0.976	0.977	0.978	0.980	0.981	0.983	0.984	0.985	0.987
-37	0.969	0.969	0.969	0.970	0.971	0.972	0.973	0.974	0.975	0.976	0.978	0.979	0.981	0.982	0.983	0.984	0.986	0.987	0.988	0.988
-38	0.971	0.972	0.972	0.973	0.974	0.974	0.975	0.976	0.978	0.979	0.980	0.981	0.983	0.984	0.985	0.986	0.987	0.988	0.989	0.990
-39	0.974	0.974	0.975	0.975	0.976	0.977	0.978	0.979	0.980	0.981	0.982	0.984	0.985	0.986	0.987	0.988	0.989	0.989	0.990	0.991
-40	0.976	0.977	0.977	0.978	0.979	0.979	0.980	0.981	0.982	0.983	0.984	0.985	0.986	0.987	0.988	0.989	0.990	0.991	0.991	0.992

**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)**  
**Actuarial Equivalency Factors Effective January 1, 2024**

**Table 6b: 100% Joint and Survivor Annuity - Option 2 - Disabled Members**  
 (Factor Multiplied by Option 1 Non-Refund Life Annuity)

Beneficiary Age Difference	Attained Age at Retirement																			
	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59
Beneficiary older than Retiree -41	0.979	0.979	0.980	0.980	0.981	0.982	0.982	0.983	0.984	0.985	0.986	0.987	0.988	0.989	0.990	0.990	0.991	0.992	0.992	0.993
-42	0.981	0.981	0.982	0.982	0.983	0.984	0.984	0.985	0.986	0.987	0.988	0.988	0.989	0.990	0.991	0.991	0.992	0.992	0.993	0.993
-43	0.983	0.983	0.984	0.984	0.985	0.985	0.986	0.987	0.987	0.988	0.989	0.990	0.990	0.991	0.992	0.992	0.993	0.993	0.994	0.994
-44	0.985	0.985	0.986	0.986	0.987	0.987	0.988	0.988	0.989	0.990	0.990	0.991	0.991	0.992	0.993	0.993	0.994	0.994	0.994	0.995
-45	0.986	0.987	0.987	0.988	0.988	0.989	0.989	0.990	0.990	0.991	0.991	0.992	0.992	0.993	0.993	0.994	0.994	0.995	0.995	0.995
-46	0.988	0.988	0.989	0.989	0.990	0.990	0.990	0.991	0.991	0.992	0.992	0.993	0.993	0.994	0.994	0.994	0.995	0.995	0.995	0.996
-47	0.989	0.990	0.990	0.990	0.991	0.991	0.991	0.992	0.992	0.993	0.993	0.994	0.994	0.994	0.995	0.995	0.995	0.996	0.996	0.996
-48	0.990	0.991	0.991	0.991	0.992	0.992	0.992	0.993	0.993	0.993	0.994	0.994	0.995	0.995	0.995	0.995	0.996	0.996	0.996	0.996
-49	0.992	0.992	0.992	0.992	0.993	0.993	0.993	0.994	0.994	0.994	0.995	0.995	0.995	0.995	0.996	0.996	0.996	0.996	0.996	0.997
-50	0.993	0.993	0.993	0.993	0.994	0.994	0.994	0.994	0.995	0.995	0.995	0.995	0.996	0.996	0.996	0.996	0.996	0.997	0.997	0.997
-51	0.993	0.994	0.994	0.994	0.994	0.995	0.995	0.995	0.995	0.995	0.996	0.996	0.996	0.996	0.996	0.997	0.997	0.997	0.997	0.997
-52	0.994	0.994	0.995	0.995	0.995	0.995	0.995	0.995	0.996	0.996	0.996	0.996	0.996	0.997	0.997	0.997	0.997	0.997	0.997	0.997
-53	0.995	0.995	0.995	0.995	0.996	0.996	0.996	0.996	0.996	0.996	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997
-54	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997
-55	0.996	0.996	0.996	0.996	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997
-56	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997
-57	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998
-58	0.997	0.997	0.997	0.997	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998
-59	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998
-60	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998
-61	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998
-62	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998
-63	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998
-64	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998
-65	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999
-66	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999
-67	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999
-68	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999
-69	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999
-70	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999
-71	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999
-72	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999
-73	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999
-74	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999
-75	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999
Beneficiary older than Retiree -76	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999
-77	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999
-78	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999
-79	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999
-80	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999

**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)**  
**Actuarial Equivalency Factors Effective January 1, 2024**

**Table 6b: 100% Joint and Survivor Annuity - Option 2 - Disabled Members**  
 (Factor Multiplied by Option 1 Non-Refund Life Annuity)

Beneficiary Age Difference	Attained Age at Retirement																			
	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59
Beneficiary older than Retiree	-81	-82	-83	-84	-85															
	-86																			
	-87																			
	-88																			
	-89																			
	-90																			

**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)**  
**Actuarial Equivalency Factors Effective January 1, 2024**

**Table 6b: 100% Joint and Survivor Annuity - Option 2 - Disabled Members**  
 (Factor Multiplied by Option 1 Non-Refund Life Annuity)

Beneficiary Age Difference	Attained Age at Retirement															
	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75
Beneficiary younger than Retiree																
75																
74																0.412
73															0.428	0.412
72														0.443	0.428	0.413
71													0.458	0.443	0.428	0.413
70												0.473	0.458	0.443	0.428	0.413
69											0.488	0.473	0.459	0.444	0.429	0.414
68										0.502	0.488	0.474	0.459	0.444	0.429	0.414
67								0.516	0.502	0.488	0.474	0.459	0.445	0.430	0.415	
66							0.530	0.516	0.503	0.489	0.474	0.460	0.445	0.430	0.415	
65							0.543	0.530	0.517	0.503	0.489	0.475	0.460	0.446	0.431	0.416
64						0.556	0.543	0.530	0.517	0.504	0.490	0.475	0.461	0.446	0.431	0.416
63					0.569	0.556	0.544	0.531	0.518	0.504	0.490	0.476	0.461	0.447	0.432	0.417
62				0.581	0.569	0.557	0.544	0.531	0.518	0.504	0.491	0.476	0.462	0.447	0.432	0.417
61			0.593	0.581	0.570	0.557	0.545	0.532	0.519	0.505	0.491	0.477	0.462	0.448	0.433	0.418
60		0.604	0.593	0.582	0.570	0.558	0.545	0.532	0.519	0.506	0.492	0.477	0.463	0.448	0.433	0.418
59	0.615	0.604	0.594	0.582	0.571	0.558	0.546	0.533	0.520	0.506	0.492	0.478	0.464	0.449	0.434	0.419
58	0.615	0.605	0.594	0.583	0.571	0.559	0.546	0.533	0.520	0.507	0.493	0.479	0.464	0.450	0.435	0.420
57	0.616	0.605	0.595	0.583	0.572	0.559	0.547	0.534	0.521	0.507	0.493	0.479	0.465	0.450	0.435	0.420
56	0.616	0.606	0.595	0.584	0.572	0.560	0.548	0.535	0.522	0.508	0.494	0.480	0.466	0.451	0.436	0.421
55	0.617	0.606	0.596	0.584	0.573	0.561	0.548	0.535	0.522	0.509	0.495	0.481	0.466	0.452	0.437	0.422
54	0.617	0.607	0.596	0.585	0.573	0.561	0.549	0.536	0.523	0.509	0.496	0.482	0.467	0.453	0.438	0.423
53	0.618	0.608	0.597	0.586	0.574	0.562	0.550	0.537	0.524	0.510	0.496	0.482	0.468	0.453	0.439	0.424
52	0.619	0.608	0.598	0.586	0.575	0.563	0.550	0.538	0.525	0.511	0.497	0.483	0.469	0.454	0.439	0.425
51	0.619	0.609	0.598	0.587	0.576	0.564	0.551	0.538	0.525	0.512	0.498	0.484	0.470	0.455	0.440	0.426
50	0.620	0.610	0.599	0.588	0.576	0.564	0.552	0.539	0.526	0.513	0.499	0.485	0.471	0.456	0.441	0.427
49	0.621	0.610	0.600	0.589	0.577	0.565	0.553	0.540	0.527	0.514	0.500	0.486	0.472	0.457	0.443	0.428
48	0.621	0.611	0.601	0.590	0.578	0.566	0.554	0.541	0.528	0.515	0.501	0.487	0.473	0.458	0.444	0.429
47	0.622	0.612	0.601	0.590	0.579	0.567	0.555	0.542	0.529	0.516	0.502	0.488	0.474	0.460	0.445	0.430
46	0.623	0.613	0.602	0.591	0.580	0.568	0.556	0.543	0.530	0.517	0.503	0.489	0.475	0.461	0.446	0.432
45	0.624	0.614	0.603	0.592	0.581	0.569	0.557	0.544	0.531	0.518	0.505	0.491	0.477	0.462	0.448	0.433
44	0.625	0.615	0.604	0.593	0.582	0.570	0.558	0.546	0.533	0.519	0.506	0.492	0.478	0.464	0.449	0.434
43	0.626	0.616	0.605	0.594	0.583	0.571	0.559	0.547	0.534	0.521	0.507	0.494	0.479	0.465	0.451	0.436
42	0.627	0.617	0.606	0.596	0.584	0.573	0.561	0.548	0.535	0.522	0.509	0.495	0.481	0.467	0.452	0.438
41	0.628	0.618	0.608	0.597	0.586	0.574	0.562	0.550	0.537	0.524	0.510	0.497	0.483	0.468	0.454	0.439
40	0.629	0.619	0.609	0.598	0.587	0.575	0.563	0.551	0.538	0.525	0.512	0.498	0.484	0.470	0.456	0.441
39	0.630	0.620	0.610	0.600	0.588	0.577	0.565	0.553	0.540	0.527	0.514	0.500	0.486	0.472	0.458	0.443
38	0.632	0.622	0.612	0.601	0.590	0.578	0.567	0.554	0.542	0.529	0.516	0.502	0.488	0.474	0.460	0.445
37	0.633	0.623	0.613	0.602	0.592	0.580	0.568	0.556	0.544	0.531	0.518	0.504	0.490	0.476	0.462	0.448
36	0.634	0.625	0.615	0.604	0.593	0.582	0.570	0.558	0.546	0.533	0.520	0.506	0.493	0.479	0.464	0.450

**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)**  
**Actuarial Equivalency Factors Effective January 1, 2024**

**Table 6b: 100% Joint and Survivor Annuity - Option 2 - Disabled Members**  
 (Factor Multiplied by Option 1 Non-Refund Life Annuity)

Beneficiary Age Difference	Attained Age at Retirement																
	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	
Beneficiary younger than Retiree	35	0.636	0.626	0.616	0.606	0.595	0.584	0.572	0.560	0.548	0.535	0.522	0.508	0.495	0.481	0.467	0.453
	34	0.638	0.628	0.618	0.608	0.597	0.586	0.574	0.562	0.550	0.537	0.524	0.511	0.497	0.483	0.469	0.455
	33	0.639	0.630	0.620	0.610	0.599	0.588	0.576	0.564	0.552	0.539	0.527	0.513	0.500	0.486	0.472	0.458
	32	0.641	0.632	0.622	0.612	0.601	0.590	0.578	0.567	0.554	0.542	0.529	0.516	0.503	0.489	0.475	0.461
	31	0.643	0.634	0.624	0.614	0.603	0.592	0.581	0.569	0.557	0.545	0.532	0.519	0.506	0.492	0.478	0.464
	30	0.645	0.636	0.626	0.616	0.605	0.595	0.583	0.572	0.560	0.547	0.535	0.522	0.509	0.495	0.481	0.468
	29	0.647	0.638	0.628	0.618	0.608	0.597	0.586	0.574	0.563	0.550	0.538	0.525	0.512	0.499	0.485	0.471
	28	0.649	0.640	0.631	0.621	0.610	0.600	0.589	0.577	0.566	0.553	0.541	0.528	0.515	0.502	0.489	0.475
	27	0.651	0.643	0.633	0.623	0.613	0.603	0.592	0.580	0.569	0.557	0.544	0.532	0.519	0.506	0.492	0.479
	26	0.654	0.645	0.636	0.626	0.616	0.606	0.595	0.584	0.572	0.560	0.548	0.536	0.523	0.510	0.497	0.483
	25	0.656	0.648	0.639	0.629	0.619	0.609	0.598	0.587	0.576	0.564	0.552	0.540	0.527	0.514	0.501	0.488
	24	0.659	0.651	0.642	0.632	0.622	0.612	0.602	0.591	0.579	0.568	0.556	0.544	0.531	0.519	0.506	0.492
	23	0.662	0.654	0.645	0.635	0.626	0.616	0.605	0.595	0.583	0.572	0.560	0.548	0.536	0.523	0.510	0.497
	22	0.665	0.657	0.648	0.639	0.629	0.619	0.609	0.599	0.588	0.576	0.565	0.553	0.541	0.528	0.515	0.502
	21	0.668	0.660	0.651	0.642	0.633	0.623	0.613	0.603	0.592	0.581	0.569	0.558	0.546	0.533	0.520	0.507
	20	0.672	0.664	0.655	0.646	0.637	0.627	0.618	0.607	0.597	0.586	0.575	0.563	0.551	0.538	0.526	0.513
	19	0.675	0.667	0.659	0.650	0.641	0.632	0.622	0.612	0.602	0.591	0.580	0.568	0.556	0.544	0.531	0.519
	18	0.679	0.671	0.663	0.654	0.646	0.636	0.627	0.617	0.607	0.596	0.585	0.574	0.562	0.550	0.538	0.525
	17	0.683	0.675	0.667	0.659	0.650	0.641	0.632	0.622	0.612	0.601	0.591	0.579	0.568	0.556	0.544	0.532
	16	0.687	0.679	0.672	0.664	0.655	0.646	0.637	0.628	0.618	0.607	0.596	0.585	0.574	0.563	0.551	0.539
	15	0.691	0.684	0.676	0.668	0.660	0.652	0.643	0.633	0.623	0.613	0.603	0.592	0.581	0.570	0.558	0.546
	14	0.695	0.688	0.681	0.674	0.666	0.657	0.648	0.639	0.629	0.619	0.609	0.599	0.588	0.577	0.566	0.554
	13	0.700	0.693	0.686	0.679	0.671	0.663	0.654	0.645	0.636	0.626	0.616	0.606	0.595	0.585	0.574	0.563
	12	0.705	0.698	0.692	0.684	0.677	0.669	0.660	0.651	0.642	0.633	0.623	0.613	0.603	0.593	0.582	0.572
	11	0.710	0.704	0.697	0.690	0.682	0.675	0.666	0.658	0.649	0.640	0.631	0.621	0.612	0.602	0.591	0.581
	10	0.715	0.709	0.703	0.696	0.689	0.681	0.673	0.665	0.657	0.648	0.639	0.630	0.620	0.611	0.601	0.591
	9	0.721	0.715	0.709	0.702	0.695	0.688	0.680	0.672	0.664	0.656	0.647	0.639	0.630	0.620	0.611	0.602
	8	0.726	0.721	0.715	0.708	0.702	0.695	0.688	0.680	0.672	0.664	0.656	0.648	0.639	0.630	0.622	0.613
	7	0.732	0.727	0.721	0.715	0.709	0.702	0.695	0.688	0.681	0.673	0.665	0.657	0.649	0.641	0.633	0.624
	6	0.738	0.733	0.728	0.722	0.716	0.710	0.703	0.696	0.690	0.682	0.675	0.668	0.660	0.652	0.644	0.636
Beneficiary younger than Retiree	5	0.744	0.739	0.734	0.729	0.723	0.718	0.711	0.705	0.699	0.692	0.685	0.678	0.671	0.664	0.656	0.649
	4	0.751	0.746	0.741	0.736	0.731	0.726	0.720	0.714	0.708	0.702	0.696	0.689	0.682	0.676	0.669	0.662
	3	0.757	0.753	0.749	0.744	0.739	0.734	0.729	0.723	0.718	0.712	0.706	0.700	0.694	0.688	0.682	0.675
	2	0.764	0.760	0.756	0.752	0.748	0.743	0.738	0.733	0.728	0.723	0.717	0.712	0.706	0.701	0.695	0.689
	1	0.771	0.768	0.764	0.760	0.756	0.752	0.748	0.743	0.738	0.734	0.729	0.724	0.719	0.714	0.709	0.704
Beneficiary same age as Retiree	0	<b>0.778</b>	<b>0.775</b>	<b>0.772</b>	<b>0.768</b>	<b>0.765</b>	<b>0.761</b>	<b>0.757</b>	<b>0.753</b>	<b>0.749</b>	<b>0.745</b>	<b>0.741</b>	<b>0.736</b>	<b>0.732</b>	<b>0.727</b>	<b>0.723</b>	<b>0.718</b>



**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)**  
**Actuarial Equivalency Factors Effective January 1, 2024**

**Table 6b: 100% Joint and Survivor Annuity - Option 2 - Disabled Members**  
 (Factor Multiplied by Option 1 Non-Refund Life Annuity)

Beneficiary Age Difference	Attained Age at Retirement															
	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75
Beneficiary older than Retiree -1	0.786	0.783	0.780	0.777	0.774	0.771	0.767	0.764	0.760	0.756	0.753	0.749	0.745	0.741	0.737	0.733
-2	0.793	0.791	0.788	0.786	0.783	0.780	0.777	0.774	0.771	0.768	0.765	0.761	0.758	0.755	0.752	0.748
-3	0.801	0.799	0.797	0.795	0.792	0.790	0.787	0.785	0.782	0.780	0.777	0.774	0.772	0.769	0.766	0.764
-4	0.809	0.807	0.805	0.804	0.802	0.800	0.798	0.796	0.794	0.791	0.789	0.787	0.785	0.783	0.781	0.779
-5	0.816	0.815	0.814	0.813	0.811	0.810	0.808	0.807	0.805	0.803	0.802	0.800	0.799	0.797	0.795	0.794
-6	0.824	0.824	0.823	0.822	0.821	0.820	0.819	0.818	0.816	0.815	0.814	0.813	0.812	0.811	0.810	0.809
-7	0.832	0.832	0.832	0.831	0.830	0.830	0.829	0.828	0.828	0.827	0.826	0.826	0.825	0.825	0.824	0.824
-8	0.840	0.840	0.840	0.840	0.840	0.840	0.839	0.839	0.839	0.839	0.839	0.838	0.838	0.838	0.838	0.838
-9	0.849	0.849	0.849	0.849	0.849	0.850	0.850	0.850	0.850	0.850	0.850	0.851	0.851	0.851	0.852	0.852
-10	0.857	0.857	0.858	0.858	0.859	0.859	0.860	0.860	0.861	0.861	0.862	0.863	0.863	0.864	0.865	0.866
-11	0.864	0.865	0.866	0.867	0.868	0.869	0.870	0.871	0.871	0.872	0.873	0.874	0.875	0.876	0.877	0.878
-12	0.872	0.874	0.875	0.876	0.877	0.878	0.879	0.881	0.882	0.883	0.884	0.885	0.887	0.888	0.889	0.890
-13	0.880	0.882	0.883	0.885	0.886	0.887	0.889	0.890	0.892	0.893	0.895	0.896	0.897	0.899	0.900	0.901
-14	0.888	0.890	0.891	0.893	0.895	0.896	0.898	0.900	0.901	0.903	0.904	0.906	0.908	0.909	0.910	0.911
-15	0.895	0.897	0.899	0.901	0.903	0.905	0.907	0.908	0.910	0.912	0.914	0.915	0.917	0.918	0.919	0.920
-16	0.903	0.905	0.907	0.909	0.911	0.913	0.915	0.917	0.919	0.921	0.922	0.924	0.925	0.927	0.928	0.929
-17	0.910	0.912	0.914	0.916	0.919	0.921	0.923	0.925	0.927	0.929	0.930	0.932	0.933	0.935	0.936	0.936
-18	0.917	0.919	0.921	0.924	0.926	0.928	0.930	0.932	0.934	0.936	0.938	0.939	0.941	0.942	0.943	0.943
-19	0.923	0.926	0.928	0.931	0.933	0.935	0.937	0.939	0.941	0.943	0.944	0.946	0.947	0.948	0.949	0.949
-20	0.930	0.932	0.935	0.937	0.939	0.942	0.944	0.946	0.947	0.949	0.950	0.952	0.953	0.954	0.954	0.955
-21	0.936	0.938	0.941	0.943	0.945	0.948	0.950	0.951	0.953	0.955	0.956	0.957	0.958	0.959	0.959	0.960
-22	0.942	0.944	0.947	0.949	0.951	0.953	0.955	0.957	0.958	0.960	0.961	0.962	0.963	0.963	0.964	0.964
-23	0.947	0.950	0.952	0.954	0.956	0.958	0.960	0.961	0.963	0.964	0.965	0.966	0.967	0.967	0.968	0.968
-24	0.952	0.955	0.957	0.959	0.961	0.963	0.964	0.966	0.967	0.968	0.969	0.970	0.970	0.971	0.971	0.971
-25	0.957	0.959	0.961	0.963	0.965	0.967	0.968	0.970	0.971	0.972	0.972	0.973	0.974	0.974	0.974	0.974
-26	0.961	0.964	0.966	0.967	0.969	0.971	0.972	0.973	0.974	0.975	0.976	0.976	0.976	0.977	0.977	0.977
-27	0.965	0.967	0.969	0.971	0.972	0.974	0.975	0.976	0.977	0.978	0.978	0.979	0.979	0.979	0.979	0.979
-28	0.969	0.971	0.973	0.974	0.976	0.977	0.978	0.979	0.979	0.980	0.981	0.981	0.981	0.981	0.981	0.981
-29	0.973	0.974	0.976	0.977	0.978	0.979	0.980	0.981	0.982	0.982	0.983	0.983	0.983	0.983	0.983	0.983
-30	0.976	0.977	0.978	0.980	0.981	0.982	0.982	0.983	0.984	0.984	0.984	0.985	0.985	0.985	0.985	0.984
-31	0.978	0.980	0.981	0.982	0.983	0.984	0.984	0.985	0.985	0.986	0.986	0.986	0.986	0.986	0.986	0.986
-32	0.981	0.982	0.983	0.984	0.985	0.985	0.986	0.987	0.987	0.987	0.987	0.988	0.988	0.988	0.987	0.987
-33	0.983	0.984	0.985	0.986	0.986	0.987	0.988	0.988	0.988	0.989	0.989	0.989	0.989	0.989	0.988	0.988
-34	0.985	0.986	0.987	0.987	0.988	0.988	0.989	0.989	0.989	0.990	0.990	0.990	0.990	0.989	0.989	0.989
-35	0.986	0.987	0.988	0.989	0.989	0.990	0.990	0.990	0.991	0.991	0.991	0.991	0.990	0.990	0.990	0.989
Beneficiary older than Retiree -36	0.988	0.989	0.989	0.990	0.990	0.991	0.991	0.991	0.991	0.991	0.991	0.991	0.991	0.991	0.990	
-37	0.989	0.990	0.990	0.991	0.991	0.992	0.992	0.992	0.992	0.992	0.992	0.992	0.992	0.991		
-38	0.990	0.991	0.991	0.992	0.992	0.992	0.993	0.993	0.993	0.993	0.993	0.992	0.992			
-39	0.991	0.992	0.992	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993				
-40	0.992	0.993	0.993	0.993	0.994	0.994	0.994	0.994	0.994	0.994	0.994					

**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)**  
**Actuarial Equivalency Factors Effective January 1, 2024**

**Table 6b: 100% Joint and Survivor Annuity - Option 2 - Disabled Members**  
 (Factor Multiplied by Option 1 Non-Refund Life Annuity)

	Beneficiary Age Difference	Attained Age at Retirement															
		60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75
Beneficiary	-41	0.993	0.993	0.994	0.994	0.994	0.994	0.994	0.994	0.994	0.994	0.994	0.994	0.994	0.994	0.994	0.994
older	-42	0.994	0.994	0.994	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995
than	-43	0.994	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995
Retiree	-44	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995
	-45	0.995	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996
	-46	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996
	-47	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996
	-48	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996
	-49	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997
	-50	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997
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	-71																
	-72																
	-73																
	-74																
	-75																
Beneficiary	-76																
older	-77																
than	-78																
Retiree	-79																
	-80																

**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)**  
**Actuarial Equivalency Factors Effective January 1, 2024**

**Table 6b: 100% Joint and Survivor Annuity - Option 2 - Disabled Members**  
 (Factor Multiplied by Option 1 Non-Refund Life Annuity)

Beneficiary Age Difference	Attained Age at Retirement															
	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75
Beneficiary older than Retiree	-81	-82	-83	-84	-85	-86	-87	-88	-89	-90						

**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)**  
**Actuarial Equivalency Factors Effective January 1, 2024**

**Table 7a: 50% Joint and Survivor Annuity - Option 3 - Healthy Members**  
 (Factor Multiplied by Option 1 Non-Refund Life Annuity)

	Beneficiary Age Difference	Attained Age at Retirement																			
		45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64
Beneficiary	100																				
younger	99																				
than	98																				
Retiree	97																				
	96																				
	95																				
	94																				
	93																				
	92																				
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**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)**  
**Actuarial Equivalency Factors Effective January 1, 2024**

**Table 7a: 50% Joint and Survivor Annuity - Option 3 - Healthy Members**  
 (Factor Multiplied by Option 1 Non-Refund Life Annuity)

	Beneficiary Age Difference	Attained Age at Retirement																								
		45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64					
Beneficiary younger than Retiree	65 64 63 62 61																				0.816 0.816 0.817					
Beneficiary younger than Retiree	60 59 58 57 56																	0.843	0.835	0.826	0.817					
	55																0.852	0.844	0.835	0.827	0.817					
	54															0.859	0.852	0.844	0.836	0.827	0.818					
	53														0.867	0.860	0.852	0.845	0.836	0.827	0.818					
	52													0.874	0.867	0.860	0.853	0.845	0.837	0.828	0.819					
	51												0.881	0.874	0.868	0.861	0.853	0.845	0.837	0.828	0.819					
	50											0.887	0.881	0.875	0.868	0.861	0.854	0.846	0.838	0.829	0.820					
	49										0.893	0.887	0.881	0.875	0.868	0.861	0.854	0.846	0.838	0.829	0.820					
	48									0.899	0.893	0.888	0.882	0.875	0.869	0.862	0.855	0.847	0.839	0.830	0.821					
	47								0.904	0.899	0.894	0.888	0.882	0.876	0.869	0.862	0.855	0.847	0.839	0.831	0.822					
	46																									
	45									0.909	0.904	0.899	0.894	0.888	0.882	0.876	0.870	0.863	0.856	0.848	0.840	0.831	0.822			
	44								0.914	0.910	0.905	0.900	0.894	0.889	0.883	0.877	0.870	0.863	0.856	0.848	0.840	0.832	0.823			
	43								0.919	0.915	0.910	0.905	0.900	0.895	0.889	0.883	0.877	0.871	0.864	0.857	0.849	0.841	0.833	0.824		
	42								0.924	0.919	0.915	0.910	0.906	0.901	0.895	0.890	0.884	0.878	0.871	0.865	0.857	0.850	0.842	0.834	0.825	
	41								0.928	0.924	0.920	0.915	0.910	0.906	0.901	0.896	0.890	0.884	0.878	0.872	0.865	0.858	0.850	0.842	0.834	0.825
	40																									
	39																									
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**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)**  
**Actuarial Equivalency Factors Effective January 1, 2024**

**Table 7a: 50% Joint and Survivor Annuity - Option 3 - Healthy Members**  
 (Factor Multiplied by Option 1 Non-Refund Life Annuity)

Beneficiary Age Difference	Attained Age at Retirement																				
	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	
30	0.943	0.940	0.936	0.933	0.929	0.925	0.921	0.917	0.912	0.907	0.903	0.898	0.892	0.887	0.881	0.874	0.868	0.861	0.853	0.845	
29	0.943	0.940	0.937	0.933	0.930	0.926	0.922	0.917	0.913	0.909	0.904	0.899	0.893	0.888	0.882	0.876	0.869	0.862	0.855	0.847	
28	0.944	0.941	0.938	0.934	0.930	0.927	0.923	0.918	0.914	0.910	0.905	0.900	0.895	0.889	0.883	0.877	0.871	0.864	0.857	0.849	
27	0.945	0.942	0.938	0.935	0.931	0.927	0.924	0.920	0.915	0.911	0.906	0.901	0.896	0.891	0.885	0.879	0.873	0.866	0.859	0.851	
26	0.946	0.943	0.939	0.936	0.932	0.928	0.925	0.921	0.916	0.912	0.907	0.903	0.898	0.892	0.887	0.881	0.874	0.868	0.861	0.853	
Beneficiary younger than Retiree	25	0.946	0.943	0.940	0.937	0.933	0.929	0.926	0.922	0.918	0.913	0.909	0.904	0.899	0.894	0.888	0.883	0.876	0.870	0.863	0.856
	24	0.947	0.944	0.941	0.938	0.934	0.931	0.927	0.923	0.919	0.915	0.910	0.906	0.901	0.896	0.890	0.884	0.878	0.872	0.865	0.858
	23	0.948	0.945	0.942	0.939	0.935	0.932	0.928	0.924	0.920	0.916	0.912	0.907	0.902	0.897	0.892	0.886	0.880	0.874	0.868	0.861
	22	0.949	0.946	0.943	0.940	0.936	0.933	0.929	0.926	0.922	0.918	0.913	0.909	0.904	0.899	0.894	0.888	0.883	0.876	0.870	0.863
	21	0.950	0.947	0.944	0.941	0.938	0.934	0.930	0.927	0.923	0.919	0.915	0.911	0.906	0.901	0.896	0.891	0.885	0.879	0.873	0.866
	20	0.951	0.948	0.945	0.942	0.939	0.935	0.932	0.928	0.925	0.921	0.917	0.912	0.908	0.903	0.898	0.893	0.887	0.881	0.875	0.869
	19	0.952	0.949	0.946	0.943	0.940	0.937	0.933	0.930	0.926	0.922	0.918	0.914	0.910	0.905	0.900	0.895	0.890	0.884	0.878	0.871
	18	0.953	0.950	0.947	0.944	0.941	0.938	0.935	0.931	0.928	0.924	0.920	0.916	0.912	0.907	0.903	0.898	0.892	0.887	0.881	0.875
	17	0.954	0.951	0.949	0.946	0.943	0.939	0.936	0.933	0.929	0.926	0.922	0.918	0.914	0.910	0.905	0.900	0.895	0.889	0.884	0.878
	16	0.955	0.952	0.950	0.947	0.944	0.941	0.938	0.935	0.931	0.928	0.924	0.920	0.916	0.912	0.907	0.903	0.898	0.892	0.887	0.881
	15	0.956	0.954	0.951	0.948	0.945	0.942	0.939	0.936	0.933	0.930	0.926	0.922	0.918	0.914	0.910	0.905	0.900	0.895	0.890	0.884
	14	0.957	0.955	0.952	0.950	0.947	0.944	0.941	0.938	0.935	0.931	0.928	0.924	0.921	0.917	0.912	0.908	0.903	0.898	0.893	0.888
	13	0.958	0.956	0.954	0.951	0.948	0.945	0.943	0.940	0.937	0.933	0.930	0.927	0.923	0.919	0.915	0.911	0.906	0.902	0.897	0.891
	12	0.960	0.957	0.955	0.953	0.950	0.947	0.944	0.942	0.939	0.936	0.932	0.929	0.925	0.922	0.918	0.914	0.909	0.905	0.900	0.895
	11	0.961	0.959	0.956	0.954	0.952	0.949	0.946	0.943	0.941	0.938	0.934	0.931	0.928	0.924	0.921	0.917	0.913	0.908	0.903	0.898
	10	0.962	0.960	0.958	0.956	0.953	0.951	0.948	0.945	0.943	0.940	0.937	0.934	0.930	0.927	0.924	0.920	0.916	0.911	0.907	0.902
	9	0.964	0.961	0.959	0.957	0.955	0.952	0.950	0.947	0.945	0.942	0.939	0.936	0.933	0.930	0.926	0.923	0.919	0.915	0.910	0.906
	8	0.965	0.963	0.961	0.959	0.956	0.954	0.952	0.949	0.947	0.944	0.941	0.939	0.936	0.933	0.929	0.926	0.922	0.918	0.914	0.910
	7	0.966	0.964	0.962	0.960	0.958	0.956	0.953	0.951	0.949	0.946	0.944	0.941	0.938	0.935	0.932	0.929	0.925	0.922	0.918	0.914
	6	0.968	0.966	0.964	0.962	0.960	0.958	0.955	0.953	0.951	0.949	0.946	0.944	0.941	0.938	0.935	0.932	0.929	0.925	0.922	0.918
Beneficiary younger than Retiree	5	0.969	0.967	0.965	0.963	0.961	0.959	0.957	0.955	0.953	0.951	0.949	0.946	0.944	0.941	0.938	0.935	0.932	0.929	0.925	0.922
	4	0.970	0.969	0.967	0.965	0.963	0.961	0.959	0.957	0.955	0.953	0.951	0.949	0.946	0.944	0.941	0.938	0.935	0.932	0.929	0.926
	3	0.972	0.970	0.968	0.967	0.965	0.963	0.961	0.959	0.957	0.955	0.953	0.951	0.949	0.947	0.944	0.941	0.939	0.936	0.933	0.930
	2	0.973	0.971	0.970	0.968	0.967	0.965	0.963	0.961	0.959	0.958	0.956	0.954	0.951	0.949	0.947	0.945	0.942	0.939	0.937	0.934
	1	0.974	0.973	0.971	0.970	0.968	0.966	0.965	0.963	0.962	0.960	0.958	0.956	0.954	0.952	0.950	0.948	0.945	0.943	0.940	0.938
Beneficiary same age as Retiree	0	<b>0.975</b>	<b>0.974</b>	<b>0.973</b>	<b>0.971</b>	<b>0.970</b>	<b>0.968</b>	<b>0.967</b>	<b>0.965</b>	<b>0.964</b>	<b>0.962</b>	<b>0.960</b>	<b>0.958</b>	<b>0.957</b>	<b>0.955</b>	<b>0.953</b>	<b>0.951</b>	<b>0.949</b>	<b>0.946</b>	<b>0.944</b>	<b>0.941</b>
Beneficiary older than	-1	0.977	0.975	0.974	0.973	0.971	0.970	0.968	0.967	0.965	0.964	0.962	0.961	0.959	0.957	0.956	0.954	0.952	0.950	0.947	0.945
	-2	0.978	0.977	0.976	0.974	0.973	0.971	0.970	0.969	0.967	0.966	0.964	0.963	0.961	0.960	0.958	0.957	0.955	0.953	0.951	0.949
	-3	0.979	0.978	0.977	0.976	0.974	0.973	0.972	0.971	0.969	0.968	0.967	0.965	0.964	0.962	0.961	0.959	0.958	0.956	0.954	0.952

**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)**  
**Actuarial Equivalency Factors Effective January 1, 2024**

**Table 7a: 50% Joint and Survivor Annuity - Option 3 - Healthy Members**  
 (Factor Multiplied by Option 1 Non-Refund Life Annuity)

Beneficiary Age Difference	Attained Age at Retirement																					
	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64		
Retiree	-4	0.980	0.979	0.978	0.977	0.976	0.975	0.973	0.972	0.971	0.970	0.969	0.967	0.966	0.965	0.964	0.962	0.961	0.959	0.958	0.956	
	-5	0.981	0.980	0.979	0.978	0.977	0.976	0.975	0.974	0.973	0.972	0.971	0.969	0.968	0.967	0.966	0.965	0.963	0.962	0.961	0.959	
	-6	0.982	0.982	0.981	0.980	0.979	0.977	0.976	0.975	0.974	0.974	0.972	0.972	0.971	0.969	0.968	0.967	0.966	0.965	0.964	0.963	
	-7	0.983	0.983	0.982	0.981	0.980	0.979	0.978	0.977	0.976	0.975	0.974	0.973	0.973	0.972	0.971	0.970	0.969	0.968	0.967	0.966	
	-8	0.984	0.984	0.983	0.982	0.981	0.980	0.979	0.978	0.978	0.977	0.976	0.975	0.975	0.974	0.973	0.972	0.971	0.970	0.969	0.968	
	-9	0.985	0.985	0.984	0.983	0.982	0.981	0.981	0.980	0.979	0.978	0.978	0.977	0.976	0.976	0.975	0.974	0.974	0.973	0.972	0.971	
	-10	0.986	0.986	0.985	0.984	0.983	0.983	0.982	0.981	0.981	0.980	0.979	0.979	0.978	0.978	0.977	0.976	0.976	0.975	0.974	0.974	
	-11	0.987	0.986	0.986	0.985	0.984	0.984	0.983	0.982	0.982	0.981	0.981	0.980	0.980	0.979	0.979	0.978	0.978	0.977	0.977	0.976	
	-12	0.988	0.987	0.987	0.986	0.985	0.985	0.984	0.984	0.983	0.983	0.982	0.982	0.981	0.981	0.981	0.980	0.980	0.979	0.979	0.978	
	-13	0.989	0.988	0.988	0.987	0.986	0.986	0.985	0.985	0.984	0.984	0.984	0.983	0.983	0.983	0.982	0.982	0.982	0.981	0.981	0.981	
	-14	0.989	0.989	0.988	0.988	0.987	0.987	0.986	0.986	0.986	0.985	0.985	0.985	0.984	0.984	0.984	0.984	0.983	0.983	0.983	0.983	
	-15	0.990	0.990	0.989	0.989	0.988	0.988	0.987	0.987	0.987	0.986	0.986	0.986	0.986	0.986	0.985	0.985	0.985	0.985	0.985	0.984	
	Beneficiary older than Retiree	-16	0.991	0.990	0.990	0.990	0.989	0.989	0.988	0.988	0.988	0.987	0.987	0.987	0.987	0.987	0.987	0.986	0.986	0.986	0.986	
		-17	0.991	0.991	0.991	0.990	0.990	0.989	0.989	0.989	0.989	0.988	0.988	0.988	0.988	0.988	0.988	0.988	0.988	0.988	0.988	0.988
		-18	0.992	0.992	0.991	0.991	0.991	0.990	0.990	0.990	0.990	0.990	0.989	0.989	0.989	0.989	0.989	0.989	0.989	0.989	0.989	0.989
-19		0.993	0.992	0.992	0.992	0.991	0.991	0.991	0.991	0.991	0.990	0.990	0.990	0.990	0.990	0.990	0.990	0.990	0.990	0.990	0.990	
-20		0.993	0.993	0.993	0.992	0.992	0.992	0.992	0.991	0.991	0.991	0.991	0.991	0.991	0.991	0.991	0.991	0.991	0.991	0.991	0.991	
-21		0.994	0.993	0.993	0.993	0.993	0.992	0.992	0.992	0.992	0.992	0.992	0.992	0.992	0.992	0.992	0.992	0.992	0.992	0.992	0.992	
-22		0.994	0.994	0.994	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	
-23		0.995	0.994	0.994	0.994	0.994	0.994	0.994	0.994	0.993	0.993	0.993	0.993	0.994	0.994	0.994	0.994	0.994	0.994	0.994	0.994	
-24		0.995	0.995	0.995	0.995	0.994	0.994	0.994	0.994	0.994	0.994	0.994	0.994	0.994	0.994	0.994	0.994	0.995	0.995	0.995	0.995	
-25		0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.996	
-26		0.996	0.996	0.996	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.996	0.996	0.996	0.996	0.996	0.996	0.996	
-27		0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.997	0.997	
-28		0.997	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.997	0.997	0.997	0.997	0.997	0.997	
-29		0.997	0.997	0.997	0.997	0.997	0.996	0.996	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997	
-30		0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.998	0.998	0.998	0.998	0.998	
-31		0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	
-32		0.998	0.998	0.998	0.998	0.998	0.997	0.997	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	
-33		0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	
-34		0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.999	0.999	0.999	0.999	0.999	
-35		0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	
-36		0.999	0.999	0.999	0.999	0.998	0.998	0.998	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	
-37		0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	
-38		0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	
-39		0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	

**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)**  
**Actuarial Equivalency Factors Effective January 1, 2024**

**Table 7a: 50% Joint and Survivor Annuity - Option 3 - Healthy Members**  
 (Factor Multiplied by Option 1 Non-Refund Life Annuity)

Beneficiary Age Difference	Attained Age at Retirement																			
	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64
-40	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999
-41	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999
-42	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999
-43	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999
-44	1.000	1.000	1.000	1.000	0.999	0.999	0.999	0.999	0.999	0.999	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
-45	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
-46	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
-47	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
-48	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
-49	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
-50	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Beneficiary older than Retiree -51	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
-52	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
-53	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
-54	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
-55	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Beneficiary older than Retiree -56	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
-57	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
-58	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Retiree -59	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
-60	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Beneficiary older than Retiree -61	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
-62	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
-63	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Retiree -64	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
-65	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000



**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)**  
**Actuarial Equivalency Factors Effective January 1, 2024**

**Table 7a: 50% Joint and Survivor Annuity - Option 3 - Healthy Members**  
 (Factor Multiplied by Option 1 Non-Refund Life Annuity)

Beneficiary Age Difference	Attained Age at Retirement																			
	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84
100																				
99																				
98																				
97																				
96																				
95																				
94																				
93																				
92																				
91																				
90																				
89																				
88																				
87																				
86																				
85																				
84																				
83																				0.497
82																			0.518	0.498
81																	0.539	0.519	0.498	
80																	0.560	0.540	0.519	0.498
79																0.580	0.560	0.540	0.519	0.499
78															0.599	0.580	0.560	0.540	0.520	0.499
77														0.618	0.599	0.580	0.561	0.541	0.520	0.499
76													0.636	0.618	0.600	0.581	0.561	0.541	0.520	0.500
75												0.654	0.636	0.619	0.600	0.581	0.561	0.541	0.521	0.500
74											0.671	0.654	0.637	0.619	0.600	0.581	0.562	0.542	0.521	0.500
73										0.687	0.671	0.654	0.637	0.619	0.601	0.582	0.562	0.542	0.522	0.501
72								0.703	0.687	0.671	0.655	0.637	0.620	0.601	0.582	0.563	0.543	0.522	0.501	
71							0.718	0.703	0.688	0.672	0.655	0.638	0.620	0.602	0.583	0.563	0.543	0.523	0.502	
70						0.732	0.718	0.703	0.688	0.672	0.655	0.638	0.621	0.602	0.583	0.564	0.544	0.523	0.502	
69						0.746	0.732	0.718	0.704	0.688	0.672	0.656	0.639	0.621	0.603	0.584	0.564	0.544	0.524	0.503
68					0.759	0.746	0.733	0.719	0.704	0.689	0.673	0.656	0.639	0.621	0.603	0.584	0.565	0.545	0.524	0.504
67				0.772	0.759	0.747	0.733	0.719	0.704	0.689	0.673	0.657	0.640	0.622	0.604	0.585	0.565	0.545	0.525	0.504
66			0.783	0.772	0.760	0.747	0.734	0.720	0.705	0.690	0.674	0.657	0.640	0.623	0.604	0.585	0.566	0.546	0.526	0.505

**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)**  
**Actuarial Equivalency Factors Effective January 1, 2024**

**Table 7a: 50% Joint and Survivor Annuity - Option 3 - Healthy Members**  
 (Factor Multiplied by Option 1 Non-Refund Life Annuity)

	Beneficiary Age Difference	Attained Age at Retirement																			
		65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84
Beneficiary younger than Retiree	65		0.795	0.784	0.772	0.760	0.747	0.734	0.720	0.705	0.690	0.674	0.658	0.641	0.623	0.605	0.586	0.567	0.547	0.526	0.506
	64	0.806	0.795	0.784	0.773	0.760	0.748	0.734	0.720	0.706	0.691	0.675	0.658	0.641	0.624	0.605	0.587	0.567	0.547	0.527	0.506
	63	0.806	0.796	0.785	0.773	0.761	0.748	0.735	0.721	0.706	0.691	0.675	0.659	0.642	0.624	0.606	0.587	0.568	0.548	0.528	0.507
	62	0.806	0.796	0.785	0.773	0.761	0.749	0.735	0.721	0.707	0.692	0.676	0.660	0.643	0.625	0.607	0.588	0.569	0.549	0.528	0.508
	61	0.807	0.796	0.785	0.774	0.762	0.749	0.736	0.722	0.707	0.692	0.677	0.660	0.643	0.626	0.608	0.589	0.569	0.550	0.529	0.509
Beneficiary younger than Retiree	60	0.807	0.797	0.786	0.774	0.762	0.750	0.736	0.723	0.708	0.693	0.677	0.661	0.644	0.626	0.608	0.590	0.570	0.550	0.530	0.510
	59	0.808	0.797	0.786	0.775	0.763	0.750	0.737	0.723	0.709	0.694	0.678	0.662	0.645	0.627	0.609	0.590	0.571	0.551	0.531	0.510
	58	0.808	0.798	0.787	0.775	0.763	0.751	0.738	0.724	0.709	0.694	0.679	0.662	0.646	0.628	0.610	0.591	0.572	0.552	0.532	0.512
	57	0.808	0.798	0.787	0.776	0.764	0.751	0.738	0.724	0.710	0.695	0.679	0.663	0.646	0.629	0.611	0.592	0.573	0.553	0.533	0.513
	56	0.809	0.799	0.788	0.777	0.765	0.752	0.739	0.725	0.711	0.696	0.680	0.664	0.647	0.630	0.612	0.593	0.574	0.554	0.534	0.514
	55	0.810	0.799	0.789	0.777	0.765	0.753	0.740	0.726	0.712	0.697	0.681	0.665	0.648	0.631	0.613	0.594	0.575	0.555	0.535	0.515
	54	0.810	0.800	0.789	0.778	0.766	0.753	0.740	0.727	0.712	0.698	0.682	0.666	0.649	0.632	0.614	0.595	0.576	0.557	0.537	0.516
	53	0.811	0.800	0.790	0.779	0.767	0.754	0.741	0.728	0.713	0.698	0.683	0.667	0.650	0.633	0.615	0.596	0.577	0.558	0.538	0.517
	52	0.811	0.801	0.790	0.779	0.767	0.755	0.742	0.728	0.714	0.699	0.684	0.668	0.651	0.634	0.616	0.598	0.579	0.559	0.539	0.519
	51	0.812	0.802	0.791	0.780	0.768	0.756	0.743	0.729	0.715	0.700	0.685	0.669	0.652	0.635	0.617	0.599	0.580	0.561	0.541	0.520
	50	0.813	0.803	0.792	0.781	0.769	0.757	0.744	0.730	0.716	0.701	0.686	0.670	0.654	0.636	0.619	0.600	0.581	0.562	0.542	0.522
	49	0.813	0.803	0.793	0.782	0.770	0.758	0.745	0.731	0.717	0.703	0.687	0.671	0.655	0.638	0.620	0.602	0.583	0.564	0.544	0.524
	48	0.814	0.804	0.794	0.782	0.771	0.759	0.746	0.732	0.718	0.704	0.688	0.673	0.656	0.639	0.622	0.603	0.585	0.565	0.545	0.525
	47	0.815	0.805	0.794	0.783	0.772	0.760	0.747	0.733	0.720	0.705	0.690	0.674	0.658	0.641	0.623	0.605	0.586	0.567	0.547	0.527
	46	0.816	0.806	0.795	0.784	0.773	0.761	0.748	0.735	0.721	0.706	0.691	0.675	0.659	0.642	0.625	0.607	0.588	0.569	0.549	0.529
	45	0.817	0.807	0.796	0.785	0.774	0.762	0.749	0.736	0.722	0.708	0.693	0.677	0.661	0.644	0.627	0.608	0.590	0.571	0.551	0.531
	44	0.818	0.808	0.797	0.786	0.775	0.763	0.750	0.737	0.724	0.709	0.694	0.679	0.662	0.646	0.628	0.610	0.592	0.573	0.553	0.534
	43	0.819	0.809	0.798	0.788	0.776	0.764	0.752	0.739	0.725	0.711	0.696	0.680	0.664	0.648	0.630	0.612	0.594	0.575	0.556	0.536
	42	0.820	0.810	0.800	0.789	0.778	0.766	0.753	0.740	0.727	0.712	0.698	0.682	0.666	0.650	0.632	0.615	0.596	0.577	0.558	0.538
	41	0.821	0.811	0.801	0.790	0.779	0.767	0.755	0.742	0.728	0.714	0.699	0.684	0.668	0.652	0.635	0.617	0.599	0.580	0.561	0.541
	40	0.822	0.812	0.802	0.791	0.780	0.769	0.756	0.743	0.730	0.716	0.701	0.686	0.670	0.654	0.637	0.619	0.601	0.582	0.563	0.544
	39	0.823	0.814	0.803	0.793	0.782	0.770	0.758	0.745	0.732	0.718	0.703	0.688	0.672	0.656	0.639	0.622	0.604	0.585	0.566	0.547
	38	0.824	0.815	0.805	0.794	0.783	0.772	0.760	0.747	0.734	0.720	0.705	0.690	0.675	0.659	0.642	0.624	0.607	0.588	0.569	0.550
	37	0.826	0.816	0.806	0.796	0.785	0.774	0.762	0.749	0.736	0.722	0.708	0.693	0.677	0.661	0.645	0.627	0.609	0.591	0.572	0.553
	36	0.827	0.818	0.808	0.798	0.787	0.775	0.763	0.751	0.738	0.724	0.710	0.695	0.680	0.664	0.647	0.630	0.613	0.594	0.576	0.557
	35	0.829	0.819	0.810	0.799	0.789	0.777	0.765	0.753	0.740	0.727	0.713	0.698	0.683	0.667	0.650	0.633	0.616	0.598	0.579	0.560
	34	0.830	0.821	0.811	0.801	0.791	0.779	0.768	0.755	0.743	0.729	0.715	0.701	0.685	0.670	0.654	0.637	0.619	0.601	0.583	0.564
	33	0.832	0.823	0.813	0.803	0.793	0.781	0.770	0.758	0.745	0.732	0.718	0.703	0.689	0.673	0.657	0.640	0.623	0.605	0.587	0.568
	32	0.833	0.825	0.815	0.805	0.795	0.784	0.772	0.760	0.748	0.735	0.721	0.707	0.692	0.676	0.660	0.644	0.627	0.609	0.591	0.572
	31	0.835	0.826	0.817	0.807	0.797	0.786	0.775	0.763	0.750	0.737	0.724	0.710	0.695	0.680	0.664	0.648	0.631	0.613	0.595	0.577

**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)**  
**Actuarial Equivalency Factors Effective January 1, 2024**

**Table 7a: 50% Joint and Survivor Annuity - Option 3 - Healthy Members**  
 (Factor Multiplied by Option 1 Non-Refund Life Annuity)

Beneficiary Age Difference	Attained Age at Retirement																				
	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	
30	0.837	0.828	0.819	0.809	0.799	0.789	0.777	0.766	0.753	0.740	0.727	0.713	0.699	0.684	0.668	0.652	0.635	0.617	0.599	0.581	
29	0.839	0.830	0.821	0.812	0.802	0.791	0.780	0.768	0.756	0.744	0.730	0.717	0.702	0.688	0.672	0.656	0.639	0.622	0.604	0.586	
28	0.841	0.833	0.824	0.814	0.804	0.794	0.783	0.772	0.760	0.747	0.734	0.720	0.706	0.692	0.676	0.660	0.644	0.626	0.609	0.591	
27	0.843	0.835	0.826	0.817	0.807	0.797	0.786	0.775	0.763	0.751	0.738	0.724	0.710	0.696	0.681	0.665	0.648	0.631	0.614	0.596	
26	0.846	0.837	0.829	0.820	0.810	0.800	0.789	0.778	0.766	0.754	0.742	0.728	0.715	0.700	0.685	0.669	0.653	0.637	0.619	0.602	
Beneficiary younger than Retiree	25	0.848	0.840	0.831	0.822	0.813	0.803	0.792	0.782	0.770	0.758	0.746	0.733	0.719	0.705	0.690	0.674	0.658	0.642	0.625	0.608
	24	0.851	0.843	0.834	0.825	0.816	0.806	0.796	0.785	0.774	0.762	0.750	0.737	0.723	0.709	0.695	0.680	0.664	0.648	0.631	0.614
	23	0.853	0.845	0.837	0.828	0.819	0.810	0.800	0.789	0.778	0.766	0.754	0.741	0.728	0.714	0.700	0.685	0.670	0.654	0.637	0.621
	22	0.856	0.848	0.840	0.832	0.823	0.813	0.803	0.793	0.782	0.771	0.759	0.746	0.733	0.720	0.706	0.691	0.676	0.660	0.644	0.628
	21	0.859	0.851	0.843	0.835	0.826	0.817	0.807	0.797	0.786	0.775	0.763	0.751	0.738	0.725	0.711	0.697	0.682	0.667	0.651	0.635
	20	0.862	0.854	0.847	0.838	0.830	0.821	0.811	0.801	0.791	0.780	0.768	0.756	0.744	0.731	0.717	0.703	0.689	0.674	0.659	0.643
	19	0.865	0.858	0.850	0.842	0.834	0.825	0.816	0.806	0.795	0.785	0.774	0.762	0.750	0.737	0.724	0.710	0.696	0.681	0.667	0.651
	18	0.868	0.861	0.854	0.846	0.838	0.829	0.820	0.810	0.800	0.790	0.779	0.767	0.756	0.743	0.731	0.717	0.704	0.689	0.675	0.660
	17	0.871	0.864	0.857	0.850	0.842	0.833	0.824	0.815	0.805	0.795	0.785	0.773	0.762	0.750	0.738	0.725	0.711	0.698	0.683	0.669
	16	0.875	0.868	0.861	0.854	0.846	0.838	0.829	0.820	0.811	0.801	0.790	0.780	0.769	0.757	0.745	0.732	0.720	0.706	0.693	0.679
	15	0.878	0.872	0.865	0.858	0.850	0.842	0.834	0.825	0.816	0.806	0.796	0.786	0.775	0.764	0.753	0.741	0.728	0.715	0.702	0.689
	14	0.882	0.876	0.869	0.862	0.855	0.847	0.839	0.830	0.822	0.812	0.803	0.793	0.782	0.772	0.761	0.749	0.737	0.725	0.712	0.699
	13	0.886	0.879	0.873	0.866	0.859	0.852	0.844	0.836	0.827	0.819	0.809	0.800	0.790	0.780	0.769	0.758	0.746	0.734	0.722	0.710
	12	0.889	0.883	0.877	0.871	0.864	0.857	0.849	0.842	0.834	0.825	0.816	0.807	0.798	0.788	0.777	0.767	0.756	0.745	0.733	0.721
	11	0.893	0.888	0.882	0.875	0.869	0.862	0.855	0.848	0.840	0.832	0.823	0.814	0.805	0.796	0.786	0.776	0.766	0.755	0.744	0.733
	10	0.897	0.892	0.886	0.880	0.874	0.867	0.861	0.854	0.846	0.838	0.830	0.822	0.814	0.805	0.795	0.786	0.776	0.766	0.755	0.745
	9	0.901	0.896	0.891	0.885	0.879	0.873	0.866	0.860	0.853	0.845	0.838	0.830	0.822	0.813	0.805	0.796	0.786	0.777	0.767	0.757
	8	0.905	0.900	0.895	0.890	0.884	0.878	0.872	0.866	0.859	0.853	0.845	0.838	0.830	0.822	0.814	0.806	0.797	0.788	0.779	0.770
	7	0.909	0.905	0.900	0.895	0.890	0.884	0.878	0.872	0.866	0.860	0.853	0.846	0.839	0.832	0.824	0.816	0.808	0.800	0.791	0.782
	6	0.914	0.909	0.905	0.900	0.895	0.890	0.884	0.879	0.873	0.867	0.861	0.854	0.848	0.841	0.834	0.826	0.819	0.811	0.803	0.795
Beneficiary younger than Retiree	5	0.918	0.914	0.910	0.905	0.900	0.896	0.891	0.885	0.880	0.874	0.869	0.863	0.856	0.850	0.844	0.837	0.830	0.823	0.816	0.808
	4	0.922	0.918	0.914	0.910	0.906	0.901	0.897	0.892	0.887	0.882	0.876	0.871	0.865	0.859	0.853	0.847	0.841	0.835	0.828	0.821
	3	0.926	0.923	0.919	0.915	0.911	0.907	0.903	0.898	0.894	0.889	0.884	0.879	0.874	0.869	0.863	0.858	0.852	0.846	0.840	0.834
	2	0.931	0.927	0.924	0.920	0.917	0.913	0.909	0.905	0.901	0.896	0.892	0.887	0.883	0.878	0.873	0.868	0.863	0.858	0.852	0.847
	1	0.935	0.932	0.929	0.925	0.922	0.919	0.915	0.911	0.907	0.904	0.900	0.895	0.891	0.887	0.883	0.878	0.874	0.869	0.864	0.859
Beneficiary same age as Retiree	0	<b>0.939</b>	<b>0.936</b>	<b>0.933</b>	<b>0.930</b>	<b>0.927</b>	<b>0.924</b>	<b>0.921</b>	<b>0.918</b>	<b>0.914</b>	<b>0.911</b>	<b>0.907</b>	<b>0.903</b>	<b>0.900</b>	<b>0.896</b>	<b>0.892</b>	<b>0.888</b>	<b>0.884</b>	<b>0.880</b>	<b>0.876</b>	<b>0.872</b>
Beneficiary older than	-1	0.943	0.940	0.938	0.935	0.932	0.930	0.927	0.924	0.921	0.917	0.914	0.911	0.908	0.904	0.901	0.898	0.894	0.891	0.887	0.883
	-2	0.947	0.945	0.942	0.940	0.937	0.935	0.932	0.930	0.927	0.924	0.921	0.918	0.916	0.913	0.910	0.907	0.904	0.901	0.897	0.894
	-3	0.951	0.949	0.947	0.944	0.942	0.940	0.938	0.935	0.933	0.931	0.928	0.926	0.923	0.921	0.918	0.916	0.913	0.910	0.907	0.904

**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)**  
**Actuarial Equivalency Factors Effective January 1, 2024**

**Table 7a: 50% Joint and Survivor Annuity - Option 3 - Healthy Members**  
 (Factor Multiplied by Option 1 Non-Refund Life Annuity)

Beneficiary Age Difference	Attained Age at Retirement																				
	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	
Retiree	-4	0.954	0.953	0.951	0.949	0.947	0.945	0.943	0.941	0.939	0.937	0.935	0.932	0.930	0.928	0.926	0.924	0.922	0.919	0.917	0.914
	-5	0.958	0.956	0.955	0.953	0.951	0.950	0.948	0.946	0.944	0.943	0.941	0.939	0.937	0.935	0.934	0.932	0.930	0.928	0.925	0.923
	-6	0.961	0.960	0.958	0.957	0.956	0.954	0.953	0.951	0.950	0.948	0.947	0.945	0.944	0.942	0.941	0.939	0.937	0.935	0.933	0.931
	-7	0.964	0.963	0.962	0.961	0.960	0.958	0.957	0.956	0.955	0.953	0.952	0.951	0.950	0.948	0.947	0.946	0.944	0.942	0.940	0.938
	-8	0.967	0.966	0.965	0.964	0.963	0.962	0.961	0.960	0.959	0.958	0.957	0.956	0.955	0.954	0.953	0.952	0.950	0.949	0.947	0.945
	-9	0.970	0.970	0.969	0.968	0.967	0.966	0.965	0.964	0.963	0.962	0.961	0.960	0.959	0.958	0.957	0.956	0.955	0.954	0.953	0.951
	-10	0.973	0.972	0.972	0.971	0.970	0.970	0.969	0.968	0.967	0.966	0.965	0.965	0.964	0.964	0.963	0.962	0.961	0.960	0.958	0.956
	-11	0.976	0.975	0.974	0.974	0.973	0.973	0.972	0.972	0.971	0.971	0.970	0.969	0.969	0.968	0.967	0.966	0.965	0.964	0.963	0.961
	-12	0.978	0.978	0.977	0.977	0.976	0.976	0.975	0.975	0.974	0.974	0.974	0.973	0.973	0.972	0.971	0.970	0.969	0.968	0.967	0.966
	-13	0.980	0.980	0.980	0.979	0.979	0.978	0.978	0.978	0.977	0.977	0.977	0.976	0.976	0.975	0.975	0.974	0.973	0.972	0.971	0.969
	-14	0.982	0.982	0.982	0.981	0.981	0.981	0.981	0.980	0.980	0.980	0.980	0.979	0.979	0.978	0.978	0.977	0.976	0.975	0.974	0.973
	-15	0.984	0.984	0.984	0.984	0.983	0.983	0.983	0.983	0.983	0.982	0.982	0.982	0.981	0.981	0.980	0.980	0.979	0.978	0.977	0.976
	Beneficiary older than Retiree	-16	0.986	0.986	0.986	0.986	0.985	0.985	0.985	0.985	0.985	0.984	0.984	0.984	0.984	0.983	0.982	0.981	0.980	0.979	0.978
		-17	0.987	0.987	0.987	0.987	0.987	0.987	0.987	0.987	0.987	0.986	0.986	0.986	0.986	0.985	0.985	0.984	0.983	0.982	0.980
		-18	0.989	0.989	0.989	0.989	0.989	0.989	0.989	0.988	0.988	0.988	0.988	0.988	0.987	0.987	0.986	0.986	0.985	0.984	0.982
-19		0.990	0.990	0.990	0.990	0.990	0.990	0.990	0.990	0.990	0.990	0.989	0.989	0.989	0.988	0.988	0.987	0.987	0.986	0.985	0.984
-20		0.991	0.991	0.991	0.991	0.991	0.991	0.991	0.991	0.991	0.991	0.991	0.990	0.990	0.990	0.989	0.989	0.988	0.988	0.987	0.986
-21		0.992	0.992	0.992	0.992	0.992	0.992	0.992	0.992	0.992	0.992	0.992	0.991	0.991	0.991	0.990	0.990	0.989	0.989	0.988	0.987
-22		0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.992	0.992	0.992	0.992	0.991	0.991	0.990	0.989	0.988
-23		0.994	0.994	0.994	0.994	0.994	0.994	0.994	0.994	0.994	0.994	0.994	0.993	0.993	0.993	0.992	0.992	0.991	0.991	0.990	0.989
-24		0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.994	0.994	0.994	0.994	0.994	0.993	0.993	0.992	0.992	0.991	0.990
-25		0.996	0.996	0.996	0.996	0.996	0.996	0.995	0.995	0.995	0.995	0.995	0.995	0.994	0.994	0.994	0.993	0.993	0.992	0.991	0.990
-26		0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.995	0.995	0.995	0.995	0.994	0.994	0.993	0.993	0.992	0.991
-27		0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.996	0.996	0.996	0.996	0.996	0.996	0.995	0.995	0.994	0.994	0.993	0.992	0.991
-28		0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.996	0.996	0.996	0.996	0.995	0.995	0.994	0.994	0.993	0.992
-29		0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.996	0.996	0.996	0.995	0.995	0.994	0.993	0.992
-30		0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.997	0.997	0.997	0.997	0.997	0.997	0.996	0.996	0.995	0.995	0.994	0.993	0.992
-31		0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.997	0.997	0.997	0.997	0.997	0.996					
-32		0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.997	0.997	0.997					
-33		0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.997	0.997					
-34		0.999	0.999	0.999	0.999	0.999	0.999	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998						
-35		0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.998	0.998	0.998	0.998	0.998								
-36		0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.998	0.998										
-37		0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999											
-38		0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999												
-39		0.999	0.999	0.999	0.999	0.999	0.999	0.999													

**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)**  
**Actuarial Equivalency Factors Effective January 1, 2024**

**Table 7a: 50% Joint and Survivor Annuity - Option 3 - Healthy Members**  
 (Factor Multiplied by Option 1 Non-Refund Life Annuity)

Beneficiary Age Difference	Attained Age at Retirement																			
	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84
-40	0.999	0.999	0.999	0.999	0.999	0.999														
-41	0.999	0.999	0.999	0.999	0.999															
-42	0.999	0.999	0.999	0.999																
-43	0.999	0.999	0.999																	
-44	0.999	0.999																		
-45	1.000																			
-46																				
-47																				
-48																				
-49																				
-50																				
Beneficiary older than Retiree	-51																			
	-52																			
	-53																			
	-54																			
	-55																			
Beneficiary older than Retiree	-56																			
	-57																			
	-58																			
	-59																			
	-60																			
Beneficiary older than Retiree	-61																			
	-62																			
	-63																			
	-64																			
	-65																			

**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)**  
**Actuarial Equivalency Factors Effective January 1, 2024**

**Table 7a: 50% Joint and Survivor Annuity - Option 3 - Healthy Members**  
 (Factor Multiplied by Option 1 Non-Refund Life Annuity)

Beneficiary Age Difference	Attained Age at Retirement															
	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
Beneficiary younger than Retiree																
100																
99																0.218
98															0.230	0.218
97														0.242	0.230	0.218
96													0.255	0.242	0.230	0.219
95												0.269	0.255	0.242	0.230	0.219
94											0.284	0.269	0.255	0.242	0.230	0.219
93										0.300	0.284	0.269	0.256	0.243	0.230	0.219
92									0.317	0.300	0.284	0.270	0.256	0.243	0.231	0.219
91								0.334	0.317	0.300	0.285	0.270	0.256	0.243	0.231	0.220
90							0.353	0.335	0.317	0.300	0.285	0.270	0.256	0.243	0.231	0.220
89						0.372	0.353	0.335	0.317	0.301	0.285	0.270	0.257	0.244	0.231	0.220
88					0.392	0.372	0.353	0.335	0.318	0.301	0.285	0.271	0.257	0.244	0.232	0.220
87				0.413	0.392	0.373	0.354	0.335	0.318	0.301	0.286	0.271	0.257	0.244	0.232	0.221
86			0.434	0.413	0.393	0.373	0.354	0.335	0.318	0.301	0.286	0.271	0.257	0.244	0.232	0.221
85		0.455	0.434	0.413	0.393	0.373	0.354	0.336	0.318	0.302	0.286	0.271	0.258	0.245	0.232	0.221
84	0.476	0.455	0.434	0.413	0.393	0.373	0.354	0.336	0.319	0.302	0.286	0.272	0.258	0.245	0.233	0.221
83	0.476	0.455	0.434	0.414	0.393	0.374	0.355	0.336	0.319	0.302	0.287	0.272	0.258	0.245	0.233	0.222
82	0.477	0.456	0.435	0.414	0.394	0.374	0.355	0.337	0.319	0.303	0.287	0.272	0.259	0.246	0.233	0.222
81	0.477	0.456	0.435	0.414	0.394	0.374	0.355	0.337	0.320	0.303	0.287	0.273	0.259	0.246	0.234	0.222
80	0.477	0.456	0.435	0.415	0.394	0.375	0.356	0.337	0.320	0.303	0.288	0.273	0.259	0.246	0.234	0.223
79	0.478	0.457	0.436	0.415	0.395	0.375	0.356	0.338	0.320	0.304	0.288	0.274	0.260	0.247	0.235	0.223
78	0.478	0.457	0.436	0.415	0.395	0.375	0.356	0.338	0.321	0.304	0.289	0.274	0.260	0.247	0.235	0.224
77	0.478	0.457	0.436	0.416	0.396	0.376	0.357	0.339	0.321	0.305	0.289	0.274	0.261	0.248	0.235	0.224
76	0.479	0.458	0.437	0.416	0.396	0.376	0.357	0.339	0.322	0.305	0.289	0.275	0.261	0.248	0.236	0.225
75	0.479	0.458	0.437	0.417	0.397	0.377	0.358	0.340	0.322	0.306	0.290	0.275	0.261	0.248	0.236	0.225
74	0.480	0.459	0.438	0.417	0.397	0.377	0.358	0.340	0.323	0.306	0.290	0.276	0.262	0.249	0.237	0.226
73	0.480	0.459	0.438	0.418	0.397	0.378	0.359	0.341	0.323	0.307	0.291	0.276	0.262	0.250	0.237	0.226
72	0.481	0.460	0.439	0.418	0.398	0.378	0.359	0.341	0.324	0.307	0.292	0.277	0.263	0.250	0.238	0.227
71	0.481	0.460	0.439	0.419	0.399	0.379	0.360	0.342	0.324	0.308	0.292	0.277	0.264	0.251	0.239	0.227
70	0.482	0.461	0.440	0.419	0.399	0.379	0.360	0.342	0.325	0.308	0.293	0.278	0.264	0.251	0.239	0.228
69	0.482	0.461	0.440	0.420	0.400	0.380	0.361	0.343	0.325	0.309	0.293	0.279	0.265	0.252	0.240	0.229
68	0.483	0.462	0.441	0.421	0.400	0.381	0.362	0.344	0.326	0.310	0.294	0.279	0.266	0.253	0.241	0.229
67	0.483	0.463	0.442	0.421	0.401	0.381	0.362	0.344	0.327	0.310	0.295	0.280	0.266	0.254	0.242	0.230
66	0.484	0.463	0.442	0.422	0.402	0.382	0.363	0.345	0.328	0.311	0.296	0.281	0.267	0.254	0.242	0.231

**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)**  
**Actuarial Equivalency Factors Effective January 1, 2024**

**Table 7a: 50% Joint and Survivor Annuity - Option 3 - Healthy Members**  
 (Factor Multiplied by Option 1 Non-Refund Life Annuity)

	Beneficiary Age Difference	Attained Age at Retirement															
		85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
Beneficiary younger than Retiree	65	0.485	0.464	0.443	0.423	0.402	0.383	0.364	0.346	0.328	0.312	0.296	0.282	0.268	0.255	0.243	0.232
	64	0.485	0.465	0.444	0.423	0.403	0.384	0.365	0.347	0.329	0.313	0.297	0.283	0.269	0.256	0.244	0.233
	63	0.486	0.465	0.445	0.424	0.404	0.385	0.366	0.348	0.330	0.314	0.298	0.284	0.270	0.257	0.245	0.234
	62	0.487	0.466	0.446	0.425	0.405	0.386	0.367	0.348	0.331	0.315	0.299	0.285	0.271	0.258	0.246	0.235
	61	0.488	0.467	0.446	0.426	0.406	0.386	0.368	0.350	0.332	0.316	0.300	0.286	0.272	0.259	0.247	0.236
Beneficiary younger than Retiree	60	0.489	0.468	0.447	0.427	0.407	0.388	0.369	0.351	0.333	0.317	0.301	0.287	0.273	0.261	0.249	0.237
	59	0.490	0.469	0.449	0.428	0.408	0.389	0.370	0.352	0.334	0.318	0.303	0.288	0.275	0.262	0.250	0.239
	58	0.491	0.470	0.450	0.429	0.409	0.390	0.371	0.353	0.336	0.319	0.304	0.289	0.276	0.263	0.251	0.240
	57	0.492	0.471	0.451	0.430	0.410	0.391	0.372	0.354	0.337	0.321	0.305	0.291	0.277	0.264	0.253	0.242
	56	0.493	0.473	0.452	0.432	0.412	0.392	0.374	0.356	0.338	0.322	0.307	0.292	0.279	0.266	0.254	0.243
	55	0.494	0.474	0.453	0.433	0.413	0.394	0.375	0.357	0.340	0.324	0.308	0.294	0.280	0.268	0.256	0.245
	54	0.496	0.475	0.455	0.434	0.415	0.395	0.376	0.358	0.341	0.325	0.310	0.295	0.282	0.269	0.257	0.247
	53	0.497	0.477	0.456	0.436	0.416	0.397	0.378	0.360	0.343	0.327	0.311	0.297	0.284	0.271	0.259	0.248
	52	0.498	0.478	0.458	0.437	0.418	0.398	0.380	0.362	0.345	0.329	0.313	0.299	0.286	0.273	0.261	0.250
	51	0.500	0.480	0.459	0.439	0.419	0.400	0.381	0.364	0.347	0.330	0.315	0.301	0.288	0.275	0.263	0.253
Beneficiary younger than Retiree	50	0.502	0.481	0.461	0.441	0.421	0.402	0.383	0.366	0.349	0.332	0.317	0.303	0.290	0.277	0.266	0.255
	49	0.503	0.483	0.463	0.443	0.423	0.404	0.385	0.368	0.351	0.335	0.319	0.305	0.292	0.280	0.268	0.257
	48	0.505	0.485	0.465	0.445	0.425	0.406	0.388	0.370	0.353	0.337	0.322	0.308	0.294	0.282	0.270	0.259
	47	0.507	0.487	0.467	0.447	0.427	0.408	0.390	0.372	0.355	0.339	0.324	0.310	0.297	0.284	0.273	0.262
	46	0.509	0.489	0.469	0.449	0.430	0.411	0.392	0.375	0.358	0.342	0.327	0.313	0.300	0.287	0.275	0.264
	45	0.511	0.491	0.471	0.451	0.432	0.413	0.395	0.377	0.360	0.345	0.330	0.315	0.302	0.290	0.278	0.267
	44	0.514	0.494	0.474	0.454	0.435	0.416	0.397	0.380	0.363	0.347	0.332	0.318	0.305	0.292	0.281	0.270
	43	0.516	0.496	0.476	0.457	0.437	0.418	0.400	0.383	0.366	0.350	0.335	0.321	0.308	0.295	0.284	0.273
	42	0.519	0.499	0.479	0.459	0.440	0.421	0.403	0.386	0.369	0.353	0.338	0.324	0.311	0.299	0.287	0.277
	41	0.521	0.502	0.482	0.462	0.443	0.425	0.407	0.389	0.372	0.356	0.341	0.327	0.314	0.302	0.291	0.280
Beneficiary younger than Retiree	40	0.524	0.505	0.485	0.466	0.447	0.428	0.410	0.392	0.376	0.360	0.345	0.331	0.318	0.306	0.294	0.284
	39	0.527	0.508	0.488	0.469	0.450	0.431	0.413	0.396	0.379	0.363	0.349	0.335	0.322	0.310	0.298	0.288
	38	0.531	0.511	0.492	0.473	0.454	0.435	0.417	0.399	0.383	0.367	0.352	0.339	0.326	0.314	0.303	0.293
	37	0.534	0.515	0.495	0.476	0.457	0.438	0.420	0.403	0.387	0.371	0.356	0.343	0.330	0.318	0.307	0.297
	36	0.538	0.518	0.499	0.480	0.461	0.442	0.424	0.407	0.391	0.375	0.361	0.347	0.335	0.323	0.312	0.302
	35	0.541	0.522	0.503	0.484	0.465	0.446	0.429	0.411	0.395	0.380	0.365	0.352	0.340	0.328	0.317	0.308
	34	0.545	0.526	0.507	0.488	0.469	0.451	0.433	0.416	0.400	0.385	0.370	0.357	0.345	0.333	0.323	0.314
	33	0.549	0.530	0.511	0.492	0.474	0.455	0.438	0.421	0.405	0.390	0.376	0.363	0.351	0.339	0.329	0.320
	32	0.553	0.534	0.516	0.497	0.478	0.460	0.443	0.426	0.410	0.395	0.381	0.369	0.357	0.346	0.336	0.326
	31	0.558	0.539	0.520	0.502	0.483	0.465	0.448	0.432	0.416	0.401	0.388	0.375	0.363	0.352	0.342	0.334

**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)**  
**Actuarial Equivalency Factors Effective January 1, 2024**

**Table 7a: 50% Joint and Survivor Annuity - Option 3 - Healthy Members**  
 (Factor Multiplied by Option 1 Non-Refund Life Annuity)

Beneficiary Age Difference	Attained Age at Retirement																
	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100	
30	0.563	0.544	0.525	0.507	0.489	0.471	0.454	0.438	0.422	0.408	0.394	0.382	0.370	0.359	0.350	0.341	
29	0.568	0.549	0.531	0.512	0.494	0.477	0.460	0.444	0.429	0.414	0.401	0.389	0.377	0.367	0.358	0.349	
28	0.573	0.554	0.536	0.518	0.500	0.483	0.466	0.451	0.436	0.422	0.408	0.396	0.385	0.375	0.366	0.358	
27	0.578	0.560	0.542	0.524	0.507	0.490	0.473	0.458	0.443	0.429	0.416	0.405	0.394	0.384	0.375	0.368	
26	0.584	0.566	0.549	0.531	0.514	0.497	0.481	0.465	0.451	0.437	0.425	0.413	0.403	0.393	0.385	0.378	
Beneficiary younger than Retiree	25	0.590	0.573	0.555	0.538	0.521	0.504	0.489	0.474	0.459	0.446	0.434	0.423	0.413	0.403	0.395	0.388
	24	0.597	0.580	0.562	0.545	0.529	0.513	0.497	0.482	0.468	0.455	0.443	0.433	0.423	0.414	0.406	0.400
	23	0.604	0.587	0.570	0.553	0.537	0.521	0.506	0.491	0.478	0.465	0.454	0.443	0.434	0.426	0.418	0.412
	22	0.611	0.595	0.578	0.562	0.546	0.530	0.515	0.501	0.488	0.476	0.465	0.454	0.446	0.438	0.431	0.425
	21	0.619	0.603	0.587	0.571	0.555	0.540	0.525	0.512	0.499	0.487	0.476	0.466	0.458	0.451	0.444	0.439
	20	0.627	0.611	0.596	0.580	0.565	0.550	0.536	0.522	0.510	0.499	0.488	0.479	0.471	0.464	0.459	0.454
	19	0.636	0.620	0.605	0.590	0.575	0.561	0.547	0.534	0.522	0.511	0.501	0.493	0.485	0.479	0.474	0.470
	18	0.645	0.630	0.615	0.600	0.586	0.572	0.559	0.546	0.535	0.525	0.515	0.507	0.500	0.495	0.490	0.487
	17	0.655	0.640	0.626	0.611	0.597	0.584	0.571	0.559	0.548	0.539	0.530	0.522	0.516	0.511	0.507	0.505
	16	0.665	0.651	0.637	0.623	0.609	0.596	0.584	0.573	0.563	0.553	0.545	0.538	0.533	0.528	0.525	0.524
	15	0.675	0.662	0.648	0.635	0.622	0.610	0.598	0.587	0.578	0.569	0.561	0.555	0.550	0.547	0.544	0.543
	14	0.686	0.673	0.660	0.647	0.635	0.623	0.612	0.602	0.593	0.585	0.578	0.573	0.569	0.566	0.564	0.563
	13	0.697	0.685	0.673	0.661	0.649	0.638	0.627	0.618	0.610	0.602	0.596	0.591	0.588	0.585	0.584	0.584
	12	0.709	0.697	0.686	0.674	0.663	0.653	0.643	0.634	0.627	0.620	0.615	0.610	0.607	0.605	0.604	0.604
	11	0.722	0.710	0.699	0.688	0.678	0.668	0.659	0.651	0.644	0.638	0.634	0.630	0.627	0.626	0.625	0.625
	10	0.734	0.724	0.713	0.703	0.693	0.684	0.676	0.669	0.663	0.657	0.653	0.650	0.648	0.646	0.646	0.646
	9	0.747	0.737	0.727	0.718	0.709	0.701	0.693	0.687	0.681	0.676	0.673	0.670	0.668	0.667	0.667	0.667
	8	0.760	0.751	0.742	0.733	0.725	0.718	0.711	0.705	0.700	0.696	0.692	0.690	0.688	0.687	0.687	0.687
	7	0.774	0.765	0.757	0.749	0.742	0.735	0.729	0.723	0.719	0.715	0.712	0.710	0.708	0.707	0.707	0.707
	6	0.787	0.780	0.772	0.765	0.758	0.752	0.746	0.741	0.737	0.734	0.731	0.729	0.728	0.727	0.726	0.726
Beneficiary younger than Retiree	5	0.801	0.794	0.787	0.781	0.775	0.769	0.764	0.759	0.756	0.752	0.750	0.748	0.746	0.745	0.745	0.745
	4	0.815	0.808	0.802	0.796	0.791	0.786	0.781	0.777	0.773	0.770	0.768	0.766	0.764	0.763	0.763	0.762
	3	0.828	0.823	0.817	0.812	0.807	0.802	0.798	0.794	0.791	0.788	0.785	0.783	0.782	0.781	0.780	0.779
	2	0.842	0.837	0.832	0.827	0.822	0.818	0.814	0.810	0.807	0.804	0.802	0.800	0.798	0.797	0.796	0.795
	1	0.855	0.850	0.846	0.841	0.837	0.833	0.829	0.826	0.823	0.820	0.818	0.815	0.814	0.812	0.811	0.810
Beneficiary same age as Retiree	0	<b>0.867</b>	<b>0.863</b>	<b>0.859</b>	<b>0.855</b>	<b>0.851</b>	<b>0.848</b>	<b>0.844</b>	<b>0.841</b>	<b>0.838</b>	<b>0.835</b>	<b>0.832</b>	<b>0.830</b>	<b>0.828</b>	<b>0.826</b>	<b>0.825</b>	<b>0.823</b>
Beneficiary older than	-1	0.879	0.876	0.872	0.868	0.865	0.861	0.858	0.854	0.851	0.848	0.846	0.844	0.842	0.840	0.838	0.836
	-2	0.891	0.887	0.884	0.881	0.877	0.874	0.870	0.867	0.864	0.861	0.859	0.856	0.854	0.852	0.850	0.848
	-3	0.901	0.898	0.895	0.892	0.889	0.885	0.882	0.879	0.876	0.873	0.870	0.868	0.866	0.863	0.861	0.859



**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)**  
**Actuarial Equivalency Factors Effective January 1, 2024**

**Table 7a: 50% Joint and Survivor Annuity - Option 3 - Healthy Members**  
 (Factor Multiplied by Option 1 Non-Refund Life Annuity)

Beneficiary Age Difference	Attained Age at Retirement																
	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100	
Retiree	-4	0.911	0.908	0.905	0.902	0.899	0.896	0.893	0.890	0.887	0.884	0.881	0.879	0.876	0.874	0.872	0.869
	-5	0.920	0.918	0.915	0.912	0.909	0.906	0.903	0.900	0.897	0.894	0.891	0.889	0.886	0.883	0.881	0.878
	-6	0.929	0.926	0.924	0.921	0.918	0.915	0.912	0.909	0.906	0.903	0.900	0.898	0.895	0.892	0.889	0.886
	-7	0.936	0.934	0.931	0.929	0.926	0.923	0.920	0.917	0.914	0.912	0.909	0.906	0.903	0.900	0.896	0.893
	-8	0.943	0.941	0.938	0.936	0.933	0.930	0.928	0.925	0.922	0.919	0.916	0.913	0.910	0.906	0.903	0.899
	-9	0.949	0.947	0.945	0.942	0.940	0.937	0.934	0.932	0.929	0.926	0.923	0.919	0.916	0.912	0.909	0.904
	-10	0.955	0.953	0.951	0.948	0.946	0.943	0.940	0.938	0.935	0.932	0.929	0.925	0.922	0.918	0.913	0.908
	-11	0.960	0.958	0.956	0.953	0.951	0.949	0.946	0.943	0.940	0.937	0.934	0.930	0.926	0.922	0.917	
	-12	0.964	0.962	0.960	0.958	0.956	0.953	0.951	0.948	0.945	0.942	0.938	0.934	0.930	0.925		
	-13	0.968	0.966	0.964	0.962	0.960	0.957	0.955	0.952	0.949	0.946	0.942	0.938	0.933			
	-14	0.971	0.970	0.968	0.966	0.964	0.961	0.959	0.956	0.953	0.949	0.945	0.941				
	-15	0.974	0.973	0.971	0.969	0.967	0.964	0.962	0.959	0.956	0.952	0.948					
	Beneficiary older than Retiree	-16	0.977	0.975	0.974	0.972	0.970	0.967	0.965	0.962	0.958	0.954					
		-17	0.979	0.978	0.976	0.974	0.972	0.970	0.967	0.964	0.960						
		-18	0.981	0.980	0.978	0.976	0.974	0.972	0.969	0.965							
-19		0.983	0.982	0.980	0.978	0.976	0.973	0.970									
-20		0.984	0.983	0.982	0.980	0.977	0.975										
-21		0.986	0.984	0.983	0.981	0.978											
-22		0.987	0.986	0.984	0.982												
-23		0.988	0.986	0.985													
-24		0.989	0.987														
-25		0.989															
-26																	
-27																	
-28																	
-29																	
-30																	
-31																	
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-38																	
-39																	

**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)**  
**Actuarial Equivalency Factors Effective January 1, 2024**

**Table 7a: 50% Joint and Survivor Annuity - Option 3 - Healthy Members**  
 (Factor Multiplied by Option 1 Non-Refund Life Annuity)

Beneficiary Age Difference	Attained Age at Retirement															
	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
-40																
-41																
-42																
-43																
-44																
-45																
-46																
-47																
-48																
-49																
-50																
Beneficiary older than Retiree -51																
-52																
-53																
-54																
-55																
Beneficiary older than Retiree -56																
-57																
-58																
-59																
-60																
Beneficiary older than Retiree -61																
-62																
-63																
-64																
-65																

**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)**  
**Actuarial Equivalency Factors Effective January 1, 2024**

**Table 7b: 50% Joint and Survivor Annuity - Option 3 - Disabled Members**  
 (Factor Multiplied by Option 1 Non-Refund Life Annuity)

Beneficiary Age Difference	Attained Age at Retirement																			
	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39
Beneficiary 75																				
younger 74																				
than 73																				
Retiree 72																				
71																				
70																				
69																				
68																				
67																				
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45																				
44																				
43																				
42																				
41																				
Beneficiary 40																				0.887
younger 39																				0.887
than 38																				0.887
Retiree 37																				0.888
36																	0.897	0.892	0.888	

**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)**  
**Actuarial Equivalency Factors Effective January 1, 2024**

**Table 7b: 50% Joint and Survivor Annuity - Option 3 - Disabled Members**  
 (Factor Multiplied by Option 1 Non-Refund Life Annuity)

Beneficiary Age Difference	Attained Age at Retirement																				
	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	
35																	0.901	0.897	0.892	0.888	
34																0.905	0.901	0.897	0.893	0.888	
33															0.910	0.906	0.902	0.898	0.893	0.889	
32														0.914	0.910	0.906	0.902	0.898	0.894	0.889	
31												0.918	0.914	0.910	0.906	0.902	0.898	0.894	0.890		
30											0.921	0.918	0.914	0.911	0.907	0.903	0.899	0.895	0.890		
29										0.925	0.922	0.918	0.915	0.911	0.907	0.903	0.899	0.895	0.891		
28								0.928	0.925	0.922	0.919	0.915	0.911	0.908	0.904	0.900	0.896	0.891	0.887		
27									0.932	0.929	0.925	0.922	0.919	0.915	0.912	0.908	0.904	0.900	0.896	0.892	
26							0.935	0.932	0.929	0.926	0.923	0.919	0.916	0.912	0.909	0.905	0.901	0.897	0.892		
25						0.938	0.935	0.932	0.929	0.926	0.923	0.920	0.916	0.913	0.909	0.905	0.901	0.897	0.893		
24					0.941	0.938	0.935	0.933	0.930	0.927	0.923	0.920	0.917	0.913	0.910	0.906	0.902	0.898	0.894		
23				0.943	0.941	0.938	0.936	0.933	0.930	0.927	0.924	0.921	0.917	0.914	0.910	0.906	0.902	0.898	0.894		
22			0.946	0.944	0.941	0.939	0.936	0.933	0.930	0.927	0.924	0.921	0.918	0.914	0.911	0.907	0.903	0.899	0.895		
21		0.948	0.946	0.944	0.942	0.939	0.936	0.934	0.931	0.928	0.925	0.922	0.918	0.915	0.911	0.908	0.904	0.900	0.896		
20	0.951	0.949	0.947	0.944	0.942	0.939	0.937	0.934	0.931	0.928	0.925	0.922	0.919	0.915	0.912	0.908	0.904	0.900	0.896		
19	0.953	0.951	0.949	0.947	0.945	0.942	0.940	0.937	0.935	0.932	0.929	0.926	0.923	0.919	0.916	0.913	0.909	0.905	0.901	0.897	
18	0.953	0.951	0.949	0.947	0.945	0.943	0.940	0.938	0.935	0.932	0.929	0.926	0.923	0.920	0.917	0.913	0.910	0.906	0.902	0.898	
17	0.953	0.952	0.950	0.948	0.946	0.943	0.941	0.938	0.935	0.933	0.930	0.927	0.924	0.921	0.917	0.914	0.910	0.907	0.903	0.899	
16	0.954	0.952	0.950	0.948	0.946	0.944	0.941	0.939	0.936	0.933	0.930	0.928	0.924	0.921	0.918	0.915	0.911	0.907	0.904	0.900	
15	0.954	0.952	0.951	0.949	0.946	0.944	0.942	0.939	0.937	0.934	0.931	0.928	0.925	0.922	0.919	0.915	0.912	0.908	0.905	0.901	
14	0.954	0.953	0.951	0.949	0.947	0.944	0.942	0.940	0.937	0.934	0.932	0.929	0.926	0.923	0.919	0.916	0.913	0.909	0.906	0.902	
13	0.955	0.953	0.951	0.949	0.947	0.945	0.943	0.940	0.938	0.935	0.932	0.929	0.926	0.923	0.920	0.917	0.914	0.910	0.907	0.903	
12	0.955	0.953	0.952	0.950	0.948	0.945	0.943	0.941	0.938	0.936	0.933	0.930	0.927	0.924	0.921	0.918	0.915	0.911	0.908	0.904	
11	0.955	0.954	0.952	0.950	0.948	0.946	0.944	0.941	0.939	0.936	0.934	0.931	0.928	0.925	0.922	0.919	0.915	0.912	0.909	0.905	
10	0.956	0.954	0.953	0.951	0.949	0.946	0.944	0.942	0.939	0.937	0.934	0.932	0.929	0.926	0.923	0.920	0.916	0.913	0.910	0.906	
9	0.956	0.955	0.953	0.951	0.949	0.947	0.945	0.942	0.940	0.938	0.935	0.932	0.930	0.927	0.924	0.921	0.917	0.914	0.911	0.907	
8	0.957	0.955	0.954	0.952	0.950	0.948	0.945	0.943	0.941	0.938	0.936	0.933	0.930	0.928	0.925	0.922	0.918	0.915	0.912	0.909	
7	0.957	0.956	0.954	0.952	0.950	0.948	0.946	0.944	0.941	0.939	0.937	0.934	0.931	0.928	0.926	0.923	0.920	0.916	0.913	0.910	
6	0.958	0.956	0.955	0.953	0.951	0.949	0.947	0.944	0.942	0.940	0.937	0.935	0.932	0.929	0.927	0.924	0.921	0.918	0.914	0.911	
Beneficiary younger than Retiree	5	0.958	0.957	0.955	0.953	0.951	0.949	0.947	0.945	0.943	0.941	0.938	0.936	0.933	0.930	0.928	0.925	0.922	0.919	0.916	0.913
	4	0.959	0.957	0.956	0.954	0.952	0.950	0.948	0.946	0.944	0.941	0.939	0.937	0.934	0.931	0.929	0.926	0.923	0.920	0.917	0.914
	3	0.959	0.958	0.956	0.955	0.953	0.951	0.949	0.947	0.944	0.942	0.940	0.937	0.935	0.932	0.930	0.927	0.924	0.921	0.918	0.915
	2	0.960	0.958	0.957	0.955	0.953	0.951	0.949	0.947	0.945	0.943	0.941	0.938	0.936	0.933	0.931	0.928	0.925	0.923	0.920	0.917
	1	0.960	0.959	0.957	0.956	0.954	0.952	0.950	0.948	0.946	0.944	0.942	0.939	0.937	0.935	0.932	0.929	0.927	0.924	0.921	0.918
Beneficiary same age as Retiree	0	<b>0.961</b>	<b>0.959</b>	<b>0.958</b>	<b>0.956</b>	<b>0.955</b>	<b>0.953</b>	<b>0.951</b>	<b>0.949</b>	<b>0.947</b>	<b>0.945</b>	<b>0.943</b>	<b>0.940</b>	<b>0.938</b>	<b>0.936</b>	<b>0.933</b>	<b>0.931</b>	<b>0.928</b>	<b>0.925</b>	<b>0.923</b>	<b>0.920</b>

**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)**  
**Actuarial Equivalency Factors Effective January 1, 2024**

**Table 7b: 50% Joint and Survivor Annuity - Option 3 - Disabled Members**  
 (Factor Multiplied by Option 1 Non-Refund Life Annuity)

Beneficiary Age Difference	Attained Age at Retirement																			
	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39
Beneficiary older than Retiree -1	0.961	0.960	0.959	0.957	0.955	0.953	0.952	0.950	0.948	0.946	0.944	0.941	0.939	0.937	0.934	0.932	0.929	0.927	0.924	0.921
-2	0.962	0.960	0.959	0.958	0.956	0.954	0.952	0.951	0.949	0.947	0.945	0.942	0.940	0.938	0.936	0.933	0.931	0.928	0.926	0.923
-3	0.962	0.961	0.960	0.958	0.957	0.955	0.953	0.951	0.949	0.947	0.945	0.943	0.941	0.939	0.937	0.935	0.932	0.930	0.927	0.925
-4	0.963	0.962	0.960	0.959	0.957	0.956	0.954	0.952	0.950	0.948	0.946	0.944	0.942	0.940	0.938	0.936	0.934	0.931	0.929	0.926
-5	0.963	0.962	0.961	0.960	0.958	0.956	0.955	0.953	0.951	0.949	0.947	0.946	0.944	0.941	0.939	0.937	0.935	0.933	0.930	0.928
-6	0.964	0.963	0.962	0.960	0.959	0.957	0.956	0.954	0.952	0.950	0.949	0.947	0.945	0.943	0.941	0.939	0.936	0.934	0.932	0.930
-7	0.965	0.964	0.962	0.961	0.960	0.958	0.956	0.955	0.953	0.951	0.950	0.948	0.946	0.944	0.942	0.940	0.938	0.936	0.934	0.931
-8	0.965	0.964	0.963	0.962	0.960	0.959	0.957	0.956	0.954	0.952	0.951	0.949	0.947	0.945	0.943	0.941	0.939	0.937	0.935	0.933
-9	0.966	0.965	0.964	0.962	0.961	0.960	0.958	0.957	0.955	0.953	0.952	0.950	0.948	0.946	0.945	0.943	0.941	0.939	0.937	0.935
-10	0.966	0.965	0.964	0.963	0.962	0.960	0.959	0.957	0.956	0.954	0.953	0.951	0.949	0.948	0.946	0.944	0.942	0.940	0.939	0.937
-11	0.967	0.966	0.965	0.964	0.963	0.961	0.960	0.958	0.957	0.955	0.954	0.952	0.951	0.949	0.947	0.946	0.944	0.942	0.940	0.939
-12	0.968	0.967	0.966	0.965	0.963	0.962	0.961	0.959	0.958	0.956	0.955	0.953	0.952	0.950	0.949	0.947	0.945	0.944	0.942	0.940
-13	0.968	0.967	0.966	0.965	0.964	0.963	0.962	0.960	0.959	0.957	0.956	0.955	0.953	0.952	0.950	0.948	0.947	0.945	0.944	0.942
-14	0.969	0.968	0.967	0.966	0.965	0.964	0.962	0.961	0.960	0.958	0.957	0.956	0.954	0.953	0.951	0.950	0.948	0.947	0.945	0.944
-15	0.969	0.969	0.968	0.967	0.966	0.965	0.963	0.962	0.961	0.960	0.958	0.957	0.956	0.954	0.953	0.951	0.950	0.949	0.947	0.946
-16	0.970	0.969	0.969	0.968	0.967	0.965	0.964	0.963	0.962	0.961	0.959	0.958	0.957	0.956	0.954	0.953	0.952	0.950	0.949	0.947
-17	0.971	0.970	0.969	0.968	0.967	0.966	0.965	0.964	0.963	0.962	0.961	0.959	0.958	0.957	0.956	0.954	0.953	0.952	0.950	0.949
-18	0.971	0.971	0.970	0.969	0.968	0.967	0.966	0.965	0.964	0.963	0.962	0.961	0.959	0.958	0.957	0.956	0.955	0.953	0.952	0.951
-19	0.972	0.972	0.971	0.970	0.969	0.968	0.967	0.966	0.965	0.964	0.963	0.962	0.961	0.960	0.958	0.957	0.956	0.955	0.954	0.953
-20	0.973	0.972	0.972	0.971	0.970	0.969	0.968	0.967	0.966	0.965	0.964	0.963	0.962	0.961	0.960	0.959	0.958	0.957	0.956	0.955
-21	0.973	0.973	0.972	0.972	0.971	0.970	0.969	0.968	0.967	0.966	0.965	0.964	0.963	0.962	0.961	0.960	0.959	0.958	0.957	0.956
-22	0.974	0.974	0.973	0.972	0.972	0.971	0.970	0.969	0.968	0.967	0.966	0.965	0.964	0.963	0.962	0.961	0.960	0.959	0.958	0.958
-23	0.975	0.974	0.974	0.973	0.972	0.972	0.971	0.970	0.969	0.968	0.968	0.967	0.966	0.965	0.964	0.963	0.962	0.962	0.961	0.960
-24	0.976	0.975	0.975	0.974	0.973	0.973	0.972	0.971	0.970	0.969	0.969	0.968	0.967	0.966	0.966	0.965	0.964	0.963	0.963	0.962
-25	0.976	0.976	0.975	0.975	0.974	0.974	0.973	0.972	0.971	0.971	0.970	0.969	0.968	0.968	0.967	0.966	0.966	0.965	0.964	0.964
-26	0.977	0.977	0.976	0.976	0.975	0.974	0.974	0.973	0.972	0.972	0.971	0.970	0.970	0.969	0.968	0.968	0.967	0.967	0.966	0.966
-27	0.978	0.977	0.977	0.977	0.976	0.975	0.975	0.974	0.973	0.973	0.972	0.972	0.971	0.970	0.970	0.969	0.969	0.968	0.968	0.967
-28	0.978	0.978	0.978	0.977	0.977	0.976	0.976	0.975	0.974	0.974	0.973	0.973	0.972	0.972	0.971	0.971	0.970	0.970	0.970	0.969
-29	0.979	0.979	0.979	0.978	0.978	0.977	0.977	0.976	0.976	0.975	0.975	0.974	0.974	0.973	0.973	0.972	0.972	0.972	0.971	0.971
-30	0.980	0.980	0.979	0.979	0.979	0.978	0.978	0.977	0.977	0.976	0.976	0.975	0.975	0.974	0.974	0.974	0.974	0.973	0.973	0.973
-31	0.981	0.980	0.980	0.980	0.979	0.979	0.979	0.978	0.978	0.977	0.977	0.976	0.976	0.976	0.976	0.975	0.975	0.975	0.975	0.974
-32	0.981	0.981	0.981	0.981	0.980	0.980	0.979	0.979	0.979	0.978	0.978	0.978	0.977	0.977	0.977	0.977	0.976	0.976	0.976	0.976
-33	0.982	0.982	0.982	0.981	0.981	0.981	0.980	0.980	0.980	0.979	0.979	0.979	0.979	0.978	0.978	0.978	0.978	0.978	0.978	0.978
-34	0.983	0.983	0.983	0.982	0.982	0.982	0.981	0.981	0.981	0.981	0.980	0.980	0.980	0.980	0.980	0.979	0.979	0.979	0.979	0.979
-35	0.983	0.983	0.983	0.983	0.983	0.983	0.982	0.982	0.982	0.982	0.981	0.981	0.981	0.981	0.981	0.981	0.981	0.981	0.981	0.981
Beneficiary older than Retiree -36	0.984	0.984	0.984	0.984	0.984	0.983	0.983	0.983	0.983	0.983	0.983	0.982	0.982	0.982	0.982	0.982	0.982	0.982	0.982	0.982
-37	0.985	0.985	0.985	0.985	0.984	0.984	0.984	0.984	0.984	0.984	0.984	0.984	0.983	0.983	0.983	0.983	0.984	0.984	0.984	0.984
-38	0.985	0.986	0.986	0.985	0.985	0.985	0.985	0.985	0.985	0.985	0.985	0.985	0.985	0.985	0.985	0.985	0.985	0.985	0.985	0.985
-39	0.986	0.986	0.986	0.986	0.986	0.986	0.986	0.986	0.986	0.986	0.986	0.986	0.986	0.986	0.986	0.986	0.986	0.986	0.986	0.986
-40	0.987	0.987	0.987	0.987	0.987	0.987	0.987	0.987	0.987	0.987	0.987	0.987	0.987	0.987	0.987	0.987	0.987	0.987	0.988	0.988

**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)**  
**Actuarial Equivalency Factors Effective January 1, 2024**

**Table 7b: 50% Joint and Survivor Annuity - Option 3 - Disabled Members**  
 (Factor Multiplied by Option 1 Non-Refund Life Annuity)

Beneficiary Age Difference	Attained Age at Retirement																			
	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39
Beneficiary older than Retiree -41	0.987	0.988	0.988	0.988	0.988	0.988	0.988	0.988	0.988	0.988	0.988	0.988	0.988	0.988	0.988	0.988	0.988	0.988	0.989	0.989
-42	0.988	0.988	0.988	0.988	0.988	0.988	0.988	0.988	0.988	0.988	0.989	0.989	0.989	0.989	0.989	0.989	0.989	0.990	0.990	0.990
-43	0.989	0.989	0.989	0.989	0.989	0.989	0.989	0.989	0.989	0.989	0.990	0.990	0.990	0.990	0.990	0.990	0.990	0.991	0.991	0.991
-44	0.989	0.990	0.990	0.990	0.990	0.990	0.990	0.990	0.990	0.990	0.990	0.990	0.991	0.991	0.991	0.991	0.991	0.991	0.992	0.992
-45	0.990	0.990	0.990	0.991	0.991	0.991	0.991	0.991	0.991	0.991	0.991	0.991	0.991	0.992	0.992	0.992	0.992	0.992	0.993	0.993
-46	0.991	0.991	0.991	0.991	0.991	0.991	0.991	0.991	0.992	0.992	0.992	0.992	0.992	0.992	0.993	0.993	0.993	0.993	0.994	0.994
-47	0.991	0.991	0.992	0.992	0.992	0.992	0.992	0.992	0.992	0.992	0.993	0.993	0.993	0.993	0.993	0.994	0.994	0.994	0.994	0.994
-48	0.992	0.992	0.992	0.992	0.992	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.994	0.994	0.994	0.994	0.994	0.995	0.995	0.995
-49	0.992	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.994	0.994	0.994	0.994	0.994	0.994	0.995	0.995	0.995	0.995	0.995	0.996
-50	0.993	0.993	0.993	0.994	0.994	0.994	0.994	0.994	0.994	0.994	0.995	0.995	0.995	0.995	0.995	0.995	0.996	0.996	0.996	0.996
-51	0.993	0.994	0.994	0.994	0.994	0.994	0.994	0.995	0.995	0.995	0.995	0.995	0.995	0.996	0.996	0.996	0.996	0.996	0.996	0.997
-52	0.994	0.994	0.994	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.996	0.996	0.996	0.996	0.996	0.996	0.997	0.997	0.997	0.997
-53	0.994	0.995	0.995	0.995	0.995	0.995	0.995	0.996	0.996	0.996	0.996	0.996	0.996	0.997	0.997	0.997	0.997	0.997	0.997	0.997
-54	0.995	0.995	0.995	0.995	0.996	0.996	0.996	0.996	0.996	0.996	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.998	0.998
-55	0.995	0.995	0.996	0.996	0.996	0.996	0.996	0.996	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.998	0.998	0.998	0.998	0.998
-56	0.996	0.996	0.996	0.996	0.996	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.998	0.998	0.998	0.998	0.998	0.998	0.998
-57	0.996	0.996	0.996	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998
-58	0.996	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.999	0.999
-59	0.997	0.997	0.997	0.997	0.997	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.999	0.999	0.999	0.999	0.999
-60	0.997	0.997	0.997	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.999	0.999	0.999	0.999	0.999	0.999	0.999
-61	0.997	0.997	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999
-62	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999
-63	0.998	0.998	0.998	0.998	0.998	0.998	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999
-64	0.998	0.998	0.998	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999
-65	0.998	0.998	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999
-66	0.998	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999
-67	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999
-68	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	1.000	1.000	1.000	1.000	1.000
-69	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	1.000	1.000	1.000	1.000	1.000	1.000
-70	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
-71	0.999	0.999	0.999	0.999	0.999	0.999	0.999	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
-72	0.999	0.999	0.999	0.999	0.999	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
-73	0.999	0.999	0.999	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
-74	0.999	0.999	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
-75	0.999	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Beneficiary older than Retiree -76	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
-77	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
-78	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
-79	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
-80	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)**  
**Actuarial Equivalency Factors Effective January 1, 2024**

**Table 7b: 50% Joint and Survivor Annuity - Option 3 - Disabled Members**  
 (Factor Multiplied by Option 1 Non-Refund Life Annuity)

	Beneficiary Age Difference	Attained Age at Retirement																			
		20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39
Beneficiary	-81	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000									
older	-82	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000										
than	-83	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000											
Retiree	-84	1.000	1.000	1.000	1.000	1.000	1.000	1.000													
	-85	1.000	1.000	1.000	1.000	1.000	1.000														
Beneficiary	-86	1.000	1.000	1.000	1.000	1.000															
older	-87	1.000	1.000	1.000	1.000																
than	-88	1.000	1.000	1.000																	
Retiree	-89	1.000	1.000																		
	-90	1.000																			

**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)**  
**Actuarial Equivalency Factors Effective January 1, 2024**

**Table 7b: 50% Joint and Survivor Annuity - Option 3 - Disabled Members**  
 (Factor Multiplied by Option 1 Non-Refund Life Annuity)

Beneficiary Age Difference	Attained Age at Retirement																									
	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59						
Beneficiary younger than Retiree	75																									
	74																									
	73																									
	72																									
	71																									
	70																									
	69																									
	68																									
	67																									
	66																									
	65																									
	64																									
	63																									
	62																									
	61																									
	60																									
	59																									
	58																			0.769						
	57																		0.777	0.770						
	56																0.784	0.777	0.770							
	55																	0.791	0.785	0.778	0.771					
	54																0.798	0.791	0.785	0.778	0.771					
	53														0.804	0.798	0.792	0.785	0.779	0.771						
	52															0.810	0.804	0.798	0.792	0.786	0.779	0.772				
	51													0.816	0.810	0.805	0.799	0.793	0.786	0.779	0.772					
	50											0.822	0.816	0.811	0.805	0.799	0.793	0.787	0.780	0.773						
	49										0.827	0.822	0.817	0.811	0.805	0.799	0.793	0.787	0.780	0.773						
	48								0.838	0.833	0.828	0.823	0.817	0.812	0.806	0.800	0.794	0.788	0.781	0.774						
	47									0.844	0.839	0.834	0.828	0.823	0.818	0.812	0.807	0.801	0.795	0.789	0.782	0.775				
	46						0.850	0.844	0.839	0.834	0.829	0.824	0.818	0.813	0.807	0.801	0.795	0.789	0.783	0.776						
	45					0.855	0.850	0.845	0.839	0.834	0.829	0.824	0.819	0.813	0.808	0.802	0.796	0.790	0.783	0.776						
	44						0.861	0.855	0.850	0.845	0.840	0.835	0.830	0.824	0.819	0.813	0.808	0.803	0.797	0.790	0.784	0.777				
	43							0.866	0.861	0.856	0.851	0.845	0.840	0.835	0.830	0.825	0.820	0.814	0.809	0.803	0.797	0.791	0.785	0.778		
	42								0.872	0.866	0.861	0.856	0.851	0.846	0.841	0.836	0.831	0.825	0.820	0.815	0.809	0.804	0.798	0.792	0.785	0.779
	41																									
Beneficiary younger than Retiree	40		0.877	0.872	0.867	0.862	0.857	0.851	0.846	0.841	0.836	0.831	0.826	0.821	0.816	0.810	0.804	0.799	0.793	0.786	0.779					
	39	0.882	0.877	0.872	0.867	0.862	0.857	0.852	0.847	0.842	0.837	0.832	0.827	0.821	0.816	0.811	0.805	0.799	0.793	0.787	0.780					
	38	0.882	0.877	0.873	0.868	0.863	0.857	0.852	0.847	0.842	0.837	0.832	0.827	0.822	0.817	0.811	0.806	0.800	0.794	0.788	0.781					
	37	0.883	0.878	0.873	0.868	0.863	0.858	0.853	0.848	0.843	0.838	0.833	0.828	0.823	0.818	0.812	0.807	0.801	0.795	0.789	0.782					
	36	0.883	0.878	0.873	0.868	0.863	0.858	0.853	0.848	0.843	0.838	0.834	0.829	0.823	0.818	0.813	0.808	0.802	0.796	0.790	0.783					



**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)**  
**Actuarial Equivalency Factors Effective January 1, 2024**

**Table 7b: 50% Joint and Survivor Annuity - Option 3 - Disabled Members**  
 (Factor Multiplied by Option 1 Non-Refund Life Annuity)

Beneficiary Age Difference	Attained Age at Retirement																				
	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	
35	0.883	0.879	0.874	0.869	0.864	0.859	0.854	0.849	0.844	0.839	0.834	0.829	0.824	0.819	0.814	0.808	0.803	0.797	0.791	0.784	
34	0.884	0.879	0.874	0.869	0.864	0.859	0.854	0.849	0.845	0.840	0.835	0.830	0.825	0.820	0.815	0.809	0.804	0.798	0.792	0.785	
33	0.884	0.880	0.875	0.870	0.865	0.860	0.855	0.850	0.845	0.840	0.836	0.831	0.826	0.821	0.816	0.810	0.805	0.799	0.793	0.787	
32	0.885	0.880	0.875	0.870	0.866	0.861	0.856	0.851	0.846	0.841	0.836	0.832	0.827	0.822	0.817	0.811	0.806	0.800	0.794	0.788	
31	0.885	0.881	0.876	0.871	0.866	0.861	0.856	0.851	0.847	0.842	0.837	0.832	0.828	0.823	0.818	0.812	0.807	0.801	0.795	0.789	
30	0.886	0.881	0.876	0.872	0.867	0.862	0.857	0.852	0.847	0.843	0.838	0.833	0.829	0.824	0.819	0.813	0.808	0.803	0.797	0.791	
29	0.886	0.882	0.877	0.872	0.867	0.863	0.858	0.853	0.848	0.844	0.839	0.834	0.830	0.825	0.820	0.815	0.809	0.804	0.798	0.792	
28	0.887	0.882	0.878	0.873	0.868	0.863	0.859	0.854	0.849	0.844	0.840	0.835	0.831	0.826	0.821	0.816	0.811	0.805	0.800	0.794	
27	0.887	0.883	0.878	0.874	0.869	0.864	0.859	0.855	0.850	0.845	0.841	0.836	0.832	0.827	0.822	0.817	0.812	0.807	0.801	0.795	
26	0.888	0.884	0.879	0.874	0.870	0.865	0.860	0.856	0.851	0.846	0.842	0.837	0.833	0.828	0.823	0.819	0.814	0.808	0.803	0.797	
25	0.889	0.884	0.880	0.875	0.870	0.866	0.861	0.856	0.852	0.847	0.843	0.839	0.834	0.829	0.825	0.820	0.815	0.810	0.804	0.799	
24	0.889	0.885	0.880	0.876	0.871	0.867	0.862	0.857	0.853	0.849	0.844	0.840	0.835	0.831	0.826	0.822	0.817	0.812	0.806	0.801	
23	0.890	0.886	0.881	0.877	0.872	0.868	0.863	0.858	0.854	0.850	0.845	0.841	0.837	0.832	0.828	0.823	0.818	0.813	0.808	0.803	
22	0.891	0.886	0.882	0.877	0.873	0.868	0.864	0.860	0.855	0.851	0.847	0.842	0.838	0.834	0.829	0.825	0.820	0.815	0.810	0.805	
21	0.892	0.887	0.883	0.878	0.874	0.869	0.865	0.861	0.856	0.852	0.848	0.844	0.840	0.835	0.831	0.826	0.822	0.817	0.812	0.807	
20	0.892	0.888	0.884	0.879	0.875	0.871	0.866	0.862	0.858	0.853	0.849	0.845	0.841	0.837	0.833	0.828	0.824	0.819	0.814	0.809	
19	0.893	0.889	0.885	0.880	0.876	0.872	0.867	0.863	0.859	0.855	0.851	0.847	0.843	0.839	0.834	0.830	0.826	0.821	0.816	0.811	
18	0.894	0.890	0.886	0.881	0.877	0.873	0.869	0.864	0.860	0.856	0.852	0.848	0.844	0.840	0.836	0.832	0.828	0.823	0.819	0.814	
17	0.895	0.891	0.887	0.882	0.878	0.874	0.870	0.866	0.862	0.858	0.854	0.850	0.846	0.842	0.838	0.834	0.830	0.826	0.821	0.816	
16	0.896	0.892	0.888	0.884	0.879	0.875	0.871	0.867	0.863	0.859	0.856	0.852	0.848	0.844	0.840	0.836	0.832	0.828	0.824	0.819	
15	0.897	0.893	0.889	0.885	0.881	0.877	0.873	0.869	0.865	0.861	0.857	0.854	0.850	0.846	0.843	0.839	0.835	0.831	0.826	0.822	
14	0.898	0.894	0.890	0.886	0.882	0.878	0.874	0.870	0.866	0.863	0.859	0.856	0.852	0.848	0.845	0.841	0.837	0.833	0.829	0.825	
13	0.899	0.895	0.891	0.887	0.883	0.879	0.876	0.872	0.868	0.864	0.861	0.858	0.854	0.851	0.847	0.844	0.840	0.836	0.832	0.828	
12	0.900	0.896	0.893	0.889	0.885	0.881	0.877	0.873	0.870	0.866	0.863	0.860	0.856	0.853	0.850	0.846	0.843	0.839	0.835	0.831	
11	0.901	0.898	0.894	0.890	0.886	0.882	0.879	0.875	0.872	0.868	0.865	0.862	0.859	0.855	0.852	0.849	0.845	0.842	0.838	0.835	
10	0.903	0.899	0.895	0.891	0.888	0.884	0.880	0.877	0.873	0.870	0.867	0.864	0.861	0.858	0.855	0.852	0.848	0.845	0.842	0.838	
9	0.904	0.900	0.897	0.893	0.889	0.886	0.882	0.879	0.875	0.872	0.869	0.866	0.863	0.860	0.857	0.854	0.851	0.848	0.845	0.842	
8	0.905	0.902	0.898	0.894	0.891	0.887	0.884	0.881	0.877	0.874	0.872	0.869	0.866	0.863	0.860	0.857	0.855	0.852	0.849	0.845	
7	0.906	0.903	0.900	0.896	0.893	0.889	0.886	0.883	0.880	0.877	0.874	0.871	0.869	0.866	0.863	0.861	0.858	0.855	0.852	0.849	
6	0.908	0.905	0.901	0.898	0.894	0.891	0.888	0.885	0.882	0.879	0.876	0.874	0.871	0.869	0.866	0.864	0.861	0.858	0.856	0.853	
Beneficiary younger than Retiree	5	0.909	0.906	0.903	0.899	0.896	0.893	0.890	0.887	0.884	0.881	0.879	0.876	0.874	0.872	0.869	0.867	0.865	0.862	0.859	0.856
	4	0.911	0.908	0.904	0.901	0.898	0.895	0.892	0.889	0.886	0.884	0.881	0.879	0.877	0.875	0.872	0.870	0.868	0.866	0.863	0.860
	3	0.912	0.909	0.906	0.903	0.900	0.897	0.894	0.891	0.889	0.886	0.884	0.882	0.880	0.878	0.876	0.874	0.871	0.869	0.867	0.864
	2	0.914	0.911	0.908	0.905	0.902	0.899	0.896	0.894	0.891	0.889	0.887	0.885	0.883	0.881	0.879	0.877	0.875	0.873	0.871	0.869
	1	0.915	0.913	0.910	0.907	0.904	0.901	0.898	0.896	0.894	0.891	0.889	0.888	0.886	0.884	0.882	0.880	0.879	0.877	0.875	0.873
Beneficiary same age as Retiree	0	0.917	0.914	0.911	0.909	0.906	0.903	0.901	0.898	0.896	0.894	0.892	0.890	0.889	0.887	0.885	0.884	0.882	0.881	0.879	0.877

**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)**  
**Actuarial Equivalency Factors Effective January 1, 2024**

**Table 7b: 50% Joint and Survivor Annuity - Option 3 - Disabled Members**  
 (Factor Multiplied by Option 1 Non-Refund Life Annuity)

Beneficiary Age Difference	Attained Age at Retirement																			
	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59
Beneficiary older than Retiree -1	0.919	0.916	0.913	0.911	0.908	0.905	0.903	0.901	0.899	0.897	0.895	0.893	0.892	0.890	0.889	0.887	0.886	0.885	0.883	0.882
-2	0.920	0.918	0.915	0.913	0.910	0.908	0.905	0.903	0.901	0.899	0.898	0.896	0.895	0.893	0.892	0.891	0.890	0.889	0.887	0.886
-3	0.922	0.920	0.917	0.915	0.912	0.910	0.908	0.906	0.904	0.902	0.901	0.899	0.898	0.897	0.896	0.895	0.894	0.893	0.892	0.891
-4	0.924	0.921	0.919	0.917	0.914	0.912	0.910	0.908	0.906	0.905	0.904	0.902	0.901	0.900	0.899	0.898	0.898	0.897	0.896	0.895
-5	0.926	0.923	0.921	0.919	0.917	0.915	0.913	0.911	0.909	0.908	0.906	0.905	0.904	0.904	0.903	0.902	0.901	0.901	0.900	0.900
-6	0.928	0.925	0.923	0.921	0.919	0.917	0.915	0.913	0.912	0.910	0.909	0.908	0.908	0.907	0.906	0.906	0.905	0.905	0.905	0.904
-7	0.929	0.927	0.925	0.923	0.921	0.919	0.917	0.916	0.914	0.913	0.912	0.912	0.911	0.910	0.910	0.909	0.909	0.909	0.909	0.909
-8	0.931	0.929	0.927	0.925	0.923	0.921	0.920	0.918	0.917	0.916	0.915	0.915	0.914	0.914	0.914	0.913	0.913	0.913	0.913	0.913
-9	0.933	0.931	0.929	0.927	0.925	0.924	0.922	0.921	0.920	0.919	0.918	0.918	0.917	0.917	0.917	0.917	0.917	0.917	0.918	0.918
-10	0.935	0.933	0.931	0.929	0.928	0.926	0.925	0.924	0.923	0.922	0.921	0.921	0.921	0.921	0.921	0.921	0.921	0.922	0.922	0.922
-11	0.937	0.935	0.933	0.932	0.930	0.929	0.927	0.926	0.925	0.925	0.924	0.924	0.924	0.924	0.924	0.925	0.925	0.926	0.926	0.927
-12	0.939	0.937	0.935	0.934	0.932	0.931	0.930	0.929	0.928	0.928	0.927	0.927	0.927	0.928	0.928	0.929	0.929	0.930	0.930	0.931
-13	0.940	0.939	0.937	0.936	0.934	0.933	0.932	0.931	0.931	0.930	0.930	0.930	0.931	0.931	0.932	0.932	0.933	0.934	0.935	0.935
-14	0.942	0.941	0.939	0.938	0.937	0.936	0.935	0.934	0.934	0.933	0.933	0.934	0.934	0.934	0.935	0.936	0.937	0.938	0.939	0.940
-15	0.944	0.943	0.941	0.940	0.939	0.938	0.937	0.937	0.936	0.936	0.936	0.937	0.937	0.938	0.939	0.940	0.941	0.942	0.943	0.944
-16	0.946	0.945	0.944	0.942	0.941	0.941	0.940	0.939	0.939	0.939	0.939	0.940	0.940	0.941	0.942	0.943	0.944	0.945	0.946	0.948
-17	0.948	0.947	0.946	0.945	0.944	0.943	0.942	0.942	0.942	0.942	0.942	0.943	0.944	0.945	0.946	0.947	0.948	0.949	0.950	0.951
-18	0.950	0.949	0.948	0.947	0.946	0.945	0.945	0.945	0.945	0.945	0.945	0.946	0.947	0.948	0.949	0.950	0.951	0.953	0.954	0.955
-19	0.952	0.951	0.950	0.949	0.948	0.948	0.947	0.947	0.947	0.948	0.948	0.949	0.950	0.951	0.952	0.953	0.955	0.956	0.957	0.959
-20	0.954	0.953	0.952	0.951	0.951	0.950	0.950	0.950	0.950	0.951	0.951	0.952	0.953	0.954	0.955	0.957	0.958	0.959	0.961	0.962
-21	0.956	0.955	0.954	0.953	0.953	0.953	0.953	0.953	0.953	0.953	0.954	0.955	0.956	0.957	0.958	0.960	0.961	0.963	0.964	0.965
-22	0.958	0.957	0.956	0.956	0.955	0.955	0.955	0.955	0.956	0.956	0.957	0.958	0.959	0.960	0.961	0.963	0.964	0.966	0.967	0.969
-23	0.959	0.959	0.958	0.958	0.958	0.957	0.957	0.958	0.958	0.959	0.960	0.961	0.962	0.963	0.964	0.966	0.967	0.969	0.970	0.971
-24	0.961	0.961	0.960	0.960	0.960	0.960	0.960	0.960	0.961	0.961	0.962	0.963	0.965	0.966	0.967	0.968	0.970	0.971	0.973	0.974
-25	0.963	0.963	0.962	0.962	0.962	0.962	0.962	0.963	0.963	0.964	0.965	0.966	0.967	0.968	0.970	0.971	0.973	0.974	0.975	0.977
-26	0.965	0.965	0.965	0.964	0.964	0.964	0.965	0.965	0.966	0.967	0.968	0.969	0.970	0.971	0.972	0.974	0.975	0.976	0.978	0.979
-27	0.967	0.967	0.967	0.967	0.967	0.967	0.967	0.967	0.968	0.969	0.970	0.971	0.972	0.973	0.975	0.976	0.977	0.979	0.980	0.981
-28	0.969	0.969	0.969	0.969	0.969	0.969	0.969	0.969	0.970	0.970	0.971	0.972	0.973	0.975	0.976	0.977	0.978	0.980	0.981	0.982
-29	0.971	0.971	0.971	0.971	0.971	0.971	0.971	0.971	0.972	0.973	0.974	0.975	0.976	0.977	0.978	0.979	0.981	0.982	0.983	0.985
-30	0.973	0.973	0.973	0.973	0.973	0.973	0.973	0.974	0.974	0.975	0.976	0.977	0.978	0.979	0.980	0.981	0.982	0.984	0.985	0.987
-31	0.974	0.974	0.974	0.975	0.975	0.975	0.976	0.976	0.977	0.978	0.979	0.980	0.981	0.982	0.983	0.984	0.985	0.986	0.987	0.988
-32	0.976	0.976	0.976	0.976	0.977	0.977	0.978	0.978	0.979	0.980	0.981	0.982	0.983	0.984	0.985	0.986	0.987	0.988	0.989	0.990
-33	0.978	0.978	0.978	0.978	0.979	0.979	0.979	0.980	0.981	0.982	0.983	0.984	0.985	0.986	0.987	0.988	0.989	0.990	0.991	0.992
-34	0.979	0.980	0.980	0.980	0.980	0.981	0.981	0.982	0.983	0.983	0.984	0.985	0.986	0.987	0.988	0.989	0.990	0.990	0.991	0.992
-35	0.981	0.981	0.981	0.982	0.982	0.982	0.983	0.984	0.984	0.985	0.986	0.987	0.988	0.988	0.989	0.990	0.991	0.991	0.992	0.993
Beneficiary older than Retiree -36	0.983	0.983	0.983	0.983	0.984	0.984	0.985	0.985	0.986	0.987	0.987	0.988	0.989	0.990	0.991	0.992	0.992	0.993	0.994	0.994
-37	0.984	0.984	0.984	0.985	0.985	0.986	0.986	0.987	0.987	0.988	0.989	0.989	0.990	0.991	0.992	0.992	0.993	0.993	0.994	0.994
-38	0.985	0.986	0.986	0.986	0.987	0.987	0.988	0.988	0.989	0.989	0.990	0.991	0.991	0.992	0.992	0.993	0.994	0.994	0.995	0.995
-39	0.987	0.987	0.987	0.988	0.988	0.988	0.989	0.989	0.990	0.990	0.991	0.992	0.992	0.993	0.993	0.994	0.994	0.995	0.995	0.995
-40	0.988	0.988	0.989	0.989	0.989	0.990	0.990	0.991	0.991	0.992	0.992	0.993	0.993	0.994	0.994	0.994	0.995	0.995	0.996	0.996

**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)**  
**Actuarial Equivalency Factors Effective January 1, 2024**

**Table 7b: 50% Joint and Survivor Annuity - Option 3 - Disabled Members**  
 (Factor Multiplied by Option 1 Non-Refund Life Annuity)

Beneficiary Age Difference	Attained Age at Retirement																			
	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59
Beneficiary older than Retiree -41	0.989	0.989	0.990	0.990	0.990	0.991	0.991	0.992	0.992	0.992	0.993	0.993	0.994	0.994	0.995	0.995	0.995	0.996	0.996	0.996
-42	0.990	0.991	0.991	0.991	0.991	0.992	0.992	0.993	0.993	0.993	0.994	0.994	0.995	0.995	0.995	0.996	0.996	0.996	0.996	0.997
-43	0.991	0.992	0.992	0.992	0.992	0.993	0.993	0.993	0.994	0.994	0.994	0.995	0.995	0.995	0.996	0.996	0.996	0.996	0.997	0.997
-44	0.992	0.992	0.993	0.993	0.993	0.994	0.994	0.994	0.994	0.995	0.995	0.995	0.996	0.996	0.996	0.997	0.997	0.997	0.997	0.997
-45	0.993	0.993	0.994	0.994	0.994	0.994	0.995	0.995	0.995	0.995	0.996	0.996	0.996	0.996	0.997	0.997	0.997	0.997	0.997	0.998
-46	0.994	0.994	0.994	0.995	0.995	0.995	0.995	0.996	0.996	0.996	0.996	0.997	0.997	0.997	0.997	0.997	0.997	0.998	0.998	0.998
-47	0.995	0.995	0.995	0.995	0.995	0.996	0.996	0.996	0.996	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.998	0.998	0.998
-48	0.995	0.995	0.996	0.996	0.996	0.996	0.996	0.996	0.997	0.997	0.997	0.997	0.997	0.997	0.998	0.998	0.998	0.998	0.998	0.998
-49	0.996	0.996	0.996	0.996	0.996	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998
-50	0.996	0.996	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998
-51	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998
-52	0.997	0.997	0.997	0.997	0.997	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.999	0.999
-53	0.997	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.999	0.999	0.999	0.999	0.999
-54	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.999	0.999	0.999	0.999	0.999	0.999	0.999
-55	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999
-56	0.998	0.998	0.998	0.998	0.998	0.998	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999
-57	0.998	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999
-58	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999
-59	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999
-60	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999
-61	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999
-62	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999
-63	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999
-64	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999
-65	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999
-66	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999
-67	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999
-68	1.000	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999
-69	1.000	1.000	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999
-70	1.000	1.000	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999
-71	1.000	1.000	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999
-72	1.000	1.000	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999
-73	1.000	1.000	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999
-74	1.000	1.000	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999
-75	1.000	1.000	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999
Beneficiary older than Retiree -76	1.000	1.000	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999
-77	1.000	1.000	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999
-78	1.000	1.000	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999
-79	1.000	1.000	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999
-80	1.000	1.000	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999

**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)**  
**Actuarial Equivalency Factors Effective January 1, 2024**

**Table 7b: 50% Joint and Survivor Annuity - Option 3 - Disabled Members**  
 (Factor Multiplied by Option 1 Non-Refund Life Annuity)

	Beneficiary Age Difference	Attained Age at Retirement																			
		40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59
Beneficiary	-81																				
older	-82																				
than	-83																				
Retiree	-84																				
	-85																				
Beneficiary	-86																				
older	-87																				
than	-88																				
Retiree	-89																				
	-90																				

**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)**  
**Actuarial Equivalency Factors Effective January 1, 2024**

**Table 7b: 50% Joint and Survivor Annuity - Option 3 - Disabled Members**  
 (Factor Multiplied by Option 1 Non-Refund Life Annuity)

Beneficiary Age Difference	Attained Age at Retirement																
	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	
Beneficiary younger than Retiree	75																
	74															0.584	
	73														0.599	0.584	
	72													0.614	0.599	0.584	
	71												0.628	0.614	0.600	0.585	
	70											0.642	0.629	0.614	0.600	0.585	
	69										0.656	0.642	0.629	0.615	0.600	0.585	
	68									0.668	0.656	0.643	0.629	0.615	0.601	0.586	
	67								0.681	0.669	0.656	0.643	0.630	0.616	0.601	0.586	
	66							0.693	0.681	0.669	0.657	0.644	0.630	0.616	0.602	0.587	
	65						0.704	0.693	0.681	0.669	0.657	0.644	0.630	0.616	0.602	0.587	
	64					0.715	0.704	0.693	0.682	0.670	0.657	0.644	0.631	0.617	0.602	0.588	
	63				0.725	0.715	0.705	0.694	0.682	0.670	0.658	0.645	0.631	0.617	0.603	0.588	
	62			0.735	0.725	0.715	0.705	0.694	0.683	0.671	0.658	0.645	0.632	0.618	0.604	0.589	
	61		0.744	0.735	0.726	0.716	0.705	0.694	0.683	0.671	0.659	0.646	0.632	0.618	0.604	0.589	
	60		0.753	0.745	0.736	0.726	0.716	0.706	0.695	0.683	0.672	0.659	0.646	0.633	0.619	0.605	0.590
	59	0.762	0.753	0.745	0.736	0.727	0.717	0.706	0.695	0.684	0.672	0.660	0.647	0.633	0.620	0.605	0.591
	58	0.762	0.754	0.745	0.736	0.727	0.717	0.707	0.696	0.684	0.673	0.660	0.647	0.634	0.620	0.606	0.591
	57	0.762	0.754	0.746	0.737	0.727	0.718	0.707	0.696	0.685	0.673	0.661	0.648	0.635	0.621	0.607	0.592
	56	0.763	0.755	0.746	0.737	0.728	0.718	0.708	0.697	0.686	0.674	0.661	0.649	0.635	0.622	0.607	0.593
	55	0.763	0.755	0.747	0.738	0.728	0.719	0.708	0.697	0.686	0.674	0.662	0.649	0.636	0.622	0.608	0.593
	54	0.763	0.755	0.747	0.738	0.729	0.719	0.709	0.698	0.687	0.675	0.663	0.650	0.637	0.623	0.609	0.594
	53	0.764	0.756	0.748	0.739	0.729	0.720	0.709	0.699	0.687	0.676	0.664	0.651	0.638	0.624	0.610	0.595
	52	0.764	0.756	0.748	0.739	0.730	0.720	0.710	0.699	0.688	0.676	0.664	0.652	0.638	0.625	0.611	0.596
	51	0.765	0.757	0.749	0.740	0.731	0.721	0.711	0.700	0.689	0.677	0.665	0.652	0.639	0.626	0.612	0.597
	50	0.765	0.757	0.749	0.740	0.731	0.722	0.711	0.701	0.690	0.678	0.666	0.653	0.640	0.627	0.613	0.598
	49	0.766	0.758	0.750	0.741	0.732	0.722	0.712	0.702	0.690	0.679	0.667	0.654	0.641	0.628	0.614	0.599
	48	0.766	0.759	0.750	0.742	0.733	0.723	0.713	0.702	0.691	0.680	0.668	0.655	0.642	0.629	0.615	0.600
	47	0.767	0.759	0.751	0.742	0.733	0.724	0.714	0.703	0.692	0.681	0.669	0.656	0.643	0.630	0.616	0.602
	46	0.768	0.760	0.752	0.743	0.734	0.725	0.715	0.704	0.693	0.682	0.670	0.657	0.644	0.631	0.617	0.603
	45	0.768	0.761	0.753	0.744	0.735	0.725	0.715	0.705	0.694	0.683	0.671	0.658	0.646	0.632	0.618	0.604
	44	0.769	0.761	0.753	0.745	0.736	0.726	0.716	0.706	0.695	0.684	0.672	0.660	0.647	0.634	0.620	0.606
	43	0.770	0.762	0.754	0.746	0.737	0.727	0.717	0.707	0.696	0.685	0.673	0.661	0.648	0.635	0.621	0.607
	42	0.771	0.763	0.755	0.747	0.738	0.728	0.718	0.708	0.697	0.686	0.674	0.662	0.650	0.636	0.623	0.609
	41	0.772	0.764	0.756	0.748	0.739	0.729	0.720	0.709	0.699	0.687	0.676	0.664	0.651	0.638	0.625	0.611
Beneficiary younger than Retiree	40	0.772	0.765	0.757	0.749	0.740	0.730	0.721	0.711	0.700	0.689	0.677	0.665	0.653	0.640	0.626	0.612
	39	0.773	0.766	0.758	0.750	0.741	0.732	0.722	0.712	0.701	0.690	0.679	0.667	0.654	0.641	0.628	0.614
	38	0.774	0.767	0.759	0.751	0.742	0.733	0.723	0.713	0.703	0.692	0.680	0.669	0.656	0.643	0.630	0.616
	37	0.775	0.768	0.760	0.752	0.743	0.734	0.725	0.715	0.704	0.693	0.682	0.670	0.658	0.645	0.632	0.619
	36	0.776	0.769	0.761	0.753	0.745	0.736	0.726	0.716	0.706	0.695	0.684	0.672	0.660	0.647	0.634	0.621

**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)**  
**Actuarial Equivalency Factors Effective January 1, 2024**

**Table 7b: 50% Joint and Survivor Annuity - Option 3 - Disabled Members**  
 (Factor Multiplied by Option 1 Non-Refund Life Annuity)

Beneficiary Age Difference	Attained Age at Retirement																
	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	
35	0.777	0.770	0.763	0.755	0.746	0.737	0.728	0.718	0.708	0.697	0.686	0.674	0.662	0.650	0.637	0.623	
34	0.779	0.771	0.764	0.756	0.748	0.739	0.729	0.720	0.709	0.699	0.688	0.676	0.664	0.652	0.639	0.626	
33	0.780	0.773	0.765	0.757	0.749	0.740	0.731	0.721	0.711	0.701	0.690	0.678	0.667	0.654	0.641	0.628	
32	0.781	0.774	0.767	0.759	0.751	0.742	0.733	0.723	0.713	0.703	0.692	0.681	0.669	0.657	0.644	0.631	
31	0.783	0.776	0.768	0.761	0.752	0.744	0.735	0.725	0.715	0.705	0.694	0.683	0.672	0.660	0.647	0.634	
30	0.784	0.777	0.770	0.762	0.754	0.746	0.737	0.727	0.718	0.708	0.697	0.686	0.674	0.662	0.650	0.637	
29	0.786	0.779	0.772	0.764	0.756	0.748	0.739	0.730	0.720	0.710	0.699	0.689	0.677	0.665	0.653	0.641	
28	0.787	0.781	0.773	0.766	0.758	0.750	0.741	0.732	0.723	0.713	0.702	0.691	0.680	0.669	0.656	0.644	
27	0.789	0.782	0.775	0.768	0.760	0.752	0.744	0.735	0.725	0.715	0.705	0.694	0.683	0.672	0.660	0.648	
26	0.791	0.784	0.777	0.770	0.762	0.754	0.746	0.737	0.728	0.718	0.708	0.698	0.687	0.675	0.664	0.652	
25	0.793	0.786	0.779	0.772	0.765	0.757	0.749	0.740	0.731	0.721	0.711	0.701	0.690	0.679	0.668	0.656	
24	0.795	0.788	0.782	0.775	0.767	0.759	0.751	0.743	0.734	0.724	0.715	0.704	0.694	0.683	0.672	0.660	
23	0.797	0.790	0.784	0.777	0.770	0.762	0.754	0.746	0.737	0.728	0.718	0.708	0.698	0.687	0.676	0.664	
22	0.799	0.793	0.786	0.780	0.773	0.765	0.757	0.749	0.740	0.731	0.722	0.712	0.702	0.691	0.680	0.668	
21	0.801	0.795	0.789	0.782	0.775	0.768	0.760	0.752	0.744	0.735	0.726	0.716	0.706	0.695	0.684	0.673	
20	0.804	0.798	0.792	0.785	0.778	0.771	0.764	0.756	0.747	0.739	0.730	0.720	0.710	0.700	0.689	0.678	
19	0.806	0.800	0.794	0.788	0.781	0.774	0.767	0.759	0.751	0.743	0.734	0.725	0.715	0.705	0.694	0.683	
18	0.809	0.803	0.797	0.791	0.785	0.778	0.771	0.763	0.755	0.747	0.738	0.729	0.719	0.710	0.699	0.689	
17	0.811	0.806	0.800	0.794	0.788	0.781	0.774	0.767	0.759	0.751	0.743	0.734	0.724	0.715	0.705	0.694	
16	0.814	0.809	0.804	0.798	0.792	0.785	0.778	0.771	0.764	0.756	0.747	0.739	0.729	0.720	0.710	0.700	
15	0.817	0.812	0.807	0.801	0.795	0.789	0.782	0.775	0.768	0.760	0.752	0.744	0.735	0.726	0.716	0.707	
14	0.820	0.815	0.810	0.805	0.799	0.793	0.787	0.780	0.772	0.765	0.757	0.749	0.741	0.732	0.723	0.713	
13	0.824	0.819	0.814	0.809	0.803	0.797	0.791	0.784	0.777	0.770	0.762	0.755	0.746	0.738	0.729	0.720	
12	0.827	0.822	0.818	0.813	0.807	0.801	0.795	0.789	0.782	0.775	0.768	0.760	0.753	0.744	0.736	0.728	
11	0.830	0.826	0.822	0.817	0.811	0.806	0.800	0.794	0.787	0.781	0.774	0.767	0.759	0.751	0.743	0.735	
10	0.834	0.830	0.825	0.821	0.816	0.810	0.805	0.799	0.793	0.786	0.780	0.773	0.766	0.758	0.751	0.743	
9	0.838	0.834	0.829	0.825	0.820	0.815	0.810	0.804	0.798	0.792	0.786	0.779	0.773	0.766	0.759	0.751	
8	0.842	0.838	0.834	0.829	0.825	0.820	0.815	0.810	0.804	0.798	0.792	0.786	0.780	0.773	0.767	0.760	
7	0.845	0.842	0.838	0.834	0.829	0.825	0.820	0.815	0.810	0.805	0.799	0.793	0.787	0.781	0.775	0.769	
6	0.849	0.846	0.842	0.838	0.834	0.830	0.826	0.821	0.816	0.811	0.806	0.801	0.795	0.789	0.784	0.778	
Beneficiary younger than Retiree	5	0.853	0.850	0.847	0.843	0.839	0.836	0.831	0.827	0.823	0.818	0.813	0.808	0.803	0.798	0.792	0.787
	4	0.858	0.855	0.852	0.848	0.845	0.841	0.837	0.833	0.829	0.825	0.820	0.816	0.811	0.806	0.801	0.797
	3	0.862	0.859	0.856	0.853	0.850	0.847	0.843	0.840	0.836	0.832	0.828	0.824	0.819	0.815	0.811	0.806
	2	0.866	0.864	0.861	0.858	0.856	0.852	0.849	0.846	0.843	0.839	0.835	0.832	0.828	0.824	0.820	0.816
	1	0.871	0.869	0.866	0.864	0.861	0.858	0.856	0.853	0.850	0.846	0.843	0.840	0.836	0.833	0.830	0.826
Beneficiary same age as Retiree	0	<b>0.875</b>	<b>0.873</b>	<b>0.871</b>	<b>0.869</b>	<b>0.867</b>	<b>0.864</b>	<b>0.862</b>	<b>0.859</b>	<b>0.857</b>	<b>0.854</b>	<b>0.851</b>	<b>0.848</b>	<b>0.845</b>	<b>0.842</b>	<b>0.839</b>	<b>0.836</b>

**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)**  
**Actuarial Equivalency Factors Effective January 1, 2024**

**Table 7b: 50% Joint and Survivor Annuity - Option 3 - Disabled Members**  
 (Factor Multiplied by Option 1 Non-Refund Life Annuity)

Beneficiary Age Difference	Attained Age at Retirement															
	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75
Beneficiary older than Retiree -1	0.880	0.878	0.876	0.875	0.873	0.870	0.868	0.866	0.864	0.861	0.859	0.856	0.854	0.851	0.849	0.846
-2	0.885	0.883	0.882	0.880	0.878	0.877	0.875	0.873	0.871	0.869	0.867	0.865	0.862	0.860	0.858	0.856
-3	0.889	0.888	0.887	0.886	0.884	0.883	0.881	0.879	0.878	0.876	0.874	0.873	0.871	0.869	0.868	0.866
-4	0.894	0.893	0.892	0.891	0.890	0.889	0.888	0.886	0.885	0.884	0.882	0.881	0.880	0.878	0.877	0.876
-5	0.899	0.898	0.897	0.897	0.896	0.895	0.894	0.893	0.892	0.891	0.890	0.889	0.888	0.887	0.886	0.885
-6	0.904	0.903	0.903	0.902	0.902	0.901	0.900	0.900	0.899	0.898	0.898	0.897	0.896	0.896	0.895	0.895
-7	0.909	0.908	0.908	0.908	0.907	0.907	0.907	0.906	0.906	0.905	0.905	0.905	0.904	0.904	0.904	0.903
-8	0.913	0.913	0.913	0.913	0.913	0.913	0.913	0.913	0.912	0.912	0.912	0.912	0.912	0.912	0.912	0.912
-9	0.918	0.918	0.918	0.918	0.919	0.919	0.919	0.919	0.919	0.919	0.919	0.919	0.920	0.920	0.920	0.920
-10	0.923	0.923	0.923	0.924	0.924	0.924	0.925	0.925	0.925	0.926	0.926	0.926	0.927	0.927	0.928	0.928
-11	0.927	0.928	0.928	0.929	0.929	0.930	0.930	0.931	0.931	0.932	0.932	0.933	0.934	0.934	0.935	0.935
-12	0.932	0.933	0.933	0.934	0.935	0.935	0.936	0.936	0.937	0.938	0.939	0.939	0.940	0.941	0.941	0.942
-13	0.936	0.937	0.938	0.939	0.940	0.940	0.941	0.942	0.943	0.944	0.944	0.945	0.946	0.947	0.947	0.948
-14	0.941	0.942	0.942	0.943	0.944	0.945	0.946	0.947	0.948	0.949	0.950	0.951	0.952	0.952	0.953	0.953
-15	0.945	0.946	0.947	0.948	0.949	0.950	0.951	0.952	0.953	0.954	0.955	0.956	0.957	0.957	0.958	0.959
-16	0.949	0.950	0.951	0.952	0.953	0.954	0.956	0.957	0.958	0.959	0.960	0.961	0.961	0.962	0.963	0.963
-17	0.953	0.954	0.955	0.956	0.958	0.959	0.960	0.961	0.962	0.963	0.964	0.965	0.966	0.966	0.967	0.967
-18	0.956	0.958	0.959	0.960	0.962	0.963	0.964	0.965	0.966	0.967	0.968	0.969	0.969	0.970	0.970	0.971
-19	0.960	0.961	0.963	0.964	0.965	0.966	0.968	0.969	0.970	0.971	0.971	0.972	0.973	0.973	0.974	0.974
-20	0.964	0.965	0.966	0.968	0.969	0.970	0.971	0.972	0.973	0.974	0.975	0.975	0.976	0.976	0.977	0.977
-21	0.967	0.968	0.970	0.971	0.972	0.973	0.974	0.975	0.976	0.977	0.977	0.978	0.979	0.979	0.979	0.979
-22	0.970	0.971	0.973	0.974	0.975	0.976	0.977	0.978	0.979	0.980	0.981	0.981	0.981	0.981	0.982	0.982
-23	0.973	0.974	0.975	0.977	0.978	0.979	0.980	0.980	0.981	0.982	0.982	0.983	0.983	0.983	0.984	0.984
-24	0.976	0.977	0.978	0.979	0.980	0.981	0.982	0.983	0.983	0.984	0.984	0.985	0.985	0.985	0.985	0.985
-25	0.978	0.979	0.980	0.981	0.982	0.983	0.984	0.985	0.985	0.986	0.986	0.986	0.987	0.987	0.987	0.987
-26	0.980	0.981	0.982	0.983	0.984	0.985	0.986	0.986	0.987	0.987	0.988	0.988	0.988	0.988	0.988	0.988
-27	0.982	0.983	0.984	0.985	0.986	0.987	0.987	0.988	0.988	0.989	0.989	0.989	0.989	0.989	0.990	0.990
-28	0.984	0.985	0.986	0.987	0.988	0.988	0.989	0.989	0.990	0.990	0.990	0.990	0.991	0.991	0.991	0.991
-29	0.986	0.987	0.988	0.988	0.989	0.990	0.990	0.990	0.991	0.991	0.991	0.991	0.992	0.992	0.992	0.991
-30	0.988	0.988	0.989	0.990	0.990	0.991	0.991	0.991	0.992	0.992	0.992	0.992	0.992	0.992	0.992	0.992
-31	0.989	0.990	0.990	0.991	0.991	0.992	0.992	0.992	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993
-32	0.990	0.991	0.991	0.992	0.992	0.993	0.993	0.993	0.993	0.994	0.994	0.994	0.994	0.994	0.994	0.993
-33	0.991	0.992	0.992	0.993	0.993	0.993	0.994	0.994	0.994	0.994	0.994	0.994	0.994	0.994	0.994	0.994
-34	0.992	0.993	0.993	0.994	0.994	0.994	0.994	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.994
-35	0.993	0.994	0.994	0.994	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995
Beneficiary older than Retiree -36	0.994	0.994	0.995	0.995	0.995	0.995	0.995	0.996	0.996	0.996	0.996	0.996	0.996	0.995	0.995	
-37	0.995	0.995	0.995	0.995	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996		
-38	0.995	0.995	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996			
-39	0.996	0.996	0.996	0.996	0.996	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.996			
-40	0.996	0.996	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997				

**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)**  
**Actuarial Equivalency Factors Effective January 1, 2024**

**Table 7b: 50% Joint and Survivor Annuity - Option 3 - Disabled Members**  
 (Factor Multiplied by Option 1 Non-Refund Life Annuity)

	Beneficiary Age Difference	Attained Age at Retirement															
		60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75
Beneficiary	-41	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997						
older	-42	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997						
than	-43	0.997	0.997	0.997	0.997	0.998	0.998	0.998	0.997	0.997							
Retiree	-44	0.997	0.998	0.998	0.998	0.998	0.998	0.998									
	-45	0.998	0.998	0.998	0.998	0.998	0.998										
	-46	0.998	0.998	0.998	0.998	0.998											
	-47	0.998	0.998	0.998	0.998												
	-48	0.998	0.998	0.998													
	-49	0.998	0.998														
	-50	0.998															
	-51																
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	-69																
	-70																
	-71																
	-72																
	-73																
	-74																
	-75																
Beneficiary	-76																
older	-77																
than	-78																
Retiree	-79																
	-80																



**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)**  
**Actuarial Equivalency Factors Effective January 1, 2024**

**Table 7b: 50% Joint and Survivor Annuity - Option 3 - Disabled Members**  
 (Factor Multiplied by Option 1 Non-Refund Life Annuity)

	Beneficiary Age Difference	Attained Age at Retirement															
		60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75
Beneficiary	-81																
older	-82																
than	-83																
Retiree	-84																
	-85																
Beneficiary	-86																
older	-87																
than	-88																
Retiree	-89																
	-90																

**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)**  
**Actuarial Equivalency Factors Effective January 1, 2024**

**Table 8a: 100% Joint and Survivor Annuity with Pop-up Feature - Option 2A - Healthy Members**  
 (Factor Multiplied by Option 1 Non-Refund Life Annuity)

	Beneficiary Age Difference	Attained Age at Retirement																			
		45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64
Beneficiary younger than Retiree	100																				
	99																				
	98																				
	97																				
	96																				
	95																				
	94																				
	93																				
	92																				
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**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)**  
**Actuarial Equivalency Factors Effective January 1, 2024**

**Table 8a: 100% Joint and Survivor Annuity with Pop-up Feature - Option 2A - Healthy Members**  
 (Factor Multiplied by Option 1 Non-Refund Life Annuity)

	Beneficiary Age Difference	Attained Age at Retirement																					
		45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64		
Beneficiary younger than Retiree	65																						
	64																				0.689		
	63																						
	62																			0.703	0.689		
	61																		0.716	0.703	0.690		
Beneficiary younger than Retiree	60																						
	59																			0.729	0.717	0.704	0.690
	58																0.741	0.730	0.717	0.704	0.691		
	57															0.753	0.742	0.730	0.718	0.705	0.692		
	56													0.776	0.765	0.754	0.743	0.731	0.719	0.706	0.693		
	55												0.786	0.776	0.766	0.755	0.744	0.732	0.720	0.707	0.694		
	54											0.796	0.787	0.777	0.767	0.756	0.744	0.733	0.720	0.708	0.694		
	53										0.806	0.797	0.787	0.778	0.767	0.756	0.745	0.733	0.721	0.708	0.695		
	52									0.816	0.807	0.798	0.788	0.778	0.768	0.757	0.746	0.734	0.722	0.709	0.696		
	51								0.825	0.816	0.807	0.798	0.789	0.779	0.769	0.758	0.747	0.735	0.723	0.710	0.697		
	50							0.833	0.825	0.817	0.808	0.799	0.789	0.780	0.769	0.759	0.747	0.736	0.723	0.711	0.698		
	49						0.842	0.834	0.826	0.818	0.809	0.800	0.790	0.780	0.770	0.759	0.748	0.737	0.724	0.712	0.699		
	48					0.850	0.842	0.835	0.827	0.818	0.809	0.800	0.791	0.781	0.771	0.760	0.749	0.737	0.725	0.713	0.700		
	47				0.858	0.851	0.843	0.835	0.827	0.819	0.810	0.801	0.792	0.782	0.772	0.761	0.750	0.738	0.726	0.714	0.701		
	46			0.866	0.859	0.851	0.844	0.836	0.828	0.820	0.811	0.802	0.792	0.783	0.773	0.762	0.751	0.739	0.727	0.715	0.702		
	45		0.873	0.866	0.859	0.852	0.844	0.837	0.829	0.820	0.812	0.803	0.793	0.784	0.774	0.763	0.752	0.740	0.728	0.716	0.703		
	44	0.880	0.874	0.867	0.860	0.853	0.845	0.837	0.829	0.821	0.813	0.804	0.794	0.785	0.775	0.764	0.753	0.742	0.730	0.717	0.704		
	43	0.881	0.874	0.868	0.861	0.853	0.846	0.838	0.830	0.822	0.813	0.804	0.795	0.786	0.776	0.765	0.754	0.743	0.731	0.719	0.706		
	42	0.881	0.875	0.868	0.861	0.854	0.847	0.839	0.831	0.823	0.814	0.805	0.796	0.787	0.777	0.766	0.755	0.744	0.732	0.720	0.707		
	41	0.882	0.876	0.869	0.862	0.855	0.847	0.840	0.832	0.824	0.815	0.806	0.797	0.788	0.778	0.767	0.757	0.745	0.734	0.721	0.709		
	40	0.882	0.876	0.870	0.863	0.856	0.848	0.841	0.833	0.825	0.816	0.807	0.798	0.789	0.779	0.769	0.758	0.747	0.735	0.723	0.710		
	39	0.883	0.877	0.871	0.864	0.857	0.849	0.842	0.834	0.826	0.817	0.809	0.800	0.790	0.780	0.770	0.759	0.748	0.737	0.724	0.712		
	38	0.884	0.878	0.871	0.865	0.858	0.850	0.843	0.835	0.827	0.819	0.810	0.801	0.791	0.782	0.771	0.761	0.750	0.738	0.726	0.713		
	37	0.885	0.879	0.872	0.866	0.858	0.851	0.844	0.836	0.828	0.820	0.811	0.802	0.793	0.783	0.773	0.762	0.751	0.740	0.728	0.715		
	36	0.886	0.880	0.873	0.866	0.859	0.852	0.845	0.837	0.829	0.821	0.812	0.804	0.794	0.785	0.775	0.764	0.753	0.742	0.730	0.717		
	35	0.886	0.880	0.874	0.867	0.861	0.853	0.846	0.838	0.831	0.822	0.814	0.805	0.796	0.786	0.776	0.766	0.755	0.743	0.732	0.719		
	34	0.887	0.881	0.875	0.869	0.862	0.854	0.847	0.840	0.832	0.824	0.815	0.806	0.797	0.788	0.778	0.768	0.757	0.745	0.734	0.721		
	33	0.888	0.882	0.876	0.870	0.863	0.856	0.848	0.841	0.833	0.825	0.817	0.808	0.799	0.790	0.780	0.769	0.759	0.747	0.736	0.724		
	32	0.889	0.883	0.877	0.871	0.864	0.857	0.850	0.842	0.835	0.827	0.818	0.810	0.801	0.791	0.782	0.771	0.761	0.750	0.738	0.726		
	31	0.890	0.885	0.878	0.872	0.865	0.858	0.851	0.844	0.836	0.828	0.820	0.811	0.803	0.793	0.784	0.773	0.763	0.752	0.740	0.728		

**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)**  
**Actuarial Equivalency Factors Effective January 1, 2024**

**Table 8a: 100% Joint and Survivor Annuity with Pop-up Feature - Option 2A - Healthy Members**  
 (Factor Multiplied by Option 1 Non-Refund Life Annuity)

Beneficiary Age Difference	Attained Age at Retirement																				
	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	
30	0.891	0.886	0.880	0.873	0.867	0.860	0.852	0.845	0.838	0.830	0.822	0.813	0.804	0.795	0.786	0.776	0.765	0.754	0.743	0.731	
29	0.893	0.887	0.881	0.875	0.868	0.861	0.854	0.847	0.839	0.832	0.824	0.815	0.806	0.797	0.788	0.778	0.768	0.757	0.745	0.734	
28	0.894	0.888	0.882	0.876	0.869	0.862	0.856	0.849	0.841	0.834	0.825	0.817	0.809	0.800	0.790	0.780	0.770	0.759	0.748	0.736	
27	0.895	0.889	0.884	0.877	0.871	0.864	0.857	0.850	0.843	0.835	0.827	0.819	0.811	0.802	0.793	0.783	0.773	0.762	0.751	0.739	
26	0.896	0.891	0.885	0.879	0.872	0.866	0.859	0.852	0.845	0.837	0.830	0.822	0.813	0.804	0.795	0.785	0.775	0.765	0.754	0.742	
Beneficiary younger than Retiree	25	0.898	0.892	0.887	0.880	0.874	0.867	0.861	0.854	0.847	0.840	0.832	0.824	0.815	0.807	0.798	0.788	0.778	0.768	0.757	0.746
	24	0.899	0.894	0.888	0.882	0.876	0.869	0.863	0.856	0.849	0.842	0.834	0.826	0.818	0.809	0.800	0.791	0.781	0.771	0.760	0.749
	23	0.901	0.895	0.890	0.884	0.878	0.871	0.865	0.858	0.851	0.844	0.836	0.829	0.821	0.812	0.803	0.794	0.784	0.774	0.764	0.753
	22	0.902	0.897	0.891	0.886	0.880	0.873	0.867	0.860	0.854	0.846	0.839	0.831	0.823	0.815	0.806	0.797	0.788	0.778	0.767	0.756
	21	0.904	0.899	0.893	0.888	0.882	0.875	0.869	0.863	0.856	0.849	0.842	0.834	0.826	0.818	0.809	0.800	0.791	0.781	0.771	0.760
	20	0.905	0.900	0.895	0.889	0.884	0.877	0.871	0.865	0.858	0.852	0.844	0.837	0.829	0.821	0.813	0.804	0.795	0.785	0.775	0.764
	19	0.907	0.902	0.897	0.892	0.886	0.880	0.874	0.867	0.861	0.854	0.847	0.840	0.832	0.824	0.816	0.807	0.798	0.789	0.779	0.768
	18	0.909	0.904	0.899	0.894	0.888	0.882	0.876	0.870	0.864	0.857	0.850	0.843	0.836	0.828	0.820	0.811	0.802	0.793	0.783	0.773
	17	0.911	0.906	0.901	0.896	0.890	0.884	0.878	0.873	0.866	0.860	0.853	0.846	0.839	0.831	0.823	0.815	0.806	0.797	0.787	0.777
	16	0.913	0.908	0.903	0.898	0.893	0.887	0.881	0.875	0.869	0.863	0.856	0.849	0.842	0.835	0.827	0.819	0.810	0.801	0.792	0.782
	15	0.915	0.910	0.905	0.900	0.895	0.889	0.884	0.878	0.872	0.866	0.860	0.853	0.846	0.839	0.831	0.823	0.815	0.806	0.797	0.787
	14	0.917	0.912	0.908	0.903	0.898	0.892	0.887	0.881	0.875	0.869	0.863	0.856	0.850	0.843	0.835	0.827	0.819	0.810	0.801	0.792
	13	0.919	0.915	0.910	0.905	0.900	0.895	0.889	0.884	0.878	0.873	0.866	0.860	0.853	0.847	0.839	0.832	0.824	0.815	0.806	0.797
	12	0.921	0.917	0.913	0.908	0.903	0.898	0.892	0.887	0.882	0.876	0.870	0.864	0.857	0.851	0.844	0.836	0.828	0.820	0.811	0.802
	11	0.923	0.919	0.915	0.910	0.906	0.900	0.895	0.890	0.885	0.879	0.874	0.868	0.861	0.855	0.848	0.841	0.833	0.825	0.817	0.808
	10	0.926	0.922	0.918	0.913	0.908	0.903	0.898	0.894	0.888	0.883	0.877	0.872	0.865	0.859	0.852	0.845	0.838	0.830	0.822	0.814
	9	0.928	0.924	0.920	0.916	0.911	0.906	0.902	0.897	0.892	0.887	0.881	0.876	0.870	0.864	0.857	0.850	0.843	0.836	0.828	0.819
	8	0.930	0.927	0.923	0.918	0.914	0.909	0.905	0.900	0.895	0.890	0.885	0.880	0.874	0.868	0.862	0.855	0.848	0.841	0.833	0.825
	7	0.933	0.929	0.925	0.921	0.917	0.912	0.908	0.904	0.899	0.894	0.889	0.884	0.878	0.872	0.866	0.860	0.853	0.846	0.839	0.831
	6	0.935	0.932	0.928	0.924	0.920	0.916	0.911	0.907	0.902	0.898	0.893	0.888	0.883	0.877	0.871	0.865	0.859	0.852	0.845	0.838
Beneficiary younger than Retiree	5	0.938	0.934	0.931	0.927	0.923	0.919	0.914	0.910	0.906	0.902	0.897	0.892	0.887	0.882	0.876	0.870	0.864	0.858	0.851	0.844
	4	0.940	0.937	0.933	0.930	0.926	0.922	0.918	0.914	0.910	0.905	0.901	0.896	0.891	0.886	0.881	0.875	0.869	0.863	0.857	0.850
	3	0.942	0.939	0.936	0.932	0.929	0.925	0.921	0.917	0.913	0.909	0.905	0.900	0.896	0.891	0.886	0.880	0.875	0.869	0.863	0.856
	2	0.945	0.942	0.939	0.935	0.932	0.928	0.924	0.921	0.917	0.913	0.909	0.904	0.900	0.895	0.891	0.886	0.880	0.875	0.869	0.863
	1	0.947	0.944	0.941	0.938	0.934	0.931	0.927	0.924	0.920	0.917	0.913	0.909	0.904	0.900	0.895	0.891	0.886	0.880	0.875	0.869
Beneficiary same age as Retiree	0	<b>0.949</b>	<b>0.947</b>	<b>0.944</b>	<b>0.941</b>	<b>0.937</b>	<b>0.934</b>	<b>0.930</b>	<b>0.927</b>	<b>0.924</b>	<b>0.920</b>	<b>0.916</b>	<b>0.913</b>	<b>0.909</b>	<b>0.905</b>	<b>0.900</b>	<b>0.896</b>	<b>0.891</b>	<b>0.886</b>	<b>0.880</b>	<b>0.875</b>
Beneficiary older than	-1	0.952	0.949	0.946	0.943	0.940	0.937	0.934	0.930	0.927	0.924	0.920	0.917	0.913	0.909	0.905	0.901	0.896	0.891	0.886	0.881
	-2	0.954	0.951	0.949	0.946	0.943	0.940	0.937	0.934	0.931	0.927	0.924	0.921	0.917	0.913	0.910	0.905	0.901	0.897	0.892	0.887
	-3	0.956	0.954	0.951	0.948	0.945	0.942	0.939	0.937	0.934	0.931	0.928	0.924	0.921	0.918	0.914	0.910	0.906	0.902	0.897	0.893

**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)**  
**Actuarial Equivalency Factors Effective January 1, 2024**

**Table 8a: 100% Joint and Survivor Annuity with Pop-up Feature - Option 2A - Healthy Members**  
 (Factor Multiplied by Option 1 Non-Refund Life Annuity)

Beneficiary Age Difference	Attained Age at Retirement																					
	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64		
Retiree	-4	0.958	0.956	0.953	0.951	0.948	0.945	0.942	0.940	0.937	0.934	0.931	0.928	0.925	0.922	0.918	0.915	0.911	0.907	0.903	0.898	
	-5	0.960	0.958	0.956	0.953	0.950	0.948	0.945	0.943	0.940	0.937	0.935	0.932	0.929	0.926	0.923	0.919	0.916	0.912	0.908	0.904	
	-6	0.962	0.960	0.958	0.955	0.953	0.950	0.948	0.945	0.943	0.940	0.938	0.935	0.933	0.930	0.927	0.924	0.920	0.917	0.913	0.909	
	-7	0.964	0.962	0.960	0.958	0.955	0.953	0.950	0.948	0.946	0.944	0.941	0.939	0.936	0.933	0.931	0.928	0.925	0.921	0.918	0.914	
	-8	0.966	0.964	0.962	0.960	0.957	0.955	0.953	0.951	0.949	0.946	0.944	0.942	0.939	0.937	0.934	0.932	0.929	0.926	0.923	0.919	
	-9	0.967	0.966	0.964	0.962	0.959	0.957	0.955	0.953	0.951	0.949	0.947	0.945	0.943	0.941	0.938	0.936	0.933	0.930	0.927	0.924	
	-10	0.969	0.967	0.965	0.964	0.962	0.959	0.957	0.956	0.954	0.952	0.950	0.948	0.946	0.944	0.942	0.939	0.937	0.934	0.932	0.929	
	-11	0.971	0.969	0.967	0.965	0.963	0.961	0.960	0.958	0.956	0.954	0.953	0.951	0.949	0.947	0.945	0.943	0.941	0.938	0.936	0.933	
	-12	0.972	0.970	0.969	0.967	0.965	0.963	0.962	0.960	0.959	0.957	0.955	0.953	0.952	0.950	0.948	0.946	0.944	0.942	0.940	0.937	
	-13	0.973	0.972	0.970	0.969	0.967	0.965	0.964	0.962	0.961	0.959	0.958	0.956	0.955	0.953	0.951	0.949	0.948	0.946	0.943	0.941	
	-14	0.975	0.973	0.972	0.970	0.969	0.967	0.966	0.964	0.963	0.961	0.960	0.959	0.957	0.956	0.954	0.952	0.951	0.949	0.947	0.945	
	-15	0.976	0.975	0.973	0.972	0.970	0.969	0.967	0.966	0.965	0.964	0.962	0.961	0.960	0.958	0.957	0.955	0.954	0.952	0.950	0.949	
	Beneficiary older than Retiree	-16	0.977	0.976	0.975	0.973	0.972	0.970	0.969	0.968	0.967	0.966	0.964	0.963	0.962	0.961	0.959	0.958	0.957	0.955	0.954	0.952
		-17	0.979	0.977	0.976	0.975	0.973	0.972	0.971	0.970	0.969	0.967	0.966	0.965	0.964	0.963	0.962	0.961	0.959	0.958	0.957	0.955
		-18	0.980	0.979	0.977	0.976	0.975	0.973	0.972	0.971	0.970	0.969	0.968	0.967	0.966	0.965	0.964	0.963	0.962	0.961	0.960	0.958
-19		0.981	0.980	0.979	0.977	0.976	0.975	0.974	0.973	0.972	0.971	0.970	0.969	0.968	0.967	0.967	0.966	0.965	0.963	0.962	0.961	
-20		0.982	0.981	0.980	0.979	0.977	0.976	0.975	0.974	0.974	0.973	0.972	0.971	0.970	0.969	0.969	0.968	0.967	0.966	0.965	0.964	
-21		0.983	0.982	0.981	0.980	0.979	0.978	0.977	0.976	0.975	0.974	0.973	0.973	0.972	0.971	0.971	0.970	0.969	0.968	0.967	0.966	
-22		0.984	0.983	0.982	0.981	0.980	0.979	0.978	0.977	0.976	0.976	0.975	0.974	0.974	0.973	0.973	0.972	0.971	0.970	0.969	0.969	
-23		0.985	0.984	0.983	0.982	0.981	0.980	0.979	0.978	0.978	0.977	0.977	0.976	0.975	0.975	0.974	0.974	0.973	0.972	0.972	0.971	
-24		0.985	0.985	0.984	0.983	0.982	0.981	0.980	0.980	0.979	0.979	0.978	0.977	0.977	0.977	0.976	0.975	0.975	0.974	0.974	0.973	
-25		0.986	0.986	0.985	0.984	0.983	0.982	0.981	0.981	0.980	0.980	0.979	0.979	0.978	0.978	0.978	0.977	0.977	0.976	0.975	0.975	
-26		0.987	0.986	0.986	0.985	0.984	0.983	0.982	0.982	0.982	0.981	0.981	0.980	0.980	0.979	0.979	0.979	0.978	0.978	0.977	0.976	
-27		0.988	0.987	0.987	0.986	0.985	0.984	0.983	0.983	0.983	0.982	0.982	0.981	0.981	0.981	0.980	0.980	0.980	0.979	0.979	0.978	
-28		0.989	0.988	0.987	0.987	0.986	0.985	0.984	0.984	0.984	0.983	0.983	0.983	0.982	0.982	0.982	0.981	0.981	0.981	0.980	0.979	
-29		0.989	0.989	0.988	0.988	0.987	0.986	0.985	0.985	0.985	0.984	0.984	0.984	0.984	0.983	0.983	0.983	0.982	0.982	0.981	0.981	
-30		0.990	0.989	0.989	0.988	0.988	0.987	0.986	0.986	0.986	0.986	0.985	0.985	0.985	0.984	0.984	0.984	0.983	0.983	0.983	0.982	
-31		0.991	0.990	0.990	0.989	0.988	0.988	0.987	0.987	0.987	0.986	0.986	0.986	0.986	0.985	0.985	0.985	0.985	0.984	0.984	0.983	
-32		0.991	0.991	0.990	0.990	0.989	0.988	0.988	0.988	0.987	0.987	0.987	0.987	0.987	0.986	0.986	0.986	0.986	0.985	0.985	0.984	
-33		0.992	0.991	0.991	0.990	0.990	0.989	0.989	0.988	0.988	0.988	0.988	0.988	0.987	0.987	0.987	0.987	0.986	0.986	0.986	0.985	
-34		0.992	0.992	0.992	0.991	0.991	0.990	0.989	0.989	0.989	0.989	0.988	0.988	0.988	0.988	0.988	0.988	0.987	0.987	0.987	0.986	
-35		0.993	0.993	0.992	0.992	0.991	0.991	0.990	0.990	0.990	0.990	0.989	0.989	0.989	0.989	0.989	0.988	0.988	0.988	0.987	0.987	
-36		0.993	0.993	0.993	0.992	0.992	0.991	0.991	0.991	0.990	0.990	0.990	0.990	0.990	0.990	0.989	0.989	0.989	0.989	0.988	0.988	
-37		0.994	0.994	0.993	0.993	0.992	0.992	0.991	0.991	0.991	0.991	0.991	0.991	0.990	0.990	0.990	0.990	0.990	0.989	0.989	0.989	
-38		0.994	0.994	0.994	0.993	0.993	0.992	0.992	0.992	0.992	0.991	0.991	0.991	0.991	0.991	0.991	0.990	0.990	0.990	0.990	0.989	
-39		0.995	0.995	0.994	0.994	0.993	0.993	0.992	0.992	0.992	0.992	0.992	0.992	0.992	0.991	0.991	0.991	0.991	0.990	0.990	0.990	

**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)**  
**Actuarial Equivalency Factors Effective January 1, 2024**

**Table 8a: 100% Joint and Survivor Annuity with Pop-up Feature - Option 2A - Healthy Members**  
 (Factor Multiplied by Option 1 Non-Refund Life Annuity)

Beneficiary Age Difference	Attained Age at Retirement																			
	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64
-40	0.995	0.995	0.995	0.994	0.994	0.993	0.993	0.993	0.993	0.992	0.992	0.992	0.992	0.992	0.992	0.992	0.991	0.991	0.991	0.990
-41	0.996	0.995	0.995	0.995	0.994	0.994	0.993	0.993	0.993	0.993	0.993	0.993	0.992	0.992	0.992	0.992	0.992	0.991	0.991	0.991
-42	0.996	0.996	0.995	0.995	0.995	0.994	0.994	0.994	0.994	0.993	0.993	0.993	0.993	0.993	0.993	0.992	0.992	0.992	0.992	0.991
-43	0.996	0.996	0.996	0.995	0.995	0.995	0.994	0.994	0.994	0.994	0.994	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.992	0.992
-44	0.996	0.996	0.996	0.996	0.995	0.995	0.995	0.994	0.994	0.994	0.994	0.994	0.994	0.994	0.993	0.993	0.993	0.993	0.992	0.992
-45	0.997	0.997	0.996	0.996	0.996	0.995	0.995	0.995	0.995	0.995	0.995	0.994	0.994	0.994	0.994	0.994	0.993	0.993	0.993	0.992
-46	0.997	0.997	0.997	0.996	0.996	0.996	0.995	0.995	0.995	0.995	0.995	0.994	0.994	0.994	0.994	0.994	0.994	0.993	0.993	0.992
-47	0.997	0.997	0.997	0.997	0.996	0.996	0.996	0.995	0.995	0.995	0.995	0.995	0.995	0.994	0.994	0.994	0.994	0.993	0.993	0.992
-48	0.997	0.997	0.997	0.997	0.997	0.996	0.996	0.996	0.996	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.994	0.994	0.994	0.993
-49	0.998	0.997	0.997	0.997	0.997	0.996	0.996	0.996	0.996	0.996	0.995	0.995	0.995	0.995	0.995	0.994	0.994	0.994	0.993	0.992
-50	0.998	0.998	0.998	0.997	0.997	0.997	0.996	0.996	0.996	0.996	0.996	0.995	0.995	0.995	0.995	0.995	0.994	0.994	0.993	0.992
Beneficiary older than Retiree	-51	0.998	0.998	0.998	0.998	0.997	0.997	0.996	0.996	0.996	0.996	0.996	0.996	0.995	0.995	0.995	0.995	0.994	0.994	0.993
	-52	0.998	0.998	0.998	0.998	0.997	0.997	0.997	0.997	0.996	0.996	0.996	0.996	0.996	0.995	0.995	0.995	0.994	0.994	0.993
	-53	0.998	0.998	0.998	0.998	0.998	0.997	0.997	0.997	0.997	0.996	0.996	0.996	0.996	0.995	0.995	0.995	0.994	0.994	0.993
	-54	0.998	0.998	0.998	0.998	0.998	0.997	0.997	0.997	0.997	0.997	0.996	0.996	0.996	0.995	0.995	0.995	0.994	0.994	0.993
	-55	0.998	0.998	0.998	0.998	0.998	0.997	0.997	0.997	0.997	0.997	0.996	0.996	0.996	0.995	0.995	0.995	0.994	0.994	0.993
Beneficiary older than Retiree	-56	0.999	0.998	0.998	0.998	0.998	0.998	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.996	0.996	0.996	0.995
	-57	0.999	0.999	0.998	0.998	0.998	0.998	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.996	0.996	0.996	0.995
	-58	0.999	0.999	0.999	0.998	0.998	0.998	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.996	0.996	0.996	0.995
	-59	0.999	0.999	0.999	0.998	0.998	0.998	0.998	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.996	0.996	0.996	0.995
	-60	0.999	0.999	0.999	0.999	0.998	0.998	0.998	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.996	0.996	0.996	0.995
Beneficiary older than Retiree	-61	0.999	0.999	0.999	0.999	0.998	0.998	0.998	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.996	0.996	0.996	0.995
	-62	0.999	0.999	0.999	0.999	0.998	0.998	0.998	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.996	0.996	0.996	0.995
	-63	0.999	0.999	0.999	0.999	0.998	0.998	0.998	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.996	0.996	0.996	0.995
	-64	0.999	0.999	0.999	0.999	0.998	0.998	0.998	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.996	0.996	0.996	0.995
	-65	0.999	0.999	0.999	0.999	0.998	0.998	0.998	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.996	0.996	0.996	0.995

**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)**  
**Actuarial Equivalency Factors Effective January 1, 2024**

**Table 8a: 100% Joint and Survivor Annuity with Pop-up Feature - Option 2A - Healthy Members**  
 (Factor Multiplied by Option 1 Non-Refund Life Annuity)

Beneficiary Age Difference	Attained Age at Retirement																			
	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84
100																				
99																				
98																				
97																				
96																				
95																				
94																				
93																				
92																				
91																				
90																				
89																				
88																				
87																				
86																				
85																				
84																				
83																				0.331
82																			0.350	0.331
81																		0.369	0.350	0.331
80																	0.389	0.369	0.350	0.332
79																0.408	0.389	0.370	0.351	0.332
78															0.428	0.408	0.389	0.370	0.351	0.332
77														0.447	0.428	0.409	0.390	0.370	0.351	0.333
76													0.466	0.447	0.428	0.409	0.390	0.371	0.352	0.333
75												0.485	0.467	0.448	0.429	0.409	0.390	0.371	0.352	0.333
74											0.504	0.486	0.467	0.448	0.429	0.410	0.391	0.371	0.352	0.334
73										0.523	0.505	0.486	0.467	0.448	0.429	0.410	0.391	0.372	0.353	0.334
72								0.541	0.523	0.505	0.487	0.468	0.449	0.430	0.411	0.391	0.372	0.353	0.334	
71							0.559	0.542	0.524	0.505	0.487	0.468	0.449	0.430	0.411	0.392	0.373	0.354	0.335	
70						0.577	0.560	0.542	0.524	0.506	0.487	0.469	0.450	0.431	0.411	0.392	0.373	0.354	0.335	
69					0.595	0.578	0.560	0.543	0.525	0.506	0.488	0.469	0.450	0.431	0.412	0.393	0.374	0.355	0.336	
68				0.611	0.595	0.578	0.561	0.543	0.525	0.507	0.488	0.470	0.451	0.432	0.412	0.393	0.374	0.355	0.336	
67			0.628	0.612	0.595	0.579	0.561	0.544	0.526	0.507	0.489	0.470	0.451	0.432	0.413	0.394	0.375	0.356	0.337	
66		0.644	0.628	0.612	0.596	0.579	0.562	0.544	0.526	0.508	0.489	0.471	0.452	0.433	0.414	0.394	0.375	0.356	0.337	

**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)**  
**Actuarial Equivalency Factors Effective January 1, 2024**

**Table 8a: 100% Joint and Survivor Annuity with Pop-up Feature - Option 2A - Healthy Members**  
 (Factor Multiplied by Option 1 Non-Refund Life Annuity)

	Beneficiary Age Difference	Attained Age at Retirement																			
		65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84
Beneficiary younger than Retiree	65		0.659	0.644	0.629	0.613	0.596	0.580	0.562	0.545	0.527	0.508	0.490	0.471	0.452	0.433	0.414	0.395	0.376	0.357	0.338
	64	0.674	0.660	0.645	0.629	0.613	0.597	0.580	0.563	0.545	0.527	0.509	0.491	0.472	0.453	0.434	0.415	0.396	0.376	0.357	0.339
	63	0.675	0.660	0.645	0.630	0.614	0.597	0.581	0.563	0.546	0.528	0.510	0.491	0.472	0.454	0.435	0.415	0.396	0.377	0.358	0.339
	62	0.675	0.661	0.646	0.630	0.614	0.598	0.581	0.564	0.546	0.529	0.510	0.492	0.473	0.454	0.435	0.416	0.397	0.378	0.359	0.340
	61	0.676	0.661	0.646	0.631	0.615	0.599	0.582	0.565	0.547	0.529	0.511	0.493	0.474	0.455	0.436	0.417	0.398	0.379	0.360	0.341
Beneficiary younger than Retiree	60	0.676	0.662	0.647	0.632	0.616	0.599	0.583	0.565	0.548	0.530	0.512	0.493	0.475	0.456	0.437	0.418	0.398	0.379	0.360	0.342
	59	0.677	0.663	0.648	0.632	0.616	0.600	0.583	0.566	0.549	0.531	0.512	0.494	0.475	0.457	0.438	0.418	0.399	0.380	0.361	0.342
	58	0.678	0.663	0.648	0.633	0.617	0.601	0.584	0.567	0.549	0.531	0.513	0.495	0.476	0.457	0.438	0.419	0.400	0.381	0.362	0.343
	57	0.678	0.664	0.649	0.634	0.618	0.601	0.585	0.568	0.550	0.532	0.514	0.496	0.477	0.458	0.439	0.420	0.401	0.382	0.363	0.344
	56	0.679	0.665	0.650	0.634	0.619	0.602	0.586	0.568	0.551	0.533	0.515	0.497	0.478	0.459	0.440	0.421	0.402	0.383	0.364	0.345
	55	0.680	0.665	0.651	0.635	0.619	0.603	0.586	0.569	0.552	0.534	0.516	0.498	0.479	0.460	0.441	0.422	0.403	0.384	0.365	0.346
	54	0.680	0.666	0.651	0.636	0.620	0.604	0.587	0.570	0.553	0.535	0.517	0.499	0.480	0.461	0.442	0.423	0.404	0.385	0.366	0.348
	53	0.681	0.667	0.652	0.637	0.621	0.605	0.588	0.571	0.554	0.536	0.518	0.500	0.481	0.462	0.444	0.425	0.405	0.386	0.367	0.349
	52	0.682	0.668	0.653	0.638	0.622	0.606	0.589	0.572	0.555	0.537	0.519	0.501	0.482	0.464	0.445	0.426	0.407	0.388	0.369	0.350
	51	0.683	0.669	0.654	0.639	0.623	0.607	0.590	0.573	0.556	0.538	0.520	0.502	0.484	0.465	0.446	0.427	0.408	0.389	0.370	0.351
	50	0.684	0.670	0.655	0.640	0.624	0.608	0.592	0.575	0.557	0.540	0.522	0.503	0.485	0.466	0.447	0.428	0.409	0.390	0.371	0.353
	49	0.685	0.671	0.656	0.641	0.625	0.609	0.593	0.576	0.559	0.541	0.523	0.505	0.486	0.468	0.449	0.430	0.411	0.392	0.373	0.354
	48	0.686	0.672	0.657	0.642	0.627	0.611	0.594	0.577	0.560	0.542	0.524	0.506	0.488	0.469	0.450	0.431	0.412	0.393	0.375	0.356
	47	0.687	0.673	0.658	0.643	0.628	0.612	0.595	0.579	0.561	0.544	0.526	0.508	0.489	0.471	0.452	0.433	0.414	0.395	0.376	0.358
	46	0.688	0.674	0.660	0.645	0.629	0.613	0.597	0.580	0.563	0.545	0.527	0.509	0.491	0.472	0.454	0.435	0.416	0.397	0.378	0.359
	45	0.690	0.676	0.661	0.646	0.631	0.615	0.598	0.582	0.564	0.547	0.529	0.511	0.493	0.474	0.455	0.437	0.418	0.399	0.380	0.361
	44	0.691	0.677	0.662	0.648	0.632	0.616	0.600	0.583	0.566	0.549	0.531	0.513	0.495	0.476	0.457	0.439	0.420	0.401	0.382	0.363
	43	0.692	0.678	0.664	0.649	0.634	0.618	0.602	0.585	0.568	0.551	0.533	0.515	0.497	0.478	0.459	0.441	0.422	0.403	0.384	0.365
	42	0.694	0.680	0.666	0.651	0.635	0.620	0.603	0.587	0.570	0.552	0.535	0.517	0.499	0.480	0.462	0.443	0.424	0.405	0.386	0.368
	41	0.695	0.681	0.667	0.652	0.637	0.621	0.605	0.589	0.572	0.554	0.537	0.519	0.501	0.482	0.464	0.445	0.426	0.407	0.388	0.370
	40	0.697	0.683	0.669	0.654	0.639	0.623	0.607	0.591	0.574	0.557	0.539	0.521	0.503	0.485	0.466	0.447	0.429	0.410	0.391	0.372
	39	0.699	0.685	0.671	0.656	0.641	0.625	0.609	0.593	0.576	0.559	0.541	0.523	0.505	0.487	0.469	0.450	0.431	0.412	0.394	0.375
	38	0.700	0.687	0.673	0.658	0.643	0.627	0.612	0.595	0.578	0.561	0.544	0.526	0.508	0.490	0.471	0.453	0.434	0.415	0.396	0.378
	37	0.702	0.689	0.675	0.660	0.645	0.630	0.614	0.598	0.581	0.564	0.546	0.529	0.511	0.492	0.474	0.455	0.437	0.418	0.399	0.381
	36	0.704	0.691	0.677	0.662	0.647	0.632	0.616	0.600	0.583	0.566	0.549	0.531	0.513	0.495	0.477	0.458	0.440	0.421	0.402	0.384
	35	0.706	0.693	0.679	0.665	0.650	0.635	0.619	0.603	0.586	0.569	0.552	0.534	0.516	0.498	0.480	0.461	0.443	0.424	0.405	0.387
	34	0.708	0.695	0.681	0.667	0.652	0.637	0.621	0.605	0.589	0.572	0.555	0.537	0.520	0.501	0.483	0.465	0.446	0.427	0.409	0.390
	33	0.711	0.698	0.684	0.670	0.655	0.640	0.624	0.608	0.592	0.575	0.558	0.541	0.523	0.505	0.487	0.468	0.450	0.431	0.412	0.394
	32	0.713	0.700	0.686	0.672	0.658	0.643	0.627	0.611	0.595	0.578	0.561	0.544	0.526	0.508	0.490	0.472	0.453	0.435	0.416	0.397
	31	0.716	0.703	0.689	0.675	0.661	0.646	0.630	0.615	0.598	0.582	0.565	0.547	0.530	0.512	0.494	0.476	0.457	0.438	0.420	0.401



**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)**  
**Actuarial Equivalency Factors Effective January 1, 2024**

**Table 8a: 100% Joint and Survivor Annuity with Pop-up Feature - Option 2A - Healthy Members**  
 (Factor Multiplied by Option 1 Non-Refund Life Annuity)

Beneficiary Age Difference	Attained Age at Retirement																				
	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	
	30	0.718	0.705	0.692	0.678	0.664	0.649	0.634	0.618	0.602	0.585	0.568	0.551	0.534	0.516	0.498	0.480	0.461	0.442	0.424	0.405
	29	0.721	0.708	0.695	0.681	0.667	0.652	0.637	0.621	0.605	0.589	0.572	0.555	0.538	0.520	0.502	0.484	0.465	0.447	0.428	0.410
	28	0.724	0.711	0.698	0.685	0.670	0.656	0.641	0.625	0.609	0.593	0.576	0.559	0.542	0.524	0.506	0.488	0.470	0.451	0.433	0.415
	27	0.727	0.715	0.702	0.688	0.674	0.659	0.644	0.629	0.613	0.597	0.580	0.563	0.546	0.529	0.511	0.493	0.474	0.456	0.438	0.420
	26	0.730	0.718	0.705	0.692	0.678	0.663	0.648	0.633	0.617	0.601	0.585	0.568	0.551	0.533	0.516	0.498	0.479	0.461	0.443	0.425
Beneficiary younger than Retiree	25	0.734	0.721	0.709	0.695	0.682	0.667	0.653	0.637	0.622	0.606	0.589	0.573	0.556	0.538	0.521	0.503	0.485	0.467	0.448	0.430
	24	0.737	0.725	0.712	0.699	0.686	0.671	0.657	0.642	0.626	0.611	0.594	0.578	0.561	0.544	0.526	0.508	0.490	0.472	0.454	0.436
	23	0.741	0.729	0.716	0.703	0.690	0.676	0.661	0.647	0.631	0.615	0.599	0.583	0.566	0.549	0.532	0.514	0.496	0.478	0.461	0.443
	22	0.745	0.733	0.721	0.708	0.694	0.680	0.666	0.651	0.636	0.621	0.605	0.588	0.572	0.555	0.538	0.520	0.503	0.485	0.467	0.449
	21	0.749	0.737	0.725	0.712	0.699	0.685	0.671	0.657	0.642	0.626	0.610	0.594	0.578	0.561	0.544	0.527	0.509	0.492	0.474	0.457
	20	0.753	0.741	0.729	0.717	0.704	0.690	0.676	0.662	0.647	0.632	0.616	0.600	0.584	0.568	0.551	0.534	0.516	0.499	0.481	0.464
	19	0.757	0.746	0.734	0.722	0.709	0.696	0.682	0.668	0.653	0.638	0.623	0.607	0.591	0.574	0.558	0.541	0.524	0.507	0.489	0.472
	18	0.762	0.751	0.739	0.727	0.714	0.701	0.687	0.674	0.659	0.644	0.629	0.614	0.598	0.582	0.565	0.549	0.532	0.515	0.497	0.480
	17	0.767	0.756	0.744	0.732	0.720	0.707	0.693	0.680	0.666	0.651	0.636	0.621	0.605	0.589	0.573	0.557	0.540	0.523	0.506	0.489
	16	0.772	0.761	0.749	0.738	0.725	0.713	0.700	0.686	0.672	0.658	0.643	0.628	0.613	0.597	0.581	0.565	0.549	0.532	0.515	0.499
	15	0.777	0.766	0.755	0.743	0.731	0.719	0.706	0.693	0.679	0.665	0.651	0.636	0.621	0.606	0.590	0.574	0.558	0.541	0.525	0.508
	14	0.782	0.772	0.761	0.749	0.738	0.725	0.713	0.700	0.686	0.673	0.659	0.644	0.629	0.614	0.599	0.583	0.567	0.551	0.535	0.519
	13	0.787	0.777	0.767	0.756	0.744	0.732	0.720	0.707	0.694	0.681	0.667	0.653	0.638	0.623	0.608	0.593	0.577	0.561	0.545	0.529
	12	0.793	0.783	0.773	0.762	0.751	0.739	0.727	0.715	0.702	0.689	0.675	0.661	0.647	0.633	0.618	0.603	0.588	0.572	0.556	0.541
	11	0.799	0.789	0.779	0.769	0.758	0.746	0.735	0.723	0.710	0.697	0.684	0.670	0.657	0.643	0.628	0.613	0.598	0.583	0.568	0.552
	10	0.805	0.795	0.786	0.775	0.765	0.754	0.742	0.731	0.718	0.706	0.693	0.680	0.666	0.653	0.639	0.624	0.610	0.595	0.580	0.565
	9	0.811	0.802	0.792	0.782	0.772	0.761	0.750	0.739	0.727	0.715	0.702	0.690	0.677	0.663	0.649	0.635	0.621	0.607	0.592	0.577
	8	0.817	0.808	0.799	0.790	0.780	0.769	0.758	0.747	0.736	0.724	0.712	0.700	0.687	0.674	0.661	0.647	0.633	0.619	0.605	0.590
	7	0.823	0.815	0.806	0.797	0.787	0.777	0.767	0.756	0.745	0.734	0.722	0.710	0.698	0.685	0.672	0.659	0.645	0.632	0.618	0.604
	6	0.830	0.822	0.813	0.804	0.795	0.785	0.775	0.765	0.754	0.743	0.732	0.720	0.708	0.696	0.684	0.671	0.658	0.645	0.631	0.618
Beneficiary younger than Retiree	5	0.836	0.828	0.820	0.812	0.803	0.794	0.784	0.774	0.764	0.753	0.742	0.731	0.719	0.708	0.696	0.683	0.671	0.658	0.645	0.632
	4	0.843	0.835	0.827	0.819	0.811	0.802	0.793	0.783	0.773	0.763	0.752	0.742	0.731	0.719	0.708	0.696	0.684	0.671	0.659	0.646
	3	0.849	0.842	0.835	0.827	0.819	0.810	0.801	0.792	0.783	0.773	0.763	0.753	0.742	0.731	0.720	0.709	0.697	0.685	0.673	0.661
	2	0.856	0.849	0.842	0.834	0.827	0.818	0.810	0.801	0.792	0.783	0.773	0.763	0.753	0.743	0.732	0.722	0.710	0.699	0.687	0.676
	1	0.863	0.856	0.849	0.842	0.835	0.827	0.819	0.810	0.802	0.793	0.784	0.774	0.765	0.755	0.745	0.734	0.724	0.713	0.702	0.690
Beneficiary same age as Retiree	0	<b>0.869</b>	<b>0.863</b>	<b>0.856</b>	<b>0.850</b>	<b>0.842</b>	<b>0.835</b>	<b>0.827</b>	<b>0.819</b>	<b>0.811</b>	<b>0.803</b>	<b>0.794</b>	<b>0.785</b>	<b>0.776</b>	<b>0.767</b>	<b>0.757</b>	<b>0.747</b>	<b>0.737</b>	<b>0.726</b>	<b>0.716</b>	<b>0.705</b>
Beneficiary older than	-1	0.875	0.870	0.863	0.857	0.850	0.843	0.836	0.828	0.821	0.813	0.804	0.796	0.787	0.778	0.769	0.760	0.750	0.740	0.730	0.719
	-2	0.882	0.876	0.870	0.864	0.858	0.851	0.844	0.837	0.830	0.822	0.815	0.807	0.798	0.790	0.781	0.772	0.763	0.753	0.744	0.733
	-3	0.888	0.883	0.877	0.871	0.865	0.859	0.853	0.846	0.839	0.832	0.825	0.817	0.809	0.801	0.793	0.785	0.776	0.767	0.757	0.747

**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)**  
**Actuarial Equivalency Factors Effective January 1, 2024**

**Table 8a: 100% Joint and Survivor Annuity with Pop-up Feature - Option 2A - Healthy Members**  
 (Factor Multiplied by Option 1 Non-Refund Life Annuity)

Beneficiary Age Difference	Attained Age at Retirement																					
	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84		
Retiree	-4	0.894	0.889	0.884	0.878	0.873	0.867	0.861	0.855	0.848	0.841	0.834	0.827	0.820	0.813	0.805	0.797	0.788	0.779	0.770	0.761	
	-5	0.900	0.895	0.890	0.885	0.880	0.874	0.869	0.863	0.857	0.850	0.844	0.837	0.830	0.823	0.816	0.808	0.800	0.792	0.783	0.774	
	-6	0.905	0.901	0.896	0.892	0.887	0.882	0.876	0.871	0.865	0.859	0.853	0.847	0.841	0.834	0.827	0.820	0.812	0.804	0.795	0.786	
	-7	0.911	0.907	0.902	0.898	0.893	0.889	0.884	0.879	0.873	0.868	0.862	0.856	0.850	0.844	0.837	0.830	0.823	0.815	0.807	0.798	
	-8	0.916	0.912	0.908	0.904	0.900	0.895	0.891	0.886	0.881	0.876	0.871	0.865	0.859	0.853	0.847	0.841	0.833	0.826	0.818	0.809	
	-9	0.921	0.918	0.914	0.910	0.906	0.902	0.898	0.893	0.889	0.884	0.879	0.874	0.868	0.863	0.857	0.850	0.844	0.836	0.828	0.820	
	-10	0.926	0.923	0.919	0.916	0.912	0.908	0.904	0.900	0.896	0.891	0.887	0.882	0.877	0.871	0.866	0.860	0.853	0.846	0.838	0.830	
	-11	0.930	0.927	0.924	0.921	0.918	0.914	0.910	0.907	0.903	0.898	0.894	0.889	0.885	0.880	0.874	0.868	0.862	0.855	0.848	0.840	
	-12	0.935	0.932	0.929	0.926	0.923	0.920	0.916	0.913	0.909	0.905	0.901	0.897	0.892	0.887	0.882	0.876	0.870	0.864	0.857	0.849	
	-13	0.939	0.936	0.934	0.931	0.928	0.925	0.922	0.919	0.915	0.911	0.907	0.903	0.899	0.894	0.890	0.884	0.878	0.872	0.865	0.858	
	-14	0.943	0.941	0.938	0.936	0.933	0.930	0.927	0.924	0.921	0.917	0.914	0.910	0.906	0.901	0.897	0.891	0.886	0.880	0.873	0.866	
	-15	0.947	0.945	0.942	0.940	0.938	0.935	0.932	0.929	0.926	0.923	0.919	0.916	0.912	0.908	0.903	0.898	0.893	0.887	0.880	0.873	
	Beneficiary older than Retiree	-16	0.950	0.948	0.946	0.944	0.942	0.939	0.937	0.934	0.931	0.928	0.925	0.921	0.917	0.913	0.909	0.904	0.899	0.893	0.887	0.880
		-17	0.954	0.952	0.950	0.948	0.946	0.943	0.941	0.938	0.936	0.933	0.930	0.926	0.923	0.919	0.915	0.910	0.905	0.900	0.893	0.887
		-18	0.957	0.955	0.953	0.952	0.950	0.947	0.945	0.943	0.940	0.937	0.934	0.931	0.928	0.924	0.920	0.916	0.911	0.905	0.899	0.893
-19		0.960	0.958	0.957	0.955	0.953	0.951	0.949	0.947	0.944	0.941	0.939	0.935	0.932	0.929	0.925	0.921	0.916	0.911	0.905	0.898	
-20		0.962	0.961	0.960	0.958	0.956	0.954	0.952	0.950	0.948	0.945	0.943	0.940	0.936	0.933	0.929	0.925	0.921	0.915	0.910	0.903	
-21		0.965	0.964	0.962	0.961	0.959	0.957	0.956	0.953	0.951	0.949	0.946	0.943	0.940	0.937	0.933	0.929	0.925	0.920	0.914	0.908	
-22		0.967	0.966	0.965	0.964	0.962	0.960	0.959	0.957	0.954	0.952	0.950	0.947	0.944	0.941	0.937	0.933	0.929	0.924	0.918	0.912	
-23		0.970	0.969	0.967	0.966	0.965	0.963	0.961	0.959	0.957	0.955	0.953	0.950	0.947	0.944	0.941	0.937	0.933	0.927	0.922	0.915	
-24		0.972	0.971	0.970	0.968	0.967	0.965	0.964	0.962	0.960	0.958	0.956	0.953	0.950	0.947	0.944	0.940	0.936	0.931	0.925	0.918	
-25		0.974	0.973	0.972	0.971	0.969	0.968	0.966	0.964	0.963	0.961	0.958	0.956	0.953	0.950	0.947	0.943	0.939	0.934	0.928	0.921	
-26		0.976	0.975	0.974	0.973	0.971	0.970	0.968	0.967	0.965	0.963	0.961	0.958	0.956	0.953	0.949	0.946	0.941	0.936	0.930	0.923	
-27		0.977	0.976	0.975	0.974	0.973	0.972	0.970	0.969	0.967	0.965	0.963	0.961	0.958	0.955	0.952	0.948	0.943	0.938	0.931		
-28		0.979	0.978	0.977	0.976	0.975	0.974	0.972	0.971	0.969	0.967	0.965	0.963	0.960	0.957	0.954	0.950	0.945	0.939			
-29		0.980	0.979	0.979	0.978	0.976	0.975	0.974	0.972	0.971	0.969	0.967	0.964	0.962	0.959	0.955	0.951	0.946				
-30		0.981	0.981	0.980	0.979	0.978	0.977	0.975	0.974	0.972	0.970	0.968	0.966	0.963	0.960	0.957	0.952					
-31		0.983	0.982	0.981	0.980	0.979	0.978	0.977	0.975	0.974	0.972	0.970	0.967	0.965	0.962	0.958						
-32		0.984	0.983	0.982	0.981	0.980	0.979	0.978	0.977	0.975	0.973	0.971	0.969	0.966	0.962							
-33		0.985	0.984	0.983	0.983	0.982	0.980	0.979	0.978	0.976	0.974	0.972	0.970	0.967								
-34		0.986	0.985	0.984	0.984	0.983	0.982	0.980	0.979	0.977	0.975	0.973	0.970									
-35		0.987	0.986	0.985	0.984	0.984	0.982	0.981	0.980	0.978	0.976	0.974										
-36		0.987	0.987	0.986	0.985	0.984	0.983	0.982	0.980	0.979	0.977											
-37		0.988	0.987	0.987	0.986	0.985	0.984	0.983	0.981	0.979												
-38		0.989	0.988	0.987	0.987	0.986	0.985	0.983	0.982													
-39		0.989	0.989	0.988	0.987	0.986	0.985	0.984														

**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)**  
**Actuarial Equivalency Factors Effective January 1, 2024**

**Table 8a: 100% Joint and Survivor Annuity with Pop-up Feature - Option 2A - Healthy Members**  
 (Factor Multiplied by Option 1 Non-Refund Life Annuity)

Beneficiary Age Difference	Attained Age at Retirement																			
	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84
-40	0.990	0.989	0.989	0.988	0.987	0.985														
-41	0.990	0.990	0.989	0.988	0.987															
-42	0.991	0.990	0.989	0.988																
-43	0.991	0.990	0.990																	
-44	0.991	0.991																		
-45	0.992																			
-46																				
-47																				
-48																				
-49																				
-50																				
Beneficiary older than Retiree	-51	-52	-53	-54	-55															
Beneficiary older than Retiree	-56	-57	-58	-59	-60															
Beneficiary older than Retiree	-61	-62	-63	-64	-65															

**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)**  
**Actuarial Equivalency Factors Effective January 1, 2024**

**Table 8a: 100% Joint and Survivor Annuity with Pop-up Feature - Option 2A - Healthy Members**  
 (Factor Multiplied by Option 1 Non-Refund Life Annuity)

Beneficiary Age Difference	Attained Age at Retirement															
	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
Beneficiary younger than Retiree																
100																
99																0.122
98															0.130	0.122
97														0.138	0.130	0.123
96													0.146	0.138	0.130	0.123
95												0.155	0.146	0.138	0.130	0.123
94											0.166	0.156	0.146	0.138	0.130	0.123
93										0.176	0.166	0.156	0.147	0.138	0.130	0.123
92									0.188	0.177	0.166	0.156	0.147	0.138	0.130	0.123
91								0.201	0.188	0.177	0.166	0.156	0.147	0.138	0.131	0.123
90							0.214	0.201	0.188	0.177	0.166	0.156	0.147	0.138	0.131	0.123
89						0.229	0.214	0.201	0.189	0.177	0.166	0.156	0.147	0.139	0.131	0.124
88					0.244	0.229	0.215	0.201	0.189	0.177	0.166	0.156	0.147	0.139	0.131	0.124
87				0.260	0.244	0.229	0.215	0.201	0.189	0.177	0.167	0.157	0.147	0.139	0.131	0.124
86			0.277	0.260	0.244	0.229	0.215	0.202	0.189	0.177	0.167	0.157	0.148	0.139	0.131	0.124
85		0.294	0.277	0.260	0.244	0.229	0.215	0.202	0.189	0.178	0.167	0.157	0.148	0.139	0.131	0.124
84	0.312	0.294	0.277	0.261	0.245	0.230	0.215	0.202	0.189	0.178	0.167	0.157	0.148	0.140	0.132	0.124
83	0.313	0.295	0.277	0.261	0.245	0.230	0.216	0.202	0.190	0.178	0.167	0.157	0.148	0.140	0.132	0.125
82	0.313	0.295	0.278	0.261	0.245	0.230	0.216	0.202	0.190	0.178	0.168	0.158	0.148	0.140	0.132	0.125
81	0.313	0.295	0.278	0.261	0.245	0.230	0.216	0.203	0.190	0.179	0.168	0.158	0.149	0.140	0.132	0.125
80	0.313	0.295	0.278	0.262	0.246	0.231	0.216	0.203	0.190	0.179	0.168	0.158	0.149	0.140	0.133	0.125
79	0.314	0.296	0.278	0.262	0.246	0.231	0.217	0.203	0.191	0.179	0.168	0.158	0.149	0.141	0.133	0.126
78	0.314	0.296	0.279	0.262	0.246	0.231	0.217	0.203	0.191	0.179	0.169	0.159	0.149	0.141	0.133	0.126
77	0.314	0.296	0.279	0.262	0.247	0.231	0.217	0.204	0.191	0.180	0.169	0.159	0.150	0.141	0.133	0.126
76	0.315	0.297	0.279	0.263	0.247	0.232	0.217	0.204	0.192	0.180	0.169	0.159	0.150	0.141	0.134	0.126
75	0.315	0.297	0.280	0.263	0.247	0.232	0.218	0.204	0.192	0.180	0.169	0.160	0.150	0.142	0.134	0.127
74	0.315	0.297	0.280	0.263	0.248	0.232	0.218	0.205	0.192	0.181	0.170	0.160	0.151	0.142	0.134	0.127
73	0.316	0.298	0.281	0.264	0.248	0.233	0.218	0.205	0.193	0.181	0.170	0.160	0.151	0.143	0.135	0.127
72	0.316	0.298	0.281	0.264	0.248	0.233	0.219	0.205	0.193	0.181	0.171	0.161	0.151	0.143	0.135	0.128
71	0.317	0.299	0.281	0.265	0.249	0.234	0.219	0.206	0.193	0.182	0.171	0.161	0.152	0.143	0.135	0.128
70	0.317	0.299	0.282	0.265	0.249	0.234	0.220	0.206	0.194	0.182	0.171	0.161	0.152	0.144	0.136	0.129
69	0.318	0.300	0.282	0.266	0.250	0.234	0.220	0.207	0.194	0.183	0.172	0.162	0.153	0.144	0.136	0.129
68	0.318	0.300	0.283	0.266	0.250	0.235	0.221	0.207	0.195	0.183	0.172	0.162	0.153	0.145	0.137	0.130
67	0.319	0.301	0.283	0.267	0.251	0.235	0.221	0.208	0.195	0.184	0.173	0.163	0.154	0.145	0.137	0.130
66	0.319	0.301	0.284	0.267	0.251	0.236	0.222	0.208	0.196	0.184	0.173	0.163	0.154	0.146	0.138	0.131

**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)**  
**Actuarial Equivalency Factors Effective January 1, 2024**

**Table 8a: 100% Joint and Survivor Annuity with Pop-up Feature - Option 2A - Healthy Members**  
 (Factor Multiplied by Option 1 Non-Refund Life Annuity)

	Beneficiary Age Difference	Attained Age at Retirement															
		85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
Beneficiary younger than Retiree	65	0.320	0.302	0.284	0.268	0.252	0.237	0.222	0.209	0.196	0.185	0.174	0.164	0.155	0.146	0.138	0.131
	64	0.320	0.302	0.285	0.268	0.252	0.237	0.223	0.210	0.197	0.185	0.175	0.165	0.155	0.147	0.139	0.132
	63	0.321	0.303	0.286	0.269	0.253	0.238	0.224	0.210	0.198	0.186	0.175	0.165	0.156	0.147	0.140	0.132
	62	0.322	0.304	0.286	0.270	0.254	0.239	0.224	0.211	0.198	0.187	0.176	0.166	0.157	0.148	0.140	0.133
	61	0.322	0.305	0.287	0.271	0.255	0.239	0.225	0.212	0.199	0.187	0.177	0.167	0.157	0.149	0.141	0.134
Beneficiary younger than Retiree	60	0.323	0.305	0.288	0.271	0.255	0.240	0.226	0.212	0.200	0.188	0.177	0.167	0.158	0.150	0.142	0.135
	59	0.324	0.306	0.289	0.272	0.256	0.241	0.227	0.213	0.201	0.189	0.178	0.168	0.159	0.150	0.143	0.135
	58	0.325	0.307	0.290	0.273	0.257	0.242	0.228	0.214	0.202	0.190	0.179	0.169	0.160	0.151	0.143	0.136
	57	0.326	0.308	0.291	0.274	0.258	0.243	0.228	0.215	0.202	0.191	0.180	0.170	0.161	0.152	0.144	0.137
	56	0.327	0.309	0.292	0.275	0.259	0.244	0.229	0.216	0.203	0.192	0.181	0.171	0.162	0.153	0.145	0.138
	55	0.328	0.310	0.293	0.276	0.260	0.245	0.230	0.217	0.204	0.193	0.182	0.172	0.163	0.154	0.146	0.139
	54	0.329	0.311	0.294	0.277	0.261	0.246	0.232	0.218	0.206	0.194	0.183	0.173	0.164	0.155	0.148	0.140
	53	0.330	0.312	0.295	0.278	0.262	0.247	0.233	0.219	0.207	0.195	0.184	0.174	0.165	0.157	0.149	0.142
	52	0.332	0.314	0.296	0.280	0.264	0.248	0.234	0.221	0.208	0.196	0.185	0.175	0.166	0.158	0.150	0.143
	51	0.333	0.315	0.298	0.281	0.265	0.250	0.235	0.222	0.209	0.198	0.187	0.177	0.168	0.159	0.151	0.144
	50	0.334	0.316	0.299	0.282	0.266	0.251	0.237	0.223	0.211	0.199	0.188	0.178	0.169	0.161	0.153	0.145
	49	0.336	0.318	0.301	0.284	0.268	0.253	0.238	0.225	0.212	0.201	0.190	0.180	0.170	0.162	0.154	0.147
	48	0.337	0.320	0.302	0.285	0.269	0.254	0.240	0.226	0.214	0.202	0.191	0.181	0.172	0.163	0.156	0.148
	47	0.339	0.321	0.304	0.287	0.271	0.256	0.242	0.228	0.215	0.204	0.193	0.183	0.174	0.165	0.157	0.150
	46	0.341	0.323	0.306	0.289	0.273	0.258	0.243	0.230	0.217	0.205	0.195	0.185	0.175	0.167	0.159	0.152
	45	0.343	0.325	0.308	0.291	0.275	0.260	0.245	0.232	0.219	0.207	0.196	0.186	0.177	0.168	0.161	0.153
	44	0.345	0.327	0.310	0.293	0.277	0.262	0.247	0.234	0.221	0.209	0.198	0.188	0.179	0.170	0.162	0.155
	43	0.347	0.329	0.312	0.295	0.279	0.264	0.249	0.236	0.223	0.211	0.200	0.190	0.181	0.172	0.164	0.157
	42	0.349	0.331	0.314	0.297	0.281	0.266	0.251	0.238	0.225	0.213	0.202	0.192	0.183	0.174	0.167	0.159
	41	0.352	0.334	0.316	0.300	0.284	0.268	0.254	0.240	0.227	0.215	0.205	0.194	0.185	0.177	0.169	0.162
40	0.354	0.336	0.319	0.302	0.286	0.271	0.256	0.242	0.230	0.218	0.207	0.197	0.188	0.179	0.171	0.164	
39	0.357	0.339	0.321	0.305	0.289	0.273	0.259	0.245	0.232	0.220	0.209	0.199	0.190	0.182	0.174	0.167	
38	0.359	0.342	0.324	0.307	0.291	0.276	0.261	0.248	0.235	0.223	0.212	0.202	0.193	0.184	0.177	0.170	
37	0.362	0.344	0.327	0.310	0.294	0.279	0.264	0.250	0.238	0.226	0.215	0.205	0.196	0.187	0.180	0.173	
36	0.365	0.347	0.330	0.313	0.297	0.282	0.267	0.253	0.241	0.229	0.218	0.208	0.199	0.191	0.183	0.176	
35	0.369	0.351	0.333	0.316	0.300	0.285	0.270	0.257	0.244	0.232	0.221	0.211	0.202	0.194	0.187	0.180	
34	0.372	0.354	0.337	0.320	0.304	0.288	0.274	0.260	0.247	0.236	0.225	0.215	0.206	0.198	0.190	0.183	
33	0.375	0.357	0.340	0.323	0.307	0.292	0.277	0.264	0.251	0.239	0.229	0.219	0.210	0.202	0.194	0.188	
32	0.379	0.361	0.344	0.327	0.311	0.296	0.281	0.268	0.255	0.243	0.233	0.223	0.214	0.206	0.199	0.192	
31	0.383	0.365	0.348	0.331	0.315	0.300	0.285	0.272	0.259	0.248	0.237	0.227	0.218	0.210	0.203	0.197	

**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)**  
**Actuarial Equivalency Factors Effective January 1, 2024**

**Table 8a: 100% Joint and Survivor Annuity with Pop-up Feature - Option 2A - Healthy Members**  
 (Factor Multiplied by Option 1 Non-Refund Life Annuity)

Beneficiary Age Difference	Attained Age at Retirement																
	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100	
30	0.387	0.369	0.352	0.335	0.319	0.304	0.290	0.276	0.264	0.252	0.242	0.232	0.223	0.215	0.208	0.202	
29	0.392	0.374	0.357	0.340	0.324	0.309	0.295	0.281	0.269	0.257	0.247	0.237	0.228	0.220	0.213	0.207	
28	0.397	0.379	0.362	0.345	0.329	0.314	0.300	0.286	0.274	0.262	0.252	0.242	0.234	0.226	0.219	0.213	
27	0.402	0.384	0.367	0.350	0.334	0.319	0.305	0.292	0.279	0.268	0.258	0.248	0.240	0.232	0.225	0.219	
26	0.407	0.389	0.372	0.356	0.340	0.325	0.311	0.298	0.285	0.274	0.264	0.254	0.246	0.238	0.232	0.226	
Beneficiary younger than Retiree	25	0.413	0.395	0.378	0.362	0.346	0.331	0.317	0.304	0.292	0.280	0.270	0.261	0.253	0.245	0.239	0.233
	24	0.419	0.401	0.384	0.368	0.352	0.338	0.323	0.310	0.298	0.287	0.277	0.268	0.260	0.253	0.246	0.241
	23	0.425	0.408	0.391	0.375	0.359	0.344	0.330	0.318	0.306	0.295	0.285	0.276	0.268	0.261	0.254	0.249
	22	0.432	0.415	0.398	0.382	0.366	0.352	0.338	0.325	0.313	0.302	0.293	0.284	0.276	0.269	0.263	0.258
	21	0.439	0.422	0.406	0.390	0.374	0.360	0.346	0.333	0.321	0.311	0.301	0.292	0.285	0.278	0.272	0.268
	20	0.447	0.430	0.413	0.398	0.382	0.368	0.354	0.342	0.330	0.320	0.310	0.302	0.294	0.288	0.282	0.278
	19	0.455	0.438	0.422	0.406	0.391	0.377	0.363	0.351	0.339	0.329	0.320	0.312	0.304	0.298	0.293	0.289
	18	0.463	0.447	0.431	0.415	0.400	0.386	0.373	0.360	0.349	0.339	0.330	0.322	0.315	0.309	0.304	0.301
	17	0.473	0.456	0.440	0.425	0.410	0.396	0.383	0.371	0.360	0.350	0.341	0.333	0.327	0.321	0.317	0.313
	16	0.482	0.466	0.450	0.435	0.420	0.406	0.394	0.382	0.371	0.361	0.353	0.345	0.339	0.334	0.329	0.326
	15	0.492	0.476	0.460	0.445	0.431	0.417	0.405	0.393	0.383	0.373	0.365	0.358	0.352	0.347	0.343	0.340
	14	0.503	0.487	0.471	0.457	0.443	0.429	0.417	0.405	0.395	0.386	0.378	0.371	0.365	0.361	0.357	0.354
	13	0.514	0.498	0.483	0.468	0.455	0.442	0.429	0.418	0.408	0.399	0.392	0.385	0.379	0.375	0.371	0.369
	12	0.525	0.510	0.495	0.481	0.467	0.454	0.443	0.432	0.422	0.413	0.406	0.400	0.394	0.390	0.387	0.384
	11	0.537	0.522	0.508	0.494	0.481	0.468	0.456	0.446	0.436	0.428	0.421	0.415	0.410	0.405	0.402	0.400
	10	0.550	0.535	0.521	0.507	0.494	0.482	0.471	0.461	0.451	0.443	0.436	0.430	0.425	0.421	0.418	0.415
	9	0.563	0.549	0.535	0.521	0.509	0.497	0.486	0.476	0.467	0.459	0.452	0.446	0.441	0.437	0.434	0.432
	8	0.576	0.562	0.549	0.536	0.524	0.512	0.501	0.492	0.483	0.475	0.468	0.463	0.458	0.454	0.450	0.448
	7	0.590	0.577	0.564	0.551	0.539	0.528	0.517	0.508	0.499	0.491	0.485	0.479	0.474	0.470	0.467	0.464
	6	0.604	0.591	0.579	0.566	0.555	0.544	0.533	0.524	0.516	0.508	0.501	0.496	0.491	0.487	0.483	0.481
Beneficiary younger than Retiree	5	0.619	0.606	0.594	0.582	0.571	0.560	0.550	0.541	0.532	0.525	0.518	0.512	0.507	0.503	0.500	0.497
	4	0.634	0.622	0.610	0.598	0.587	0.576	0.566	0.557	0.549	0.541	0.535	0.529	0.524	0.520	0.516	0.513
	3	0.649	0.637	0.625	0.614	0.603	0.593	0.583	0.574	0.565	0.558	0.551	0.545	0.540	0.536	0.532	0.529
	2	0.664	0.652	0.641	0.630	0.619	0.609	0.599	0.590	0.582	0.574	0.568	0.562	0.556	0.552	0.548	0.544
	1	0.679	0.668	0.657	0.646	0.635	0.625	0.616	0.607	0.598	0.591	0.584	0.578	0.572	0.568	0.563	0.560
Beneficiary same age as Retiree	0	<b>0.694</b>	<b>0.683</b>	<b>0.672</b>	<b>0.662</b>	<b>0.651</b>	<b>0.641</b>	<b>0.632</b>	<b>0.623</b>	<b>0.614</b>	<b>0.607</b>	<b>0.600</b>	<b>0.593</b>	<b>0.588</b>	<b>0.583</b>	<b>0.579</b>	<b>0.575</b>
Beneficiary older than	-1	0.709	0.698	0.687	0.677	0.667	0.657	0.647	0.638	0.630	0.622	0.615	0.609	0.603	0.598	0.593	0.589
	-2	0.723	0.713	0.702	0.692	0.682	0.672	0.663	0.654	0.645	0.637	0.630	0.624	0.618	0.613	0.608	0.603
	-3	0.737	0.727	0.717	0.707	0.697	0.687	0.678	0.669	0.660	0.652	0.645	0.638	0.632	0.627	0.621	0.616

**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)**  
**Actuarial Equivalency Factors Effective January 1, 2024**

**Table 8a: 100% Joint and Survivor Annuity with Pop-up Feature - Option 2A - Healthy Members**  
 (Factor Multiplied by Option 1 Non-Refund Life Annuity)

Beneficiary Age Difference	Attained Age at Retirement																
	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100	
Retiree	-4	0.751	0.741	0.731	0.721	0.711	0.702	0.692	0.683	0.675	0.667	0.659	0.652	0.646	0.640	0.634	0.629
	-5	0.764	0.755	0.745	0.735	0.725	0.715	0.706	0.697	0.688	0.680	0.673	0.666	0.659	0.653	0.647	0.641
	-6	0.777	0.767	0.758	0.748	0.738	0.729	0.719	0.710	0.702	0.694	0.686	0.679	0.672	0.665	0.658	0.652
	-7	0.789	0.780	0.770	0.761	0.751	0.742	0.732	0.723	0.715	0.706	0.698	0.691	0.683	0.676	0.669	0.662
	-8	0.801	0.792	0.782	0.773	0.763	0.754	0.745	0.735	0.727	0.718	0.710	0.702	0.694	0.686	0.679	0.671
	-9	0.812	0.803	0.794	0.784	0.775	0.766	0.756	0.747	0.738	0.729	0.721	0.713	0.704	0.696	0.687	0.678
	-10	0.822	0.813	0.804	0.795	0.786	0.777	0.767	0.758	0.749	0.740	0.731	0.722	0.713	0.704	0.695	0.684
	-11	0.832	0.823	0.815	0.806	0.796	0.787	0.778	0.768	0.759	0.750	0.740	0.731	0.721	0.711	0.700	
	-12	0.841	0.833	0.824	0.815	0.806	0.797	0.787	0.778	0.768	0.758	0.749	0.739	0.728	0.716		
	-13	0.850	0.842	0.833	0.825	0.815	0.806	0.796	0.787	0.777	0.767	0.756	0.745	0.733			
	-14	0.858	0.850	0.842	0.833	0.824	0.814	0.805	0.794	0.784	0.774	0.762	0.750				
	-15	0.866	0.858	0.850	0.841	0.832	0.822	0.812	0.802	0.791	0.779	0.767					
	Beneficiary older than Retiree	-16	0.873	0.865	0.857	0.848	0.839	0.829	0.819	0.808	0.796	0.784					
		-17	0.880	0.872	0.864	0.855	0.845	0.835	0.824	0.813	0.800						
		-18	0.886	0.878	0.870	0.861	0.851	0.841	0.829	0.817							
-19		0.891	0.883	0.875	0.866	0.856	0.845	0.833									
-20		0.896	0.888	0.880	0.870	0.860	0.848										
-21		0.901	0.893	0.884	0.874	0.863											
-22		0.905	0.896	0.887	0.877												
-23		0.908	0.899	0.890													
-24		0.911	0.902														
-25		0.913															
-26																	
-27																	
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**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)**  
**Actuarial Equivalency Factors Effective January 1, 2024**

**Table 8a: 100% Joint and Survivor Annuity with Pop-up Feature - Option 2A - Healthy Members**  
 (Factor Multiplied by Option 1 Non-Refund Life Annuity)

Beneficiary Age Difference	Attained Age at Retirement															
	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
-40																
-41																
-42																
-43																
-44																
-45																
-46																
-47																
-48																
-49																
-50																
Beneficiary older than Retiree -51																
-52																
-53																
-54																
-55																
Beneficiary older than Retiree -56																
-57																
-58																
-59																
-60																
Beneficiary older than Retiree -61																
-62																
-63																
-64																
-65																



**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)**  
**Actuarial Equivalency Factors Effective January 1, 2024**

**Table 8b: 100% Joint and Survivor Annuity with Pop-up Feature - Option 2A - Disabled Members**  
 (Factor Multiplied by Option 1 Non-Refund Life Annuity)

Beneficiary Age Difference	Attained Age at Retirement																				
	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	
Beneficiary 75																					
younger 74																					
than 73																					
Retiree 72																					
71																					
70																					
69																					
68																					
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46																					
45																					
44																					
43																					
42																					
41																					
Beneficiary 40																					
younger 39																					
than 38																					
Retiree 37																				0.797	
36																			0.805	0.797	
																			0.812	0.805	0.798

**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)**  
**Actuarial Equivalency Factors Effective January 1, 2024**

**Table 8b: 100% Joint and Survivor Annuity with Pop-up Feature - Option 2A - Disabled Members**  
 (Factor Multiplied by Option 1 Non-Refund Life Annuity)

Beneficiary Age Difference	Attained Age at Retirement																				
	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	
35																	0.820	0.813	0.806	0.798	
34																0.827	0.820	0.813	0.806	0.799	
33															0.834	0.827	0.821	0.814	0.807	0.800	
32														0.841	0.835	0.828	0.821	0.815	0.807	0.800	
31													0.847	0.841	0.835	0.829	0.822	0.815	0.808	0.801	
30												0.854	0.848	0.842	0.836	0.829	0.823	0.816	0.809	0.802	
29											0.860	0.854	0.848	0.842	0.836	0.830	0.823	0.817	0.810	0.803	
28										0.866	0.860	0.855	0.849	0.843	0.837	0.831	0.824	0.817	0.810	0.803	
27									0.872	0.866	0.861	0.855	0.850	0.844	0.838	0.831	0.825	0.818	0.811	0.804	
26								0.877	0.872	0.867	0.862	0.856	0.850	0.844	0.838	0.832	0.826	0.819	0.812	0.805	
25							0.883	0.878	0.873	0.868	0.862	0.857	0.851	0.845	0.839	0.833	0.826	0.820	0.813	0.806	
24						0.888	0.883	0.878	0.873	0.868	0.863	0.857	0.852	0.846	0.840	0.834	0.827	0.821	0.814	0.807	
23					0.893	0.888	0.884	0.879	0.874	0.869	0.864	0.858	0.853	0.847	0.841	0.835	0.828	0.822	0.815	0.808	
22				0.897	0.893	0.889	0.884	0.880	0.875	0.870	0.864	0.859	0.853	0.848	0.842	0.835	0.829	0.823	0.816	0.809	
21			0.902	0.898	0.894	0.889	0.885	0.880	0.875	0.870	0.865	0.860	0.854	0.848	0.843	0.836	0.830	0.824	0.817	0.810	
20		0.906	0.902	0.899	0.894	0.890	0.886	0.881	0.876	0.871	0.866	0.861	0.855	0.849	0.843	0.837	0.831	0.825	0.818	0.812	
19	0.909	0.906	0.903	0.899	0.895	0.891	0.886	0.882	0.877	0.872	0.867	0.861	0.856	0.850	0.844	0.838	0.832	0.826	0.819	0.813	
18	0.910	0.907	0.904	0.900	0.896	0.891	0.887	0.882	0.878	0.873	0.868	0.862	0.857	0.851	0.846	0.840	0.833	0.827	0.821	0.814	
17	0.910	0.907	0.904	0.900	0.896	0.892	0.888	0.883	0.878	0.873	0.868	0.863	0.858	0.852	0.847	0.841	0.835	0.828	0.822	0.816	
16	0.911	0.908	0.905	0.901	0.897	0.893	0.888	0.884	0.879	0.874	0.869	0.864	0.859	0.853	0.848	0.842	0.836	0.830	0.823	0.817	
15	0.912	0.909	0.905	0.902	0.898	0.894	0.889	0.885	0.880	0.875	0.870	0.865	0.860	0.855	0.849	0.843	0.837	0.831	0.825	0.818	
14	0.912	0.909	0.906	0.902	0.899	0.894	0.890	0.886	0.881	0.876	0.871	0.866	0.861	0.856	0.850	0.844	0.839	0.833	0.826	0.820	
13	0.913	0.910	0.907	0.903	0.899	0.895	0.891	0.887	0.882	0.877	0.872	0.867	0.862	0.857	0.851	0.846	0.840	0.834	0.828	0.822	
12	0.914	0.911	0.908	0.904	0.900	0.896	0.892	0.887	0.883	0.878	0.874	0.869	0.863	0.858	0.853	0.847	0.841	0.836	0.829	0.823	
11	0.914	0.911	0.908	0.905	0.901	0.897	0.893	0.888	0.884	0.879	0.875	0.870	0.865	0.859	0.854	0.849	0.843	0.837	0.831	0.825	
10	0.915	0.912	0.909	0.906	0.902	0.898	0.894	0.889	0.885	0.881	0.876	0.871	0.866	0.861	0.856	0.850	0.844	0.839	0.833	0.827	
9	0.916	0.913	0.910	0.906	0.903	0.899	0.895	0.891	0.886	0.882	0.877	0.872	0.867	0.862	0.857	0.852	0.846	0.840	0.835	0.829	
8	0.916	0.914	0.911	0.907	0.904	0.900	0.896	0.892	0.887	0.883	0.878	0.874	0.869	0.864	0.859	0.853	0.848	0.842	0.836	0.831	
7	0.917	0.915	0.912	0.908	0.905	0.901	0.897	0.893	0.888	0.884	0.880	0.875	0.870	0.865	0.860	0.855	0.850	0.844	0.838	0.833	
6	0.918	0.915	0.913	0.909	0.906	0.902	0.898	0.894	0.890	0.885	0.881	0.876	0.872	0.867	0.862	0.857	0.851	0.846	0.840	0.835	
Beneficiary younger than Retiree																					
5	0.919	0.916	0.913	0.910	0.907	0.903	0.899	0.895	0.891	0.887	0.882	0.878	0.873	0.868	0.863	0.858	0.853	0.848	0.842	0.837	
4	0.920	0.917	0.914	0.911	0.908	0.904	0.900	0.896	0.892	0.888	0.884	0.879	0.875	0.870	0.865	0.860	0.855	0.850	0.844	0.839	
3	0.921	0.918	0.915	0.912	0.909	0.905	0.901	0.898	0.894	0.889	0.885	0.881	0.876	0.872	0.867	0.862	0.857	0.852	0.846	0.841	
2	0.922	0.919	0.916	0.913	0.910	0.906	0.903	0.899	0.895	0.891	0.887	0.882	0.878	0.873	0.869	0.864	0.859	0.854	0.849	0.843	
1	0.922	0.920	0.917	0.914	0.911	0.907	0.904	0.900	0.896	0.892	0.888	0.884	0.880	0.875	0.870	0.866	0.861	0.856	0.851	0.846	
Beneficiary same age as Retiree	<b>0</b>	<b>0.923</b>	<b>0.921</b>	<b>0.918</b>	<b>0.915</b>	<b>0.912</b>	<b>0.909</b>	<b>0.905</b>	<b>0.901</b>	<b>0.898</b>	<b>0.894</b>	<b>0.890</b>	<b>0.886</b>	<b>0.881</b>	<b>0.877</b>	<b>0.872</b>	<b>0.868</b>	<b>0.863</b>	<b>0.858</b>	<b>0.853</b>	<b>0.848</b>

**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)**  
**Actuarial Equivalency Factors Effective January 1, 2024**

**Table 8b: 100% Joint and Survivor Annuity with Pop-up Feature - Option 2A - Disabled Members**  
 (Factor Multiplied by Option 1 Non-Refund Life Annuity)

Beneficiary Age Difference	Attained Age at Retirement																			
	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39
Beneficiary older than Retiree -1	0.924	0.922	0.919	0.916	0.913	0.910	0.906	0.903	0.899	0.895	0.891	0.887	0.883	0.879	0.874	0.870	0.865	0.860	0.855	0.850
-2	0.925	0.923	0.920	0.918	0.914	0.911	0.908	0.904	0.900	0.897	0.893	0.889	0.885	0.880	0.876	0.872	0.867	0.862	0.858	0.853
-3	0.926	0.924	0.922	0.919	0.916	0.912	0.909	0.905	0.902	0.898	0.894	0.890	0.886	0.882	0.878	0.874	0.869	0.865	0.860	0.855
-4	0.927	0.925	0.923	0.920	0.917	0.914	0.910	0.907	0.903	0.900	0.896	0.892	0.888	0.884	0.880	0.876	0.871	0.867	0.862	0.858
-5	0.928	0.926	0.924	0.921	0.918	0.915	0.912	0.908	0.905	0.901	0.898	0.894	0.890	0.886	0.882	0.878	0.873	0.869	0.865	0.860
-6	0.929	0.927	0.925	0.922	0.919	0.916	0.913	0.910	0.906	0.903	0.899	0.896	0.892	0.888	0.884	0.880	0.876	0.871	0.867	0.863
-7	0.930	0.928	0.926	0.923	0.920	0.917	0.914	0.911	0.908	0.904	0.901	0.897	0.894	0.890	0.886	0.882	0.878	0.874	0.869	0.865
-8	0.931	0.929	0.927	0.924	0.922	0.919	0.916	0.913	0.909	0.906	0.903	0.899	0.895	0.892	0.888	0.884	0.880	0.876	0.872	0.868
-9	0.932	0.930	0.928	0.926	0.923	0.920	0.917	0.914	0.911	0.908	0.904	0.901	0.897	0.894	0.890	0.886	0.882	0.878	0.874	0.870
-10	0.933	0.931	0.929	0.927	0.924	0.921	0.918	0.915	0.912	0.909	0.906	0.903	0.899	0.896	0.892	0.888	0.885	0.881	0.877	0.873
-11	0.934	0.932	0.930	0.928	0.925	0.923	0.920	0.917	0.914	0.911	0.908	0.904	0.901	0.898	0.894	0.890	0.887	0.883	0.879	0.875
-12	0.935	0.934	0.932	0.929	0.927	0.924	0.921	0.918	0.915	0.912	0.909	0.906	0.903	0.900	0.896	0.893	0.889	0.885	0.882	0.878
-13	0.936	0.935	0.933	0.930	0.928	0.925	0.923	0.920	0.917	0.914	0.911	0.908	0.905	0.901	0.898	0.895	0.891	0.888	0.884	0.880
-14	0.937	0.936	0.934	0.932	0.929	0.927	0.924	0.921	0.919	0.916	0.913	0.910	0.907	0.903	0.900	0.897	0.894	0.890	0.887	0.883
-15	0.938	0.937	0.935	0.933	0.931	0.928	0.925	0.923	0.920	0.917	0.914	0.912	0.909	0.905	0.902	0.899	0.896	0.892	0.889	0.886
-16	0.939	0.938	0.936	0.934	0.932	0.929	0.927	0.924	0.922	0.919	0.916	0.913	0.910	0.907	0.904	0.901	0.898	0.895	0.892	0.888
-17	0.940	0.939	0.937	0.935	0.933	0.931	0.928	0.926	0.923	0.921	0.918	0.915	0.912	0.909	0.907	0.903	0.900	0.897	0.894	0.891
-18	0.942	0.940	0.939	0.937	0.934	0.932	0.930	0.927	0.925	0.922	0.920	0.917	0.914	0.911	0.909	0.906	0.903	0.900	0.897	0.894
-19	0.943	0.941	0.940	0.938	0.936	0.934	0.931	0.929	0.927	0.924	0.922	0.919	0.916	0.914	0.911	0.908	0.905	0.902	0.899	0.896
-20	0.944	0.943	0.941	0.939	0.937	0.935	0.933	0.930	0.928	0.926	0.923	0.921	0.918	0.916	0.913	0.910	0.907	0.905	0.902	0.899
-21	0.945	0.944	0.942	0.941	0.939	0.936	0.934	0.932	0.930	0.927	0.925	0.923	0.920	0.918	0.915	0.912	0.910	0.907	0.904	0.902
-22	0.946	0.945	0.943	0.942	0.940	0.938	0.936	0.934	0.931	0.929	0.927	0.925	0.922	0.920	0.917	0.915	0.912	0.910	0.907	0.904
-23	0.947	0.946	0.945	0.943	0.941	0.939	0.937	0.935	0.933	0.931	0.929	0.926	0.924	0.922	0.919	0.917	0.915	0.912	0.910	0.907
-24	0.948	0.947	0.946	0.944	0.943	0.941	0.939	0.937	0.935	0.933	0.931	0.928	0.926	0.924	0.922	0.919	0.917	0.915	0.912	0.910
-25	0.949	0.948	0.947	0.946	0.944	0.942	0.940	0.938	0.936	0.934	0.932	0.930	0.928	0.926	0.924	0.922	0.919	0.917	0.915	0.913
-26	0.951	0.950	0.949	0.947	0.945	0.944	0.942	0.940	0.938	0.936	0.934	0.932	0.930	0.928	0.926	0.924	0.922	0.920	0.918	0.915
-27	0.952	0.951	0.950	0.948	0.947	0.945	0.943	0.942	0.940	0.938	0.936	0.934	0.932	0.930	0.928	0.926	0.924	0.922	0.920	0.918
-28	0.953	0.952	0.951	0.950	0.948	0.947	0.945	0.943	0.942	0.940	0.938	0.936	0.934	0.933	0.931	0.929	0.927	0.925	0.923	0.921
-29	0.954	0.953	0.952	0.951	0.950	0.948	0.947	0.945	0.943	0.942	0.940	0.938	0.937	0.935	0.933	0.931	0.929	0.927	0.926	0.924
-30	0.955	0.955	0.954	0.953	0.951	0.950	0.948	0.947	0.945	0.943	0.942	0.940	0.939	0.937	0.935	0.934	0.932	0.930	0.928	0.927
-31	0.956	0.956	0.955	0.954	0.953	0.951	0.950	0.948	0.947	0.945	0.944	0.942	0.941	0.939	0.938	0.936	0.934	0.933	0.931	0.929
-32	0.958	0.957	0.956	0.955	0.954	0.953	0.951	0.950	0.949	0.947	0.946	0.944	0.943	0.941	0.940	0.938	0.937	0.935	0.934	0.932
-33	0.959	0.958	0.958	0.957	0.955	0.954	0.953	0.952	0.950	0.949	0.948	0.946	0.945	0.943	0.942	0.941	0.939	0.938	0.936	0.935
-34	0.960	0.960	0.959	0.958	0.957	0.956	0.954	0.953	0.952	0.951	0.949	0.948	0.947	0.946	0.944	0.943	0.942	0.940	0.939	0.938
-35	0.961	0.961	0.960	0.959	0.958	0.957	0.956	0.955	0.954	0.953	0.951	0.950	0.949	0.948	0.947	0.945	0.944	0.943	0.942	0.940
Beneficiary older than Retiree -36	0.962	0.962	0.962	0.961	0.960	0.959	0.958	0.957	0.955	0.954	0.953	0.952	0.951	0.950	0.949	0.948	0.947	0.945	0.944	0.943
-37	0.964	0.963	0.963	0.962	0.961	0.960	0.959	0.958	0.957	0.956	0.955	0.954	0.953	0.952	0.951	0.950	0.949	0.948	0.947	0.946
-38	0.965	0.965	0.964	0.963	0.963	0.962	0.961	0.960	0.959	0.958	0.957	0.956	0.955	0.954	0.953	0.952	0.951	0.950	0.949	0.948
-39	0.966	0.966	0.965	0.965	0.964	0.963	0.962	0.961	0.961	0.960	0.959	0.958	0.957	0.956	0.955	0.954	0.954	0.953	0.952	0.951
-40	0.967	0.967	0.967	0.966	0.965	0.965	0.964	0.963	0.962	0.961	0.961	0.960	0.959	0.958	0.957	0.957	0.956	0.955	0.954	0.954

**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)**  
**Actuarial Equivalency Factors Effective January 1, 2024**

**Table 8b: 100% Joint and Survivor Annuity with Pop-up Feature - Option 2A - Disabled Members**  
 (Factor Multiplied by Option 1 Non-Refund Life Annuity)

Beneficiary Age Difference	Attained Age at Retirement																			
	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39
Beneficiary -41	0.968	0.968	0.968	0.967	0.967	0.966	0.965	0.965	0.964	0.963	0.962	0.962	0.961	0.960	0.960	0.959	0.958	0.957	0.957	0.956
older -42	0.969	0.969	0.969	0.969	0.968	0.967	0.967	0.966	0.965	0.965	0.964	0.963	0.963	0.962	0.962	0.961	0.960	0.960	0.959	0.958
than -43	0.970	0.971	0.970	0.970	0.969	0.969	0.968	0.968	0.967	0.966	0.966	0.965	0.965	0.964	0.964	0.963	0.962	0.962	0.961	0.961
Retiree -44	0.972	0.972	0.972	0.971	0.971	0.970	0.970	0.969	0.969	0.968	0.967	0.967	0.966	0.966	0.965	0.965	0.965	0.964	0.964	0.963
-45	0.973	0.973	0.973	0.972	0.972	0.972	0.971	0.970	0.970	0.970	0.969	0.969	0.968	0.968	0.967	0.967	0.967	0.966	0.966	0.965
-46	0.974	0.974	0.974	0.974	0.973	0.973	0.972	0.972	0.971	0.971	0.971	0.970	0.970	0.970	0.969	0.969	0.968	0.968	0.968	0.967
-47	0.975	0.975	0.975	0.975	0.975	0.974	0.974	0.973	0.973	0.973	0.972	0.972	0.972	0.971	0.971	0.971	0.970	0.970	0.970	0.969
-48	0.976	0.976	0.976	0.976	0.976	0.975	0.975	0.975	0.974	0.974	0.974	0.973	0.973	0.973	0.973	0.972	0.972	0.972	0.971	0.971
-49	0.977	0.977	0.977	0.977	0.977	0.977	0.976	0.976	0.976	0.975	0.975	0.975	0.975	0.974	0.974	0.974	0.974	0.974	0.973	0.973
-50	0.978	0.978	0.978	0.978	0.978	0.978	0.977	0.977	0.977	0.977	0.977	0.976	0.976	0.976	0.976	0.976	0.975	0.975	0.975	0.975
-51	0.979	0.979	0.979	0.979	0.979	0.979	0.979	0.978	0.978	0.978	0.978	0.978	0.978	0.977	0.977	0.977	0.977	0.977	0.976	0.976
-52	0.980	0.980	0.980	0.980	0.980	0.980	0.980	0.980	0.979	0.979	0.979	0.979	0.979	0.979	0.979	0.979	0.978	0.978	0.978	0.978
-53	0.981	0.981	0.981	0.981	0.981	0.981	0.981	0.981	0.981	0.980	0.980	0.980	0.980	0.980	0.980	0.980	0.980	0.980	0.979	0.979
-54	0.981	0.982	0.982	0.982	0.982	0.982	0.982	0.982	0.982	0.982	0.982	0.982	0.981	0.981	0.981	0.981	0.981	0.981	0.981	0.980
-55	0.982	0.983	0.983	0.983	0.983	0.983	0.983	0.983	0.983	0.983	0.983	0.983	0.983	0.982	0.982	0.982	0.982	0.982	0.982	0.982
-56	0.983	0.984	0.984	0.984	0.984	0.984	0.984	0.984	0.984	0.984	0.984	0.984	0.984	0.984	0.983	0.983	0.983	0.983	0.983	0.983
-57	0.984	0.985	0.985	0.985	0.985	0.985	0.985	0.985	0.985	0.985	0.985	0.985	0.985	0.985	0.985	0.984	0.984	0.984	0.984	0.984
-58	0.985	0.985	0.986	0.986	0.986	0.986	0.986	0.986	0.986	0.986	0.986	0.986	0.986	0.986	0.986	0.985	0.985	0.985	0.985	0.985
-59	0.985	0.986	0.987	0.987	0.987	0.987	0.987	0.987	0.987	0.987	0.987	0.987	0.987	0.987	0.986	0.986	0.986	0.986	0.986	0.986
-60	0.986	0.987	0.987	0.987	0.988	0.987	0.987	0.987	0.987	0.987	0.987	0.987	0.987	0.987	0.987	0.987	0.987	0.987	0.987	0.986
-61	0.987	0.988	0.988	0.988	0.988	0.988	0.988	0.988	0.988	0.988	0.988	0.988	0.988	0.988	0.988	0.988	0.988	0.988	0.987	0.987
-62	0.988	0.988	0.989	0.989	0.989	0.989	0.989	0.989	0.989	0.989	0.989	0.989	0.989	0.989	0.989	0.989	0.989	0.988	0.988	0.988
-63	0.988	0.989	0.989	0.989	0.990	0.990	0.990	0.990	0.990	0.990	0.990	0.990	0.990	0.990	0.989	0.989	0.989	0.989	0.989	0.989
-64	0.989	0.990	0.990	0.990	0.990	0.990	0.990	0.990	0.990	0.990	0.990	0.990	0.990	0.990	0.990	0.990	0.990	0.990	0.989	0.989
-65	0.990	0.990	0.991	0.991	0.991	0.991	0.991	0.991	0.991	0.991	0.991	0.991	0.991	0.991	0.991	0.991	0.990	0.990	0.990	0.990
-66	0.990	0.991	0.991	0.991	0.991	0.991	0.991	0.991	0.991	0.991	0.991	0.991	0.991	0.991	0.991	0.991	0.991	0.991	0.991	0.990
-67	0.991	0.991	0.992	0.992	0.992	0.992	0.992	0.992	0.992	0.992	0.992	0.992	0.992	0.992	0.992	0.992	0.991	0.991	0.991	0.991
-68	0.991	0.992	0.992	0.992	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.992	0.992	0.992	0.991
-69	0.992	0.992	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.992	0.992	0.992	0.991
-70	0.992	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.992	0.992	0.992
-71	0.993	0.993	0.994	0.994	0.994	0.994	0.994	0.994	0.994	0.994	0.994	0.994	0.993	0.993	0.993	0.993	0.993	0.993	0.992	0.992
-72	0.993	0.994	0.994	0.994	0.994	0.994	0.994	0.994	0.994	0.994	0.994	0.994	0.994	0.994	0.994	0.993	0.993	0.993	0.992	0.992
-73	0.993	0.994	0.994	0.994	0.995	0.995	0.994	0.994	0.994	0.994	0.994	0.994	0.994	0.994	0.994	0.994	0.993	0.993	0.993	0.993
-74	0.994	0.994	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.994	0.994	0.994	0.994	0.994	0.994	0.993	0.993
-75	0.994	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.994	0.994	0.994	0.994	0.994	0.994	0.994
Beneficiary -76	0.994	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.994					
older -77	0.995	0.995	0.995	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.995	0.995	0.995	0.995	0.995					
than -78	0.995	0.995	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.995	0.995	0.995					
Retiree -79	0.995	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.995							
-80	0.995	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996								

**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)**  
**Actuarial Equivalency Factors Effective January 1, 2024**

**Table 8b: 100% Joint and Survivor Annuity with Pop-up Feature - Option 2A - Disabled Members**  
 (Factor Multiplied by Option 1 Non-Refund Life Annuity)

	Beneficiary Age Difference	Attained Age at Retirement																		
		20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38
Beneficiary	-81	0.996	0.996	0.996	0.997	0.997	0.996	0.996	0.996	0.996	0.996									
older	-82	0.996	0.996	0.997	0.997	0.997	0.997	0.996	0.996	0.996										
than	-83	0.996	0.996	0.997	0.997	0.997	0.997	0.997	0.997	0.996										
Retiree	-84	0.996	0.997	0.997	0.997	0.997	0.997	0.997												
	-85	0.996	0.997	0.997	0.997	0.997	0.997													
Beneficiary	-86	0.996	0.997	0.997	0.997	0.997														
older	-87	0.997	0.997	0.997	0.997															
than	-88	0.997	0.997	0.997																
Retiree	-89	0.997	0.997																	
	-90	0.997																		

**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)**  
**Actuarial Equivalency Factors Effective January 1, 2024**

**Table 8b: 100% Joint and Survivor Annuity with Pop-up Feature - Option 2A - Disabled Members**  
 (Factor Multiplied by Option 1 Non-Refund Life Annuity)

Beneficiary Age Difference	Attained Age at Retirement																			
	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59
Beneficiary 75																				
younger 74																				
than 73																				
Retiree 72																				
71																				
70																				
69																				
68																				
67																				
66																				
65																				
64																				
63																				
62																				
61																				
60																				
59																				0.625
58																				0.635
57																			0.636	0.626
56																		0.645	0.636	0.626
55																	0.654	0.645	0.636	0.627
54																0.663	0.655	0.646	0.637	0.627
53															0.672	0.664	0.655	0.646	0.637	0.628
52														0.680	0.672	0.664	0.656	0.647	0.638	0.628
51													0.689	0.681	0.673	0.665	0.656	0.647	0.638	0.629
50												0.697	0.689	0.681	0.673	0.665	0.657	0.648	0.639	0.629
49											0.705	0.698	0.690	0.682	0.674	0.666	0.657	0.649	0.640	0.630
48										0.713	0.706	0.698	0.690	0.682	0.674	0.666	0.658	0.649	0.640	0.631
47									0.721	0.714	0.706	0.699	0.691	0.683	0.675	0.667	0.659	0.650	0.641	0.632
46								0.730	0.722	0.714	0.707	0.699	0.691	0.684	0.676	0.668	0.659	0.651	0.642	0.632
45							0.738	0.730	0.722	0.715	0.707	0.700	0.692	0.684	0.676	0.668	0.660	0.651	0.643	0.633
44						0.747	0.739	0.731	0.723	0.715	0.708	0.700	0.693	0.685	0.677	0.669	0.661	0.652	0.643	0.634
43					0.755	0.747	0.739	0.731	0.724	0.716	0.709	0.701	0.693	0.686	0.678	0.670	0.662	0.653	0.644	0.635
42			0.764	0.756	0.748	0.740	0.732	0.724	0.717	0.709	0.702	0.694	0.686	0.679	0.671	0.662	0.654	0.645	0.636	
41		0.772	0.764	0.756	0.748	0.740	0.733	0.725	0.717	0.710	0.702	0.695	0.687	0.679	0.672	0.663	0.655	0.646	0.637	
Beneficiary 40																				
younger 39	0.789	0.781	0.773	0.765	0.757	0.749	0.741	0.733	0.726	0.718	0.711	0.703	0.696	0.688	0.680	0.672	0.664	0.656	0.647	0.638
than 38	0.789	0.781	0.774	0.766	0.758	0.750	0.742	0.735	0.727	0.720	0.712	0.705	0.697	0.690	0.682	0.674	0.666	0.658	0.649	0.640
Retiree 37	0.790	0.782	0.774	0.766	0.759	0.751	0.743	0.735	0.728	0.720	0.713	0.706	0.698	0.691	0.683	0.675	0.668	0.659	0.651	0.642
36	0.790	0.783	0.775	0.767	0.759	0.752	0.744	0.736	0.729	0.721	0.714	0.707	0.699	0.692	0.684	0.677	0.669	0.660	0.652	0.643

**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)**  
**Actuarial Equivalency Factors Effective January 1, 2024**

**Table 8b: 100% Joint and Survivor Annuity with Pop-up Feature - Option 2A - Disabled Members**  
 (Factor Multiplied by Option 1 Non-Refund Life Annuity)

Beneficiary Age Difference	Attained Age at Retirement																				
	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	
35	0.791	0.783	0.776	0.768	0.760	0.752	0.745	0.737	0.730	0.722	0.715	0.708	0.700	0.693	0.685	0.678	0.670	0.662	0.653	0.644	
34	0.792	0.784	0.776	0.769	0.761	0.753	0.745	0.738	0.730	0.723	0.716	0.709	0.702	0.694	0.687	0.679	0.671	0.663	0.655	0.646	
33	0.792	0.785	0.777	0.769	0.762	0.754	0.746	0.739	0.731	0.724	0.717	0.710	0.703	0.695	0.688	0.680	0.673	0.665	0.656	0.647	
32	0.793	0.785	0.778	0.770	0.763	0.755	0.747	0.740	0.732	0.725	0.718	0.711	0.704	0.697	0.689	0.682	0.674	0.666	0.658	0.649	
31	0.794	0.786	0.779	0.771	0.763	0.756	0.748	0.741	0.733	0.726	0.719	0.712	0.705	0.698	0.691	0.683	0.676	0.668	0.659	0.651	
30	0.794	0.787	0.780	0.772	0.764	0.757	0.749	0.742	0.735	0.728	0.721	0.714	0.706	0.699	0.692	0.685	0.677	0.669	0.661	0.653	
29	0.795	0.788	0.780	0.773	0.765	0.758	0.750	0.743	0.736	0.729	0.722	0.715	0.708	0.701	0.694	0.686	0.679	0.671	0.663	0.655	
28	0.796	0.789	0.781	0.774	0.766	0.759	0.751	0.744	0.737	0.730	0.723	0.716	0.709	0.702	0.695	0.688	0.681	0.673	0.665	0.657	
27	0.797	0.790	0.782	0.775	0.767	0.760	0.753	0.745	0.738	0.731	0.725	0.718	0.711	0.704	0.697	0.690	0.682	0.675	0.667	0.659	
26	0.798	0.791	0.783	0.776	0.769	0.761	0.754	0.747	0.740	0.733	0.726	0.719	0.713	0.706	0.699	0.692	0.684	0.677	0.669	0.661	
25	0.799	0.792	0.784	0.777	0.770	0.762	0.755	0.748	0.741	0.734	0.728	0.721	0.714	0.708	0.701	0.694	0.686	0.679	0.671	0.663	
24	0.800	0.793	0.786	0.778	0.771	0.764	0.757	0.750	0.743	0.736	0.729	0.723	0.716	0.709	0.703	0.696	0.689	0.681	0.674	0.666	
23	0.801	0.794	0.787	0.780	0.772	0.765	0.758	0.751	0.744	0.738	0.731	0.725	0.718	0.711	0.705	0.698	0.691	0.684	0.676	0.668	
22	0.802	0.795	0.788	0.781	0.774	0.767	0.760	0.753	0.746	0.739	0.733	0.726	0.720	0.713	0.707	0.700	0.693	0.686	0.679	0.671	
21	0.803	0.796	0.789	0.782	0.775	0.768	0.761	0.754	0.748	0.741	0.735	0.728	0.722	0.716	0.709	0.703	0.696	0.689	0.681	0.674	
20	0.805	0.798	0.791	0.784	0.777	0.770	0.763	0.756	0.749	0.743	0.737	0.730	0.724	0.718	0.711	0.705	0.698	0.691	0.684	0.677	
19	0.806	0.799	0.792	0.785	0.778	0.771	0.764	0.758	0.751	0.745	0.739	0.733	0.726	0.720	0.714	0.708	0.701	0.694	0.687	0.680	
18	0.807	0.801	0.794	0.787	0.780	0.773	0.766	0.760	0.753	0.747	0.741	0.735	0.729	0.723	0.717	0.710	0.704	0.697	0.690	0.683	
17	0.809	0.802	0.795	0.788	0.782	0.775	0.768	0.762	0.755	0.749	0.743	0.737	0.731	0.725	0.719	0.713	0.707	0.700	0.694	0.686	
16	0.810	0.804	0.797	0.790	0.783	0.777	0.770	0.764	0.757	0.751	0.746	0.740	0.734	0.728	0.722	0.716	0.710	0.704	0.697	0.690	
15	0.812	0.805	0.799	0.792	0.785	0.779	0.772	0.766	0.760	0.754	0.748	0.742	0.737	0.731	0.725	0.719	0.713	0.707	0.700	0.694	
14	0.814	0.807	0.800	0.794	0.787	0.781	0.774	0.768	0.762	0.756	0.751	0.745	0.739	0.734	0.728	0.722	0.717	0.710	0.704	0.697	
13	0.815	0.809	0.802	0.796	0.789	0.783	0.777	0.770	0.764	0.759	0.753	0.748	0.742	0.737	0.731	0.726	0.720	0.714	0.708	0.701	
12	0.817	0.811	0.804	0.798	0.791	0.785	0.779	0.773	0.767	0.761	0.756	0.751	0.745	0.740	0.735	0.729	0.724	0.718	0.712	0.706	
11	0.819	0.813	0.806	0.800	0.794	0.787	0.781	0.775	0.770	0.764	0.759	0.754	0.748	0.743	0.738	0.733	0.727	0.722	0.716	0.710	
10	0.821	0.815	0.808	0.802	0.796	0.790	0.784	0.778	0.772	0.767	0.762	0.757	0.752	0.747	0.742	0.736	0.731	0.726	0.720	0.714	
9	0.823	0.817	0.810	0.804	0.798	0.792	0.786	0.781	0.775	0.770	0.765	0.760	0.755	0.750	0.745	0.740	0.735	0.730	0.725	0.719	
8	0.825	0.819	0.813	0.807	0.801	0.795	0.789	0.783	0.778	0.773	0.768	0.763	0.759	0.754	0.749	0.744	0.739	0.734	0.729	0.724	
7	0.827	0.821	0.815	0.809	0.803	0.797	0.792	0.786	0.781	0.776	0.771	0.767	0.762	0.758	0.753	0.748	0.744	0.739	0.734	0.728	
6	0.829	0.823	0.817	0.811	0.806	0.800	0.794	0.789	0.784	0.779	0.775	0.770	0.766	0.761	0.757	0.753	0.748	0.743	0.739	0.733	
Beneficiary younger than Retiree	5	0.831	0.825	0.820	0.814	0.808	0.803	0.797	0.792	0.787	0.783	0.778	0.774	0.770	0.765	0.761	0.757	0.753	0.748	0.744	0.739
	4	0.833	0.828	0.822	0.817	0.811	0.806	0.800	0.795	0.790	0.786	0.782	0.778	0.773	0.769	0.765	0.761	0.757	0.753	0.749	0.744
	3	0.836	0.830	0.825	0.819	0.814	0.808	0.803	0.798	0.794	0.789	0.785	0.781	0.777	0.774	0.770	0.766	0.762	0.758	0.754	0.749
	2	0.838	0.833	0.827	0.822	0.817	0.811	0.806	0.802	0.797	0.793	0.789	0.785	0.781	0.778	0.774	0.770	0.767	0.763	0.759	0.755
	1	0.840	0.835	0.830	0.825	0.819	0.814	0.810	0.805	0.801	0.797	0.793	0.789	0.786	0.782	0.779	0.775	0.772	0.768	0.765	0.761
Beneficiary same age as Retiree	0	0.843	0.838	0.833	0.827	0.822	0.817	0.813	0.808	0.804	0.800	0.797	0.793	0.790	0.786	0.783	0.780	0.777	0.773	0.770	0.766

**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)**  
**Actuarial Equivalency Factors Effective January 1, 2024**

**Table 8b: 100% Joint and Survivor Annuity with Pop-up Feature - Option 2A - Disabled Members**  
 (Factor Multiplied by Option 1 Non-Refund Life Annuity)

Beneficiary Age Difference	Attained Age at Retirement																			
	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59
Beneficiary older than Retiree -1	0.845	0.840	0.835	0.830	0.825	0.821	0.816	0.812	0.808	0.804	0.800	0.797	0.794	0.791	0.788	0.785	0.782	0.779	0.776	0.772
-2	0.848	0.843	0.838	0.833	0.828	0.824	0.819	0.815	0.811	0.808	0.804	0.801	0.798	0.795	0.792	0.790	0.787	0.784	0.781	0.778
-3	0.850	0.846	0.841	0.836	0.831	0.827	0.823	0.819	0.815	0.811	0.808	0.805	0.802	0.800	0.797	0.795	0.792	0.790	0.787	0.784
-4	0.853	0.848	0.844	0.839	0.834	0.830	0.826	0.822	0.818	0.815	0.812	0.809	0.807	0.804	0.802	0.800	0.798	0.795	0.793	0.790
-5	0.856	0.851	0.846	0.842	0.838	0.833	0.829	0.825	0.822	0.819	0.816	0.814	0.811	0.809	0.807	0.805	0.803	0.801	0.799	0.796
-6	0.858	0.854	0.849	0.845	0.841	0.837	0.833	0.829	0.826	0.823	0.820	0.818	0.816	0.814	0.812	0.810	0.808	0.806	0.805	0.803
-7	0.861	0.856	0.852	0.848	0.844	0.840	0.836	0.833	0.829	0.827	0.824	0.822	0.820	0.818	0.817	0.815	0.814	0.812	0.810	0.809
-8	0.863	0.859	0.855	0.851	0.847	0.843	0.839	0.836	0.833	0.831	0.828	0.826	0.825	0.823	0.822	0.820	0.819	0.818	0.816	0.815
-9	0.866	0.862	0.858	0.854	0.850	0.846	0.843	0.840	0.837	0.835	0.833	0.831	0.829	0.828	0.826	0.825	0.824	0.823	0.822	0.821
-10	0.869	0.865	0.861	0.857	0.853	0.850	0.846	0.843	0.841	0.839	0.837	0.835	0.834	0.832	0.831	0.830	0.830	0.829	0.828	0.827
-11	0.871	0.868	0.864	0.860	0.856	0.853	0.850	0.847	0.845	0.842	0.841	0.839	0.838	0.837	0.836	0.836	0.835	0.834	0.834	0.833
-12	0.874	0.870	0.867	0.863	0.860	0.856	0.853	0.851	0.848	0.846	0.845	0.844	0.843	0.842	0.841	0.841	0.840	0.840	0.839	0.839
-13	0.877	0.873	0.870	0.866	0.863	0.860	0.857	0.854	0.852	0.850	0.849	0.848	0.847	0.846	0.846	0.846	0.845	0.845	0.845	0.845
-14	0.879	0.876	0.873	0.869	0.866	0.863	0.860	0.858	0.856	0.854	0.853	0.852	0.852	0.851	0.851	0.851	0.851	0.851	0.851	0.851
-15	0.882	0.879	0.875	0.872	0.869	0.866	0.864	0.862	0.860	0.858	0.857	0.857	0.856	0.856	0.856	0.856	0.856	0.856	0.856	0.857
-16	0.885	0.882	0.878	0.875	0.872	0.870	0.867	0.865	0.864	0.862	0.861	0.861	0.860	0.860	0.860	0.861	0.861	0.862	0.862	0.862
-17	0.888	0.885	0.881	0.879	0.876	0.873	0.871	0.869	0.867	0.866	0.866	0.865	0.865	0.865	0.865	0.866	0.866	0.867	0.868	0.868
-18	0.890	0.887	0.885	0.882	0.879	0.877	0.874	0.873	0.871	0.870	0.870	0.869	0.869	0.869	0.870	0.871	0.871	0.872	0.873	0.874
-19	0.893	0.890	0.888	0.885	0.882	0.880	0.878	0.876	0.875	0.874	0.874	0.874	0.874	0.874	0.875	0.875	0.876	0.877	0.878	0.879
-20	0.896	0.893	0.891	0.888	0.886	0.883	0.882	0.880	0.879	0.878	0.878	0.878	0.878	0.879	0.879	0.880	0.881	0.882	0.883	0.885
-21	0.899	0.896	0.894	0.891	0.889	0.887	0.885	0.884	0.883	0.882	0.882	0.882	0.882	0.883	0.884	0.885	0.886	0.887	0.889	0.890
-22	0.902	0.899	0.897	0.894	0.892	0.890	0.889	0.887	0.886	0.886	0.886	0.886	0.887	0.887	0.888	0.890	0.891	0.892	0.894	0.895
-23	0.905	0.902	0.900	0.898	0.896	0.894	0.892	0.891	0.890	0.890	0.890	0.890	0.891	0.892	0.893	0.894	0.896	0.897	0.899	0.900
-24	0.907	0.905	0.903	0.901	0.899	0.897	0.896	0.895	0.894	0.894	0.894	0.894	0.895	0.895	0.896	0.897	0.899	0.900	0.902	0.903
-25	0.910	0.908	0.906	0.904	0.902	0.901	0.899	0.898	0.898	0.898	0.898	0.899	0.899	0.900	0.902	0.903	0.905	0.907	0.908	0.910
-26	0.913	0.911	0.909	0.907	0.906	0.904	0.903	0.902	0.902	0.902	0.902	0.903	0.904	0.905	0.906	0.908	0.909	0.911	0.913	0.914
-27	0.916	0.914	0.912	0.911	0.909	0.908	0.906	0.906	0.905	0.905	0.906	0.907	0.908	0.909	0.910	0.912	0.914	0.915	0.917	0.919
-28	0.919	0.917	0.915	0.914	0.912	0.911	0.910	0.909	0.909	0.909	0.910	0.911	0.912	0.913	0.914	0.916	0.918	0.920	0.921	0.923
-29	0.922	0.920	0.919	0.917	0.916	0.914	0.914	0.913	0.913	0.913	0.914	0.915	0.916	0.917	0.919	0.920	0.922	0.924	0.926	0.927
-30	0.925	0.923	0.922	0.920	0.919	0.918	0.917	0.917	0.916	0.917	0.918	0.918	0.920	0.921	0.923	0.924	0.926	0.928	0.930	0.931
-31	0.928	0.926	0.925	0.923	0.922	0.921	0.920	0.920	0.920	0.920	0.921	0.922	0.923	0.925	0.926	0.928	0.930	0.932	0.933	0.935
-32	0.931	0.929	0.928	0.927	0.925	0.925	0.924	0.924	0.924	0.924	0.925	0.926	0.927	0.929	0.930	0.932	0.933	0.935	0.937	0.938
-33	0.934	0.932	0.931	0.930	0.929	0.928	0.927	0.927	0.927	0.928	0.929	0.930	0.931	0.932	0.934	0.935	0.937	0.939	0.940	0.942
-34	0.936	0.935	0.934	0.933	0.932	0.931	0.931	0.931	0.931	0.931	0.932	0.933	0.934	0.936	0.937	0.939	0.940	0.942	0.944	0.945
-35	0.939	0.938	0.937	0.936	0.935	0.934	0.934	0.934	0.934	0.935	0.936	0.937	0.938	0.939	0.940	0.942	0.944	0.945	0.947	0.948
Beneficiary older than Retiree -36	0.942	0.941	0.940	0.939	0.938	0.938	0.937	0.937	0.937	0.938	0.939	0.940	0.941	0.942	0.944	0.945	0.947	0.948	0.949	0.951
-37	0.945	0.944	0.943	0.942	0.941	0.941	0.940	0.940	0.941	0.941	0.942	0.943	0.944	0.945	0.947	0.948	0.949	0.951	0.952	0.953
-38	0.947	0.947	0.946	0.945	0.944	0.944	0.944	0.943	0.944	0.944	0.945	0.946	0.947	0.948	0.950	0.951	0.952	0.954	0.955	0.956
-39	0.950	0.949	0.949	0.948	0.947	0.947	0.947	0.946	0.947	0.947	0.948	0.949	0.950	0.951	0.952	0.953	0.955	0.956	0.957	0.958
-40	0.953	0.952	0.951	0.951	0.950	0.950	0.949	0.949	0.950	0.950	0.951	0.952	0.953	0.954	0.955	0.956	0.957	0.958	0.959	0.960



**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)**  
**Actuarial Equivalency Factors Effective January 1, 2024**

**Table 8b: 100% Joint and Survivor Annuity with Pop-up Feature - Option 2A - Disabled Members**  
 (Factor Multiplied by Option 1 Non-Refund Life Annuity)

Beneficiary Age Difference	Attained Age at Retirement																			
	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59
Beneficiary -41	0.955	0.955	0.954	0.953	0.953	0.952	0.952	0.952	0.952	0.953	0.954	0.954	0.955	0.956	0.957	0.958	0.959	0.961	0.962	0.963
older -42	0.958	0.957	0.957	0.956	0.956	0.955	0.955	0.955	0.955	0.955	0.956	0.957	0.958	0.959	0.960	0.961	0.962	0.963	0.964	0.964
than -43	0.960	0.960	0.959	0.959	0.958	0.958	0.957	0.957	0.957	0.958	0.959	0.959	0.960	0.961	0.962	0.963	0.964	0.965	0.965	0.966
Retiree -44	0.962	0.962	0.961	0.961	0.960	0.960	0.960	0.960	0.960	0.960	0.961	0.961	0.962	0.963	0.964	0.965	0.965	0.966	0.967	0.968
-45	0.965	0.964	0.964	0.963	0.963	0.962	0.962	0.962	0.962	0.962	0.963	0.964	0.964	0.965	0.966	0.966	0.967	0.968	0.969	0.969
-46	0.967	0.966	0.966	0.965	0.965	0.965	0.964	0.964	0.964	0.964	0.965	0.966	0.966	0.967	0.967	0.968	0.969	0.970	0.970	0.971
-47	0.969	0.968	0.968	0.967	0.967	0.967	0.966	0.966	0.966	0.966	0.967	0.967	0.968	0.968	0.969	0.970	0.970	0.971	0.971	0.972
-48	0.971	0.970	0.970	0.969	0.969	0.969	0.968	0.968	0.968	0.968	0.969	0.969	0.970	0.970	0.971	0.971	0.972	0.972	0.973	0.973
-49	0.973	0.972	0.972	0.971	0.971	0.971	0.970	0.970	0.970	0.970	0.971	0.971	0.971	0.972	0.972	0.972	0.973	0.973	0.974	0.974
-50	0.974	0.974	0.973	0.973	0.973	0.972	0.972	0.972	0.972	0.972	0.972	0.972	0.973	0.973	0.973	0.974	0.974	0.974	0.975	0.975
-51	0.976	0.975	0.975	0.975	0.974	0.974	0.974	0.973	0.973	0.973	0.973	0.974	0.974	0.974	0.974	0.975	0.975	0.975	0.975	0.975
-52	0.977	0.977	0.977	0.976	0.976	0.975	0.975	0.975	0.975	0.975	0.975	0.975	0.975	0.975	0.976	0.976	0.976	0.976	0.976	0.976
-53	0.979	0.978	0.978	0.978	0.977	0.977	0.976	0.976	0.976	0.976	0.976	0.976	0.976	0.976	0.976	0.976	0.977	0.977	0.976	0.976
-54	0.980	0.980	0.979	0.979	0.979	0.978	0.978	0.977	0.977	0.977	0.977	0.977	0.977	0.977	0.977	0.977	0.977	0.977	0.977	0.977
-55	0.981	0.981	0.981	0.980	0.980	0.979	0.979	0.979	0.978	0.978	0.978	0.978	0.978	0.978	0.978	0.978	0.978	0.978	0.978	0.978
-56	0.982	0.982	0.982	0.981	0.981	0.980	0.980	0.980	0.979	0.979	0.979	0.979	0.979	0.979	0.979	0.978	0.978	0.978	0.978	0.978
-57	0.983	0.983	0.983	0.982	0.982	0.981	0.981	0.981	0.980	0.980	0.980	0.980	0.979	0.979	0.979	0.979	0.979	0.979	0.979	0.979
-58	0.984	0.984	0.984	0.983	0.983	0.982	0.982	0.982	0.981	0.981	0.981	0.981	0.980	0.980	0.980	0.980	0.980	0.980	0.980	0.980
-59	0.985	0.985	0.985	0.984	0.984	0.983	0.983	0.982	0.982	0.981	0.981	0.981	0.981	0.981	0.981	0.981	0.981	0.981	0.981	0.981
-60	0.986	0.986	0.986	0.985	0.985	0.984	0.984	0.983	0.982	0.982	0.982	0.982	0.982	0.982	0.982	0.982	0.982	0.982	0.982	0.982
-61	0.987	0.987	0.986	0.986	0.985	0.985	0.984	0.984	0.983	0.982	0.982	0.982	0.982	0.982	0.982	0.982	0.982	0.982	0.982	0.982
-62	0.988	0.987	0.987	0.986	0.986	0.985	0.985	0.984	0.984	0.983	0.982	0.982	0.982	0.982	0.982	0.982	0.982	0.982	0.982	0.982
-63	0.988	0.988	0.988	0.987	0.987	0.986	0.986	0.985	0.984	0.983	0.982	0.982	0.982	0.982	0.982	0.982	0.982	0.982	0.982	0.982
-64	0.989	0.989	0.988	0.988	0.987	0.986	0.986	0.986	0.986	0.986	0.986	0.986	0.986	0.986	0.986	0.986	0.986	0.986	0.986	0.986
-65	0.989	0.989	0.989	0.988	0.987	0.987	0.987	0.987	0.987	0.987	0.987	0.987	0.987	0.987	0.987	0.987	0.987	0.987	0.987	0.987
-66	0.990	0.990	0.989	0.988	0.988	0.988	0.988	0.988	0.988	0.988	0.988	0.988	0.988	0.988	0.988	0.988	0.988	0.988	0.988	0.988
-67	0.990	0.990	0.989	0.989	0.989	0.989	0.989	0.989	0.989	0.989	0.989	0.989	0.989	0.989	0.989	0.989	0.989	0.989	0.989	0.989
-68	0.991	0.990	0.990	0.990	0.990	0.990	0.990	0.990	0.990	0.990	0.990	0.990	0.990	0.990	0.990	0.990	0.990	0.990	0.990	0.990
-69	0.991	0.990	0.990	0.990	0.990	0.990	0.990	0.990	0.990	0.990	0.990	0.990	0.990	0.990	0.990	0.990	0.990	0.990	0.990	0.990
-70	0.991	0.991	0.991	0.991	0.991	0.991	0.991	0.991	0.991	0.991	0.991	0.991	0.991	0.991	0.991	0.991	0.991	0.991	0.991	0.991
-71																				
-72																				
-73																				
-74																				
-75																				
Beneficiary -76																				
older -77																				
than -78																				
Retiree -79																				
-80																				

**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)**  
**Actuarial Equivalency Factors Effective January 1, 2024**

**Table 8b: 100% Joint and Survivor Annuity with Pop-up Feature - Option 2A - Disabled Members**  
 (Factor Multiplied by Option 1 Non-Refund Life Annuity)

Beneficiary Age Difference	Attained Age at Retirement																			
	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59
Beneficiary older than Retiree -81																				
-82																				
-83																				
-84																				
-85																				
Beneficiary older than Retiree -86																				
-87																				
-88																				
-89																				
-90																				

**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)**  
**Actuarial Equivalency Factors Effective January 1, 2024**

**Table 8b: 100% Joint and Survivor Annuity with Pop-up Feature - Option 2A - Disabled Members**  
 (Factor Multiplied by Option 1 Non-Refund Life Annuity)

Beneficiary Age Difference	Attained Age at Retirement															
	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75
Beneficiary younger than Retiree	75															0.412
	74														0.427	0.412
	73														0.428	0.413
	72												0.458	0.443	0.428	0.413
	71												0.458	0.443	0.428	0.413
	70											0.473	0.458	0.443	0.428	0.413
	69										0.487	0.473	0.459	0.444	0.429	0.414
	68								0.502	0.488	0.473	0.459	0.444	0.429	0.414	
	67							0.516	0.502	0.488	0.474	0.459	0.445	0.430	0.414	
	66						0.530	0.516	0.503	0.489	0.474	0.460	0.445	0.430	0.415	
	65					0.543	0.530	0.517	0.503	0.489	0.475	0.460	0.445	0.430	0.415	
	64				0.556	0.543	0.530	0.517	0.503	0.489	0.475	0.461	0.446	0.431	0.416	
	63			0.569	0.556	0.544	0.531	0.517	0.504	0.490	0.476	0.461	0.446	0.431	0.416	
	62		0.581	0.569	0.557	0.544	0.531	0.518	0.504	0.490	0.476	0.462	0.447	0.432	0.417	
	61	0.592	0.581	0.569	0.557	0.545	0.532	0.518	0.505	0.491	0.477	0.462	0.447	0.433	0.417	
	60	0.604	0.593	0.582	0.570	0.558	0.545	0.532	0.519	0.505	0.491	0.477	0.463	0.448	0.433	0.418
	59	0.615	0.604	0.593	0.582	0.570	0.558	0.546	0.533	0.519	0.506	0.492	0.478	0.463	0.449	0.434
	58	0.615	0.605	0.594	0.583	0.571	0.559	0.546	0.533	0.520	0.506	0.493	0.478	0.464	0.449	0.434
	57	0.616	0.605	0.594	0.583	0.571	0.559	0.547	0.534	0.521	0.507	0.493	0.479	0.465	0.450	0.435
	56	0.616	0.606	0.595	0.584	0.572	0.560	0.547	0.534	0.521	0.508	0.494	0.480	0.465	0.451	0.436
	55	0.617	0.606	0.595	0.584	0.573	0.560	0.548	0.535	0.522	0.508	0.495	0.480	0.466	0.451	0.437
	54	0.617	0.607	0.596	0.585	0.573	0.561	0.549	0.536	0.523	0.509	0.495	0.481	0.467	0.452	0.437
	53	0.618	0.607	0.597	0.585	0.574	0.562	0.549	0.537	0.523	0.510	0.496	0.482	0.468	0.453	0.438
	52	0.618	0.608	0.597	0.586	0.574	0.562	0.550	0.537	0.524	0.511	0.497	0.483	0.468	0.454	0.439
	51	0.619	0.609	0.598	0.587	0.575	0.563	0.551	0.538	0.525	0.512	0.498	0.484	0.469	0.455	0.440
	50	0.620	0.609	0.599	0.588	0.576	0.564	0.552	0.539	0.526	0.512	0.499	0.485	0.470	0.456	0.441
	49	0.620	0.610	0.599	0.588	0.577	0.565	0.553	0.540	0.527	0.513	0.500	0.486	0.471	0.457	0.442
	48	0.621	0.611	0.600	0.589	0.578	0.566	0.553	0.541	0.528	0.514	0.501	0.487	0.472	0.458	0.443
	47	0.622	0.612	0.601	0.590	0.579	0.567	0.554	0.542	0.529	0.515	0.502	0.488	0.474	0.459	0.445
	46	0.623	0.612	0.602	0.591	0.579	0.568	0.555	0.543	0.530	0.517	0.503	0.489	0.475	0.460	0.446
	45	0.624	0.613	0.603	0.592	0.580	0.569	0.556	0.544	0.531	0.518	0.504	0.490	0.476	0.462	0.447
	44	0.624	0.614	0.604	0.593	0.582	0.570	0.558	0.545	0.532	0.519	0.505	0.492	0.477	0.463	0.449
	43	0.625	0.615	0.605	0.594	0.583	0.571	0.559	0.546	0.533	0.520	0.507	0.493	0.479	0.465	0.450
	42	0.626	0.616	0.606	0.595	0.584	0.572	0.560	0.548	0.535	0.522	0.508	0.494	0.480	0.466	0.452
	41	0.627	0.617	0.607	0.596	0.585	0.573	0.561	0.549	0.536	0.523	0.510	0.496	0.482	0.468	0.453
Beneficiary younger than Retiree	40	0.629	0.619	0.608	0.598	0.586	0.575	0.563	0.550	0.538	0.525	0.511	0.498	0.484	0.470	0.455
	39	0.630	0.620	0.610	0.599	0.588	0.576	0.564	0.552	0.539	0.526	0.513	0.499	0.486	0.471	0.457
	38	0.631	0.621	0.611	0.600	0.589	0.578	0.566	0.554	0.541	0.528	0.515	0.501	0.487	0.473	0.459
	37	0.632	0.623	0.612	0.602	0.591	0.579	0.568	0.555	0.543	0.530	0.517	0.503	0.489	0.475	0.461
	36	0.634	0.624	0.614	0.603	0.592	0.581	0.569	0.557	0.545	0.532	0.519	0.505	0.492	0.478	0.463

**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)**  
**Actuarial Equivalency Factors Effective January 1, 2024**

**Table 8b: 100% Joint and Survivor Annuity with Pop-up Feature - Option 2A - Disabled Members**  
 (Factor Multiplied by Option 1 Non-Refund Life Annuity)

Beneficiary Age Difference	Attained Age at Retirement															
	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75
35	0.635	0.626	0.616	0.605	0.594	0.583	0.571	0.559	0.547	0.534	0.521	0.507	0.494	0.480	0.466	0.451
34	0.637	0.627	0.617	0.607	0.596	0.585	0.573	0.561	0.549	0.536	0.523	0.510	0.496	0.482	0.468	0.454
33	0.638	0.629	0.619	0.609	0.598	0.587	0.575	0.563	0.551	0.538	0.525	0.512	0.499	0.485	0.471	0.457
32	0.640	0.631	0.621	0.611	0.600	0.589	0.577	0.565	0.553	0.541	0.528	0.515	0.501	0.487	0.473	0.459
31	0.642	0.633	0.623	0.613	0.602	0.591	0.580	0.568	0.556	0.543	0.530	0.517	0.504	0.490	0.476	0.462
30	0.644	0.635	0.625	0.615	0.604	0.593	0.582	0.570	0.558	0.546	0.533	0.520	0.507	0.493	0.479	0.465
29	0.646	0.637	0.627	0.617	0.606	0.596	0.584	0.573	0.561	0.549	0.536	0.523	0.510	0.496	0.483	0.469
28	0.648	0.639	0.629	0.619	0.609	0.598	0.587	0.576	0.564	0.551	0.539	0.526	0.513	0.500	0.486	0.472
27	0.650	0.641	0.632	0.622	0.612	0.601	0.590	0.578	0.567	0.555	0.542	0.529	0.516	0.503	0.489	0.476
26	0.652	0.643	0.634	0.624	0.614	0.604	0.593	0.581	0.570	0.558	0.545	0.533	0.520	0.507	0.493	0.479
25	0.655	0.646	0.637	0.627	0.617	0.607	0.596	0.585	0.573	0.561	0.549	0.536	0.523	0.510	0.497	0.483
24	0.657	0.649	0.640	0.630	0.620	0.610	0.599	0.588	0.576	0.565	0.553	0.540	0.527	0.514	0.501	0.487
23	0.660	0.651	0.642	0.633	0.623	0.613	0.602	0.591	0.580	0.568	0.556	0.544	0.531	0.518	0.505	0.492
22	0.663	0.654	0.645	0.636	0.626	0.616	0.606	0.595	0.584	0.572	0.560	0.548	0.536	0.523	0.510	0.496
21	0.666	0.657	0.649	0.639	0.630	0.620	0.610	0.599	0.588	0.576	0.565	0.552	0.540	0.527	0.514	0.501
20	0.669	0.661	0.652	0.643	0.634	0.624	0.613	0.603	0.592	0.581	0.569	0.557	0.545	0.532	0.519	0.506
19	0.672	0.664	0.655	0.647	0.637	0.628	0.618	0.607	0.596	0.585	0.574	0.562	0.550	0.537	0.525	0.512
18	0.675	0.667	0.659	0.650	0.641	0.632	0.622	0.611	0.601	0.590	0.578	0.567	0.555	0.543	0.530	0.518
17	0.679	0.671	0.663	0.654	0.645	0.636	0.626	0.616	0.606	0.595	0.584	0.572	0.560	0.548	0.536	0.524
16	0.683	0.675	0.667	0.658	0.650	0.640	0.631	0.621	0.610	0.600	0.589	0.578	0.566	0.554	0.542	0.530
15	0.686	0.679	0.671	0.663	0.654	0.645	0.636	0.626	0.616	0.605	0.594	0.583	0.572	0.560	0.549	0.537
14	0.690	0.683	0.675	0.667	0.659	0.650	0.641	0.631	0.621	0.611	0.600	0.590	0.578	0.567	0.555	0.544
13	0.695	0.687	0.680	0.672	0.664	0.655	0.646	0.637	0.627	0.617	0.607	0.596	0.585	0.574	0.563	0.551
12	0.699	0.692	0.685	0.677	0.669	0.660	0.651	0.642	0.633	0.623	0.613	0.603	0.592	0.581	0.570	0.559
11	0.703	0.697	0.689	0.682	0.674	0.666	0.657	0.648	0.639	0.630	0.620	0.610	0.599	0.589	0.578	0.567
10	0.708	0.701	0.694	0.687	0.679	0.671	0.663	0.654	0.646	0.636	0.627	0.617	0.607	0.597	0.586	0.575
9	0.713	0.706	0.700	0.693	0.685	0.677	0.669	0.661	0.652	0.643	0.634	0.625	0.615	0.605	0.595	0.584
8	0.718	0.712	0.705	0.698	0.691	0.684	0.676	0.668	0.659	0.651	0.642	0.632	0.623	0.613	0.604	0.594
7	0.723	0.717	0.711	0.704	0.697	0.690	0.682	0.675	0.667	0.658	0.650	0.641	0.632	0.622	0.613	0.603
6	0.728	0.722	0.716	0.710	0.703	0.697	0.689	0.682	0.674	0.666	0.658	0.649	0.640	0.631	0.622	0.613
Beneficiary younger than Retiree																
5	0.733	0.728	0.722	0.716	0.710	0.703	0.696	0.689	0.682	0.674	0.666	0.658	0.650	0.641	0.632	0.623
4	0.739	0.734	0.728	0.723	0.717	0.710	0.704	0.697	0.690	0.682	0.675	0.667	0.659	0.651	0.642	0.634
3	0.745	0.740	0.735	0.729	0.724	0.718	0.711	0.705	0.698	0.691	0.684	0.676	0.669	0.661	0.653	0.645
2	0.751	0.746	0.741	0.736	0.731	0.725	0.719	0.713	0.706	0.700	0.693	0.686	0.678	0.671	0.663	0.656
1	0.757	0.752	0.748	0.743	0.738	0.732	0.727	0.721	0.715	0.709	0.702	0.695	0.688	0.681	0.674	0.667
Beneficiary same age as Retiree																
0	<b>0.763</b>	<b>0.759</b>	<b>0.754</b>	<b>0.750</b>	<b>0.745</b>	<b>0.740</b>	<b>0.735</b>	<b>0.729</b>	<b>0.723</b>	<b>0.718</b>	<b>0.711</b>	<b>0.705</b>	<b>0.699</b>	<b>0.692</b>	<b>0.685</b>	<b>0.678</b>

**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)**  
**Actuarial Equivalency Factors Effective January 1, 2024**

**Table 8b: 100% Joint and Survivor Annuity with Pop-up Feature - Option 2A - Disabled Members**  
 (Factor Multiplied by Option 1 Non-Refund Life Annuity)

Beneficiary Age Difference	Attained Age at Retirement															
	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75
Beneficiary older than Retiree -1	0.769	0.765	0.761	0.757	0.752	0.748	0.743	0.738	0.732	0.727	0.721	0.715	0.709	0.703	0.697	0.690
-2	0.775	0.772	0.768	0.764	0.760	0.756	0.751	0.746	0.741	0.736	0.731	0.725	0.720	0.714	0.708	0.702
-3	0.781	0.778	0.775	0.771	0.767	0.763	0.759	0.755	0.750	0.745	0.740	0.735	0.730	0.725	0.719	0.714
-4	0.788	0.785	0.782	0.778	0.775	0.771	0.767	0.763	0.759	0.755	0.750	0.746	0.741	0.736	0.731	0.726
-5	0.794	0.791	0.789	0.786	0.783	0.779	0.776	0.772	0.768	0.764	0.760	0.756	0.751	0.747	0.742	0.738
-6	0.800	0.798	0.796	0.793	0.790	0.787	0.784	0.781	0.777	0.774	0.770	0.766	0.762	0.758	0.754	0.749
-7	0.807	0.805	0.803	0.800	0.798	0.795	0.792	0.789	0.786	0.783	0.780	0.776	0.773	0.769	0.765	0.761
-8	0.813	0.812	0.810	0.808	0.805	0.803	0.801	0.798	0.795	0.792	0.789	0.786	0.783	0.780	0.776	0.773
-9	0.820	0.818	0.817	0.815	0.813	0.811	0.809	0.807	0.804	0.802	0.799	0.796	0.793	0.790	0.787	0.784
-10	0.826	0.825	0.824	0.822	0.821	0.819	0.817	0.815	0.813	0.811	0.808	0.806	0.803	0.801	0.798	0.795
-11	0.832	0.831	0.830	0.829	0.828	0.827	0.825	0.823	0.822	0.820	0.818	0.816	0.813	0.811	0.808	0.806
-12	0.839	0.838	0.837	0.836	0.835	0.834	0.833	0.831	0.830	0.828	0.827	0.825	0.823	0.821	0.818	0.816
-13	0.845	0.844	0.844	0.843	0.842	0.842	0.841	0.840	0.838	0.837	0.836	0.834	0.832	0.830	0.828	0.826
-14	0.851	0.851	0.850	0.850	0.850	0.849	0.848	0.847	0.846	0.845	0.844	0.843	0.841	0.839	0.838	0.835
-15	0.857	0.857	0.857	0.857	0.857	0.856	0.856	0.855	0.854	0.853	0.852	0.851	0.850	0.848	0.846	0.844
-16	0.863	0.863	0.863	0.863	0.863	0.863	0.863	0.863	0.862	0.861	0.860	0.859	0.858	0.857	0.855	0.853
-17	0.869	0.869	0.870	0.870	0.870	0.870	0.870	0.870	0.869	0.869	0.868	0.867	0.866	0.865	0.863	0.861
-18	0.874	0.875	0.876	0.876	0.877	0.877	0.877	0.877	0.876	0.876	0.876	0.875	0.874	0.872	0.871	0.869
-19	0.880	0.881	0.882	0.882	0.883	0.883	0.883	0.883	0.883	0.883	0.883	0.882	0.881	0.880	0.878	0.876
-20	0.886	0.887	0.888	0.888	0.889	0.889	0.890	0.890	0.890	0.890	0.889	0.889	0.888	0.886	0.885	0.883
-21	0.891	0.892	0.893	0.894	0.895	0.895	0.896	0.896	0.896	0.896	0.895	0.895	0.894	0.893	0.891	0.890
-22	0.896	0.898	0.899	0.900	0.900	0.901	0.902	0.902	0.902	0.902	0.901	0.901	0.900	0.899	0.897	0.896
-23	0.902	0.903	0.904	0.905	0.906	0.907	0.907	0.907	0.907	0.907	0.907	0.906	0.906	0.905	0.903	0.902
-24	0.907	0.908	0.909	0.910	0.911	0.912	0.912	0.913	0.913	0.913	0.912	0.912	0.911	0.910	0.908	0.907
-25	0.911	0.913	0.914	0.915	0.916	0.917	0.917	0.918	0.918	0.918	0.917	0.917	0.916	0.915	0.913	0.912
-26	0.916	0.917	0.919	0.920	0.921	0.921	0.922	0.922	0.922	0.922	0.922	0.921	0.921	0.919	0.918	0.916
-27	0.920	0.922	0.923	0.924	0.925	0.926	0.926	0.927	0.927	0.927	0.926	0.926	0.925	0.924	0.922	0.921
-28	0.925	0.926	0.927	0.928	0.929	0.930	0.930	0.931	0.931	0.931	0.930	0.930	0.929	0.928	0.926	0.925
-29	0.929	0.930	0.931	0.932	0.933	0.934	0.934	0.935	0.935	0.935	0.934	0.934	0.933	0.931	0.930	0.928
-30	0.933	0.934	0.935	0.936	0.937	0.938	0.938	0.938	0.938	0.938	0.938	0.937	0.936	0.935	0.933	0.931
-31	0.936	0.938	0.939	0.940	0.941	0.941	0.941	0.942	0.942	0.941	0.941	0.940	0.939	0.938	0.936	0.934
-32	0.940	0.941	0.942	0.943	0.944	0.944	0.945	0.945	0.945	0.944	0.944	0.943	0.942	0.941	0.939	0.937
-33	0.943	0.944	0.945	0.946	0.947	0.947	0.948	0.948	0.948	0.947	0.947	0.946	0.945	0.943	0.941	0.939
-34	0.946	0.947	0.948	0.949	0.950	0.950	0.950	0.951	0.950	0.950	0.949	0.948	0.947	0.945	0.943	0.941
-35	0.949	0.950	0.951	0.952	0.953	0.953	0.953	0.953	0.953	0.952	0.952	0.951	0.949	0.947	0.945	0.942
Beneficiary older than Retiree -36	0.952	0.953	0.954	0.955	0.955	0.955	0.955	0.955	0.955	0.954	0.954	0.952	0.951	0.949	0.946	
-37	0.955	0.955	0.956	0.957	0.957	0.958	0.958	0.957	0.957	0.956	0.955	0.954	0.952	0.950		
-38	0.957	0.958	0.959	0.959	0.960	0.960	0.960	0.959	0.959	0.958	0.957	0.955	0.953			
-39	0.959	0.960	0.961	0.961	0.961	0.962	0.961	0.961	0.960	0.960	0.958	0.956				
-40	0.961	0.962	0.963	0.963	0.963	0.963	0.963	0.963	0.962	0.961	0.959					

**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)**  
**Actuarial Equivalency Factors Effective January 1, 2024**

**Table 8b: 100% Joint and Survivor Annuity with Pop-up Feature - Option 2A - Disabled Members**  
 (Factor Multiplied by Option 1 Non-Refund Life Annuity)

	Beneficiary Age Difference	Attained Age at Retirement															
		60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75
Beneficiary	-41	0.963	0.964	0.964	0.965	0.965	0.965	0.964	0.964	0.963	0.962						
older	-42	0.965	0.966	0.966	0.966	0.966	0.966	0.966	0.966	0.965	0.964						
than	-43	0.967	0.967	0.968	0.968	0.968	0.968	0.967	0.967	0.966							
Retiree	-44	0.968	0.969	0.969	0.969	0.969	0.968	0.967									
	-45	0.970	0.970	0.970	0.970	0.970	0.969										
	-46	0.971	0.971	0.971	0.971	0.970											
	-47	0.972	0.972	0.972	0.972												
	-48	0.973	0.973	0.973													
	-49	0.974	0.974														
	-50	0.974															
	-51																
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	-72																
	-73																
	-74																
	-75																
Beneficiary	-76																
older	-77																
than	-78																
Retiree	-79																
	-80																

**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)**  
**Actuarial Equivalency Factors Effective January 1, 2024**

**Table 8b: 100% Joint and Survivor Annuity with Pop-up Feature - Option 2A - Disabled Members**  
 (Factor Multiplied by Option 1 Non-Refund Life Annuity)

Beneficiary Age Difference	Attained Age at Retirement															
	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75
Beneficiary older than Retiree -81																
-82																
-83																
-84																
-85																
Beneficiary older than Retiree -86																
-87																
-88																
-89																
-90																

**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)**  
**Actuarial Equivalency Factors Effective January 1, 2024**

**Table 9a: 50% Joint and Survivor Annuity with Pop-up Feature - Option 3A - Healthy Members**  
 (Factor Multiplied by Option 1 Non-Refund Life Annuity)

	Beneficiary Age Difference	Attained Age at Retirement																			
		45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64
Beneficiary younger than Retiree	100																				
	99																				
	98																				
	97																				
	96																				
	95																				
	94																				
	93																				
	92																				
	91																				
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	74																				
	73																				
	72																				
	71																				
	70																				
	69																				
	68																				
	67																				
	66																				



**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)**  
**Actuarial Equivalency Factors Effective January 1, 2024**

**Table 9a: 50% Joint and Survivor Annuity with Pop-up Feature - Option 3A - Healthy Members**  
 (Factor Multiplied by Option 1 Non-Refund Life Annuity)

	Beneficiary Age Difference	Attained Age at Retirement																					
		45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64		
Beneficiary younger than Retiree	65																						
	64																				0.816		
	63																						
	62																			0.825	0.816		
	61																	0.835	0.826	0.816			
Beneficiary younger than Retiree	60																			0.843	0.835	0.826	0.817
	59																0.852	0.844	0.835	0.826	0.817		
	58															0.859	0.852	0.844	0.836	0.827	0.818		
	57														0.867	0.860	0.852	0.844	0.836	0.827	0.818		
	56												0.874	0.867	0.860	0.853	0.845	0.837	0.828	0.819			
	55											0.880	0.874	0.867	0.860	0.853	0.845	0.837	0.828	0.819			
	54										0.887	0.881	0.874	0.868	0.861	0.853	0.846	0.837	0.829	0.820			
	53									0.893	0.887	0.881	0.875	0.868	0.861	0.854	0.846	0.838	0.829	0.820			
	52								0.899	0.893	0.887	0.881	0.875	0.869	0.862	0.854	0.847	0.838	0.830	0.821			
	51							0.904	0.899	0.893	0.888	0.882	0.876	0.869	0.862	0.855	0.847	0.839	0.830	0.821			
	50						0.909	0.904	0.899	0.894	0.888	0.882	0.876	0.870	0.863	0.855	0.848	0.840	0.831	0.822			
	49					0.914	0.909	0.905	0.900	0.894	0.889	0.883	0.877	0.870	0.863	0.856	0.848	0.840	0.832	0.823			
	48				0.919	0.914	0.910	0.905	0.900	0.895	0.889	0.883	0.877	0.871	0.864	0.857	0.849	0.841	0.832	0.823			
	47			0.924	0.919	0.915	0.910	0.905	0.900	0.895	0.890	0.884	0.878	0.871	0.864	0.857	0.850	0.841	0.833	0.824			
	46		0.928	0.924	0.920	0.915	0.910	0.906	0.901	0.896	0.890	0.884	0.878	0.872	0.865	0.858	0.850	0.842	0.834	0.825			
	45	0.932	0.928	0.924	0.920	0.916	0.911	0.906	0.901	0.896	0.891	0.885	0.879	0.872	0.866	0.858	0.851	0.843	0.835	0.826			
	44	0.936	0.933	0.929	0.925	0.921	0.916	0.911	0.907	0.902	0.897	0.891	0.885	0.879	0.873	0.866	0.859	0.852	0.844	0.835	0.827		
	43	0.936	0.933	0.929	0.925	0.921	0.916	0.912	0.907	0.902	0.897	0.892	0.886	0.880	0.874	0.867	0.860	0.852	0.845	0.836	0.827		
	42	0.937	0.933	0.930	0.926	0.921	0.917	0.912	0.908	0.903	0.898	0.892	0.887	0.881	0.874	0.868	0.861	0.853	0.845	0.837	0.828		
	41	0.937	0.934	0.930	0.926	0.922	0.917	0.913	0.908	0.903	0.898	0.893	0.887	0.881	0.875	0.868	0.861	0.854	0.846	0.838	0.829		
	40	0.938	0.934	0.930	0.926	0.922	0.918	0.913	0.909	0.904	0.899	0.893	0.888	0.882	0.876	0.869	0.862	0.855	0.847	0.839	0.830		
	39	0.938	0.934	0.931	0.927	0.923	0.918	0.914	0.909	0.905	0.900	0.894	0.889	0.883	0.877	0.870	0.863	0.856	0.848	0.840	0.832		
	38	0.938	0.935	0.931	0.927	0.923	0.919	0.915	0.910	0.905	0.900	0.895	0.889	0.884	0.877	0.871	0.864	0.857	0.849	0.841	0.833		
	37	0.939	0.935	0.932	0.928	0.924	0.920	0.915	0.911	0.906	0.901	0.896	0.890	0.884	0.878	0.872	0.865	0.858	0.850	0.842	0.834		
	36	0.939	0.936	0.932	0.928	0.924	0.920	0.916	0.911	0.907	0.902	0.896	0.891	0.885	0.879	0.873	0.866	0.859	0.852	0.844	0.835		
	35	0.940	0.936	0.933	0.929	0.925	0.921	0.916	0.912	0.907	0.902	0.897	0.892	0.886	0.880	0.874	0.867	0.860	0.853	0.845	0.837		
	34	0.940	0.937	0.933	0.930	0.926	0.921	0.917	0.913	0.908	0.903	0.898	0.893	0.887	0.881	0.875	0.868	0.861	0.854	0.846	0.838		
	33	0.941	0.938	0.934	0.930	0.926	0.922	0.918	0.914	0.909	0.904	0.899	0.894	0.888	0.882	0.876	0.870	0.863	0.855	0.848	0.840		
	32	0.941	0.938	0.935	0.931	0.927	0.923	0.919	0.914	0.910	0.905	0.900	0.895	0.889	0.884	0.877	0.871	0.864	0.857	0.849	0.841		
	31	0.942	0.939	0.935	0.932	0.928	0.924	0.919	0.915	0.911	0.906	0.901	0.896	0.890	0.885	0.879	0.872	0.865	0.858	0.851	0.843		

**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)**  
**Actuarial Equivalency Factors Effective January 1, 2024**

**Table 9a: 50% Joint and Survivor Annuity with Pop-up Feature - Option 3A - Healthy Members**  
 (Factor Multiplied by Option 1 Non-Refund Life Annuity)

Beneficiary Age Difference	Attained Age at Retirement																				
	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	
30	0.943	0.939	0.936	0.932	0.929	0.924	0.920	0.916	0.912	0.907	0.902	0.897	0.892	0.886	0.880	0.874	0.867	0.860	0.852	0.844	
29	0.943	0.940	0.937	0.933	0.929	0.925	0.921	0.917	0.913	0.908	0.903	0.898	0.893	0.887	0.881	0.875	0.868	0.861	0.854	0.846	
28	0.944	0.941	0.937	0.934	0.930	0.926	0.922	0.918	0.914	0.909	0.904	0.899	0.894	0.889	0.883	0.877	0.870	0.863	0.856	0.848	
27	0.945	0.941	0.938	0.935	0.931	0.927	0.923	0.919	0.915	0.910	0.906	0.901	0.896	0.890	0.884	0.878	0.872	0.865	0.858	0.850	
26	0.945	0.942	0.939	0.936	0.932	0.928	0.924	0.920	0.916	0.912	0.907	0.902	0.897	0.892	0.886	0.880	0.873	0.867	0.860	0.852	
Beneficiary younger than Retiree	25	0.946	0.943	0.940	0.936	0.933	0.929	0.925	0.921	0.917	0.913	0.908	0.903	0.898	0.893	0.887	0.882	0.875	0.869	0.862	0.854
	24	0.947	0.944	0.941	0.937	0.934	0.930	0.926	0.922	0.918	0.914	0.910	0.905	0.900	0.895	0.889	0.883	0.877	0.871	0.864	0.856
	23	0.948	0.945	0.942	0.938	0.935	0.931	0.927	0.924	0.920	0.915	0.911	0.906	0.901	0.896	0.891	0.885	0.879	0.873	0.866	0.859
	22	0.949	0.946	0.943	0.939	0.936	0.932	0.929	0.925	0.921	0.917	0.912	0.908	0.903	0.898	0.893	0.887	0.881	0.875	0.868	0.861
	21	0.949	0.947	0.944	0.940	0.937	0.933	0.930	0.926	0.922	0.918	0.914	0.910	0.905	0.900	0.895	0.889	0.883	0.877	0.871	0.864
	20	0.950	0.948	0.945	0.942	0.938	0.935	0.931	0.928	0.924	0.920	0.916	0.911	0.907	0.902	0.897	0.891	0.886	0.879	0.873	0.866
	19	0.951	0.949	0.946	0.943	0.939	0.936	0.932	0.929	0.925	0.921	0.917	0.913	0.908	0.904	0.899	0.893	0.888	0.882	0.876	0.869
	18	0.952	0.950	0.947	0.944	0.941	0.937	0.934	0.930	0.927	0.923	0.919	0.915	0.910	0.906	0.901	0.896	0.890	0.884	0.878	0.872
	17	0.953	0.951	0.948	0.945	0.942	0.939	0.935	0.932	0.928	0.925	0.921	0.917	0.912	0.908	0.903	0.898	0.893	0.887	0.881	0.875
	16	0.954	0.952	0.949	0.946	0.943	0.940	0.937	0.934	0.930	0.926	0.923	0.919	0.914	0.910	0.905	0.900	0.895	0.890	0.884	0.878
	15	0.956	0.953	0.950	0.948	0.945	0.941	0.938	0.935	0.932	0.928	0.924	0.921	0.917	0.912	0.908	0.903	0.898	0.892	0.887	0.881
	14	0.957	0.954	0.952	0.949	0.946	0.943	0.940	0.937	0.934	0.930	0.926	0.923	0.919	0.915	0.910	0.905	0.900	0.895	0.890	0.884
	13	0.958	0.955	0.953	0.950	0.947	0.944	0.941	0.938	0.935	0.932	0.928	0.925	0.921	0.917	0.913	0.908	0.903	0.898	0.893	0.887
	12	0.959	0.957	0.954	0.952	0.949	0.946	0.943	0.940	0.937	0.934	0.930	0.927	0.923	0.919	0.915	0.911	0.906	0.901	0.896	0.890
	11	0.960	0.958	0.956	0.953	0.950	0.948	0.945	0.942	0.939	0.936	0.933	0.929	0.926	0.922	0.918	0.913	0.909	0.904	0.899	0.894
	10	0.961	0.959	0.957	0.955	0.952	0.949	0.947	0.944	0.941	0.938	0.935	0.931	0.928	0.924	0.920	0.916	0.912	0.907	0.902	0.897
	9	0.963	0.961	0.958	0.956	0.954	0.951	0.948	0.946	0.943	0.940	0.937	0.934	0.930	0.927	0.923	0.919	0.915	0.910	0.906	0.901
	8	0.964	0.962	0.960	0.958	0.955	0.953	0.950	0.947	0.945	0.942	0.939	0.936	0.933	0.929	0.926	0.922	0.918	0.914	0.909	0.904
	7	0.965	0.963	0.961	0.959	0.957	0.954	0.952	0.949	0.947	0.944	0.941	0.938	0.935	0.932	0.928	0.925	0.921	0.917	0.913	0.908
	6	0.967	0.965	0.963	0.961	0.958	0.956	0.954	0.951	0.949	0.946	0.943	0.941	0.938	0.934	0.931	0.928	0.924	0.920	0.916	0.912
Beneficiary younger than Retiree	5	0.968	0.966	0.964	0.962	0.960	0.958	0.955	0.953	0.951	0.948	0.946	0.943	0.940	0.937	0.934	0.931	0.927	0.923	0.919	0.915
	4	0.969	0.967	0.965	0.964	0.961	0.959	0.957	0.955	0.953	0.950	0.948	0.945	0.943	0.940	0.937	0.934	0.930	0.927	0.923	0.919
	3	0.970	0.969	0.967	0.965	0.963	0.961	0.959	0.957	0.955	0.952	0.950	0.948	0.945	0.942	0.939	0.936	0.933	0.930	0.926	0.923
	2	0.972	0.970	0.968	0.967	0.965	0.963	0.961	0.959	0.957	0.954	0.952	0.950	0.947	0.945	0.942	0.939	0.936	0.933	0.930	0.926
	1	0.973	0.971	0.970	0.968	0.966	0.964	0.962	0.960	0.959	0.956	0.954	0.952	0.950	0.947	0.945	0.942	0.939	0.936	0.933	0.930
Beneficiary same age as Retiree	0	<b>0.974</b>	<b>0.973</b>	<b>0.971</b>	<b>0.969</b>	<b>0.968</b>	<b>0.966</b>	<b>0.964</b>	<b>0.962</b>	<b>0.960</b>	<b>0.958</b>	<b>0.956</b>	<b>0.954</b>	<b>0.952</b>	<b>0.950</b>	<b>0.947</b>	<b>0.945</b>	<b>0.942</b>	<b>0.939</b>	<b>0.936</b>	<b>0.933</b>
Beneficiary older than	-1	0.975	0.974	0.972	0.971	0.969	0.967	0.966	0.964	0.962	0.960	0.958	0.957	0.954	0.952	0.950	0.948	0.945	0.943	0.940	0.937
	-2	0.976	0.975	0.974	0.972	0.971	0.969	0.967	0.966	0.964	0.962	0.960	0.959	0.957	0.955	0.953	0.950	0.948	0.946	0.943	0.940
	-3	0.978	0.976	0.975	0.973	0.972	0.970	0.969	0.967	0.966	0.964	0.962	0.961	0.959	0.957	0.955	0.953	0.951	0.948	0.946	0.943

**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)**  
**Actuarial Equivalency Factors Effective January 1, 2024**

**Table 9a: 50% Joint and Survivor Annuity with Pop-up Feature - Option 3A - Healthy Members**  
 (Factor Multiplied by Option 1 Non-Refund Life Annuity)

Beneficiary Age Difference	Attained Age at Retirement																				
	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	
Retiree	-4	0.979	0.977	0.976	0.975	0.973	0.972	0.970	0.969	0.967	0.966	0.964	0.963	0.961	0.959	0.957	0.955	0.953	0.951	0.949	0.946
	-5	0.980	0.978	0.977	0.976	0.975	0.973	0.972	0.970	0.969	0.968	0.966	0.965	0.963	0.961	0.960	0.958	0.956	0.954	0.952	0.950
	-6	0.981	0.980	0.978	0.977	0.976	0.974	0.973	0.972	0.971	0.969	0.968	0.967	0.965	0.964	0.962	0.960	0.958	0.957	0.955	0.952
	-7	0.982	0.981	0.979	0.978	0.977	0.976	0.975	0.973	0.972	0.971	0.970	0.968	0.967	0.966	0.964	0.963	0.961	0.959	0.957	0.955
	-8	0.983	0.982	0.980	0.979	0.978	0.977	0.976	0.975	0.974	0.972	0.971	0.970	0.969	0.967	0.966	0.965	0.963	0.962	0.960	0.958
	-9	0.983	0.982	0.981	0.980	0.979	0.978	0.977	0.976	0.975	0.974	0.973	0.972	0.971	0.969	0.968	0.967	0.965	0.964	0.962	0.961
	-10	0.984	0.983	0.982	0.981	0.980	0.979	0.978	0.977	0.976	0.975	0.974	0.973	0.972	0.971	0.970	0.969	0.967	0.966	0.965	0.963
	-11	0.985	0.984	0.983	0.982	0.981	0.980	0.979	0.979	0.978	0.977	0.976	0.975	0.974	0.973	0.972	0.971	0.969	0.968	0.967	0.965
	-12	0.986	0.985	0.984	0.983	0.982	0.981	0.980	0.980	0.979	0.978	0.977	0.976	0.975	0.974	0.973	0.972	0.971	0.970	0.969	0.968
	-13	0.987	0.986	0.985	0.984	0.983	0.982	0.981	0.981	0.980	0.979	0.978	0.978	0.977	0.976	0.975	0.974	0.973	0.972	0.971	0.970
-14	0.987	0.987	0.986	0.985	0.984	0.983	0.982	0.982	0.981	0.980	0.980	0.979	0.978	0.977	0.977	0.976	0.975	0.974	0.973	0.972	
-15	0.988	0.987	0.987	0.986	0.985	0.984	0.983	0.983	0.982	0.981	0.981	0.980	0.979	0.979	0.978	0.977	0.976	0.976	0.975	0.974	
Beneficiary older than Retiree	-16	0.989	0.988	0.987	0.987	0.986	0.985	0.984	0.984	0.983	0.982	0.982	0.981	0.981	0.980	0.979	0.979	0.978	0.977	0.976	0.975
	-17	0.989	0.989	0.988	0.987	0.987	0.986	0.985	0.985	0.984	0.983	0.983	0.982	0.982	0.981	0.981	0.980	0.979	0.979	0.978	0.977
	-18	0.990	0.989	0.989	0.988	0.987	0.987	0.986	0.985	0.985	0.984	0.984	0.983	0.983	0.982	0.982	0.981	0.981	0.980	0.979	0.979
	-19	0.990	0.990	0.989	0.989	0.988	0.987	0.987	0.986	0.986	0.985	0.985	0.984	0.984	0.983	0.983	0.982	0.982	0.981	0.981	0.980
	-20	0.991	0.990	0.990	0.989	0.989	0.988	0.987	0.987	0.987	0.986	0.986	0.985	0.985	0.984	0.984	0.983	0.983	0.982	0.982	0.981
	-21	0.991	0.991	0.990	0.990	0.989	0.989	0.988	0.988	0.987	0.987	0.987	0.986	0.986	0.985	0.985	0.984	0.984	0.983	0.983	0.982
	-22	0.992	0.991	0.991	0.990	0.990	0.989	0.989	0.988	0.988	0.988	0.987	0.987	0.987	0.986	0.986	0.985	0.985	0.984	0.984	0.983
	-23	0.992	0.992	0.991	0.991	0.990	0.990	0.989	0.989	0.989	0.988	0.988	0.988	0.988	0.987	0.987	0.986	0.986	0.985	0.985	0.984
	-24	0.993	0.992	0.992	0.991	0.991	0.990	0.990	0.990	0.989	0.989	0.989	0.989	0.988	0.988	0.988	0.987	0.987	0.987	0.986	0.985
	-25	0.993	0.993	0.992	0.992	0.991	0.991	0.991	0.990	0.990	0.990	0.990	0.989	0.989	0.989	0.989	0.988	0.988	0.988	0.987	0.986
	-26	0.994	0.993	0.993	0.992	0.992	0.992	0.991	0.991	0.991	0.990	0.990	0.990	0.990	0.990	0.989	0.989	0.989	0.989	0.988	0.988
	-27	0.994	0.994	0.993	0.993	0.992	0.992	0.992	0.991	0.991	0.991	0.991	0.991	0.990	0.990	0.990	0.990	0.990	0.989	0.989	0.989
	-28	0.994	0.994	0.994	0.993	0.993	0.992	0.992	0.992	0.992	0.992	0.991	0.991	0.991	0.991	0.991	0.991	0.990	0.990	0.990	0.990
	-29	0.995	0.994	0.994	0.994	0.993	0.993	0.993	0.992	0.992	0.992	0.992	0.992	0.992	0.992	0.991	0.991	0.991	0.991	0.991	0.990
	-30	0.995	0.995	0.994	0.994	0.994	0.993	0.993	0.993	0.993	0.993	0.992	0.992	0.992	0.992	0.992	0.992	0.992	0.991	0.991	0.991
	-31	0.995	0.995	0.995	0.995	0.994	0.994	0.994	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.992	0.992	0.992	0.992	0.992
	-32	0.996	0.995	0.995	0.995	0.995	0.994	0.994	0.994	0.994	0.994	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.992
	-33	0.996	0.996	0.995	0.995	0.995	0.995	0.994	0.994	0.994	0.994	0.994	0.994	0.994	0.994	0.993	0.993	0.993	0.993	0.993	0.993
	-34	0.996	0.996	0.996	0.996	0.995	0.995	0.995	0.995	0.995	0.994	0.994	0.994	0.994	0.994	0.994	0.994	0.994	0.993	0.993	0.993
	-35	0.996	0.996	0.996	0.996	0.996	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.994	0.994	0.994	0.994	0.994	0.994	0.993
	-36	0.997	0.997	0.996	0.996	0.996	0.996	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.994	0.994	0.994	0.994
	-37	0.997	0.997	0.997	0.996	0.996	0.996	0.996	0.996	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.994	0.994
	-38	0.997	0.997	0.997	0.997	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995
	-39	0.997	0.997	0.997	0.997	0.997	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.995	0.995	0.995	0.995	0.995

**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)**  
**Actuarial Equivalency Factors Effective January 1, 2024**

**Table 9a: 50% Joint and Survivor Annuity with Pop-up Feature - Option 3A - Healthy Members**  
 (Factor Multiplied by Option 1 Non-Refund Life Annuity)

Beneficiary Age Difference	Attained Age at Retirement																			
	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64
-40	0.998	0.997	0.997	0.997	0.997	0.997	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.995	0.995	0.995
-41	0.998	0.998	0.998	0.997	0.997	0.997	0.997	0.997	0.997	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.995
-42	0.998	0.998	0.998	0.998	0.997	0.997	0.997	0.997	0.997	0.997	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996
-43	0.998	0.998	0.998	0.998	0.998	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.996	0.996	0.996	0.996	0.996
-44	0.998	0.998	0.998	0.998	0.998	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.996	0.996	0.996	0.996
-45	0.998	0.998	0.998	0.998	0.998	0.998	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.996	0.996	0.996
-46	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.996	0.996
-47	0.999	0.999	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.996
-48	0.999	0.999	0.999	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.996
-49	0.999	0.999	0.999	0.999	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.997	0.997	0.997	0.997	0.997	0.997	0.996
-50	0.999	0.999	0.999	0.999	0.999	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.997	0.997	0.997	0.997	0.997	0.996
Beneficiary older than Retiree -51	0.999	0.999	0.999	0.999	0.999	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.997					
-52	0.999	0.999	0.999	0.999	0.999	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998					
-53	0.999	0.999	0.999	0.999	0.999	0.999	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998					
-54	0.999	0.999	0.999	0.999	0.999	0.999	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998					
-55	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998					
Beneficiary older than Retiree -56	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.998	0.998										
-57	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999										
-58	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999										
-59	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999	0.999										
-60	0.999	0.999	0.999	0.999	0.999	0.999														
Beneficiary older than Retiree -61	0.999	0.999	0.999	0.999	0.999															
-62	0.999	0.999	0.999	0.999																
-63	0.999	0.999	0.999																	
-64	1.000	0.999																		
-65	1.000																			

**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)**  
**Actuarial Equivalency Factors Effective January 1, 2024**

**Table 9a: 50% Joint and Survivor Annuity with Pop-up Feature - Option 3A - Healthy Members**  
 (Factor Multiplied by Option 1 Non-Refund Life Annuity)

Beneficiary Age Difference	Attained Age at Retirement																			
	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84
100																				
99																				
98																				
97																				
96																				
95																				
94																				
93																				
92																				
91																				
90																				
89																				
88																				
87																				
86																				
85																				
84																				
83																				0.497
82																			0.518	0.498
81																	0.539	0.519	0.498	
80																	0.560	0.540	0.519	0.498
79																0.580	0.560	0.540	0.519	0.498
78															0.599	0.580	0.560	0.540	0.520	0.499
77														0.618	0.599	0.580	0.561	0.541	0.520	0.499
76													0.636	0.618	0.600	0.581	0.561	0.541	0.520	0.500
75												0.654	0.636	0.618	0.600	0.581	0.561	0.541	0.521	0.500
74											0.670	0.654	0.637	0.619	0.600	0.581	0.562	0.542	0.521	0.500
73										0.687	0.671	0.654	0.637	0.619	0.601	0.582	0.562	0.542	0.522	0.501
72								0.702	0.687	0.671	0.655	0.637	0.620	0.601	0.582	0.563	0.543	0.522	0.501	
71							0.718	0.703	0.687	0.672	0.655	0.638	0.620	0.602	0.583	0.563	0.543	0.523	0.502	
70						0.732	0.718	0.703	0.688	0.672	0.655	0.638	0.620	0.602	0.583	0.564	0.543	0.523	0.502	
69						0.746	0.732	0.718	0.704	0.688	0.672	0.656	0.639	0.621	0.603	0.584	0.564	0.544	0.524	0.503
68					0.759	0.746	0.733	0.719	0.704	0.689	0.673	0.656	0.639	0.621	0.603	0.584	0.565	0.545	0.524	0.503
67				0.771	0.759	0.746	0.733	0.719	0.704	0.689	0.673	0.657	0.640	0.622	0.604	0.585	0.565	0.545	0.525	0.504
66		0.783	0.772	0.760	0.747	0.733	0.719	0.705	0.690	0.674	0.657	0.640	0.622	0.604	0.585	0.566	0.546	0.525	0.505	

**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)**  
**Actuarial Equivalency Factors Effective January 1, 2024**

**Table 9a: 50% Joint and Survivor Annuity with Pop-up Feature - Option 3A - Healthy Members**  
 (Factor Multiplied by Option 1 Non-Refund Life Annuity)

	Beneficiary Age Difference	Attained Age at Retirement																			
		65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84
Beneficiary younger than Retiree	65		0.795	0.784	0.772	0.760	0.747	0.734	0.720	0.705	0.690	0.674	0.658	0.641	0.623	0.605	0.586	0.566	0.546	0.526	0.505
	64	0.805	0.795	0.784	0.772	0.760	0.748	0.734	0.720	0.706	0.690	0.675	0.658	0.641	0.624	0.605	0.586	0.567	0.547	0.527	0.506
	63	0.806	0.795	0.784	0.773	0.761	0.748	0.735	0.721	0.706	0.691	0.675	0.659	0.642	0.624	0.606	0.587	0.568	0.548	0.527	0.507
	62	0.806	0.796	0.785	0.773	0.761	0.748	0.735	0.721	0.707	0.692	0.676	0.659	0.642	0.625	0.607	0.588	0.568	0.548	0.528	0.508
	61	0.807	0.796	0.785	0.774	0.762	0.749	0.736	0.722	0.707	0.692	0.676	0.660	0.643	0.625	0.607	0.588	0.569	0.549	0.529	0.508
Beneficiary younger than Retiree	60	0.807	0.797	0.786	0.774	0.762	0.749	0.736	0.722	0.708	0.693	0.677	0.661	0.644	0.626	0.608	0.589	0.570	0.550	0.530	0.509
	59	0.807	0.797	0.786	0.775	0.763	0.750	0.737	0.723	0.708	0.693	0.678	0.661	0.644	0.627	0.609	0.590	0.571	0.551	0.531	0.510
	58	0.808	0.798	0.787	0.775	0.763	0.751	0.737	0.724	0.709	0.694	0.678	0.662	0.645	0.628	0.610	0.591	0.572	0.552	0.532	0.511
	57	0.808	0.798	0.787	0.776	0.764	0.751	0.738	0.724	0.710	0.695	0.679	0.663	0.646	0.629	0.610	0.592	0.573	0.553	0.533	0.512
	56	0.809	0.799	0.788	0.776	0.764	0.752	0.739	0.725	0.711	0.696	0.680	0.664	0.647	0.629	0.611	0.593	0.574	0.554	0.534	0.513
	55	0.809	0.799	0.788	0.777	0.765	0.752	0.739	0.726	0.711	0.696	0.681	0.665	0.648	0.630	0.612	0.594	0.575	0.555	0.535	0.515
	54	0.810	0.800	0.789	0.778	0.766	0.753	0.740	0.726	0.712	0.697	0.682	0.665	0.649	0.631	0.613	0.595	0.576	0.556	0.536	0.516
	53	0.810	0.800	0.790	0.778	0.766	0.754	0.741	0.727	0.713	0.698	0.683	0.666	0.650	0.632	0.615	0.596	0.577	0.557	0.537	0.517
	52	0.811	0.801	0.790	0.779	0.767	0.755	0.742	0.728	0.714	0.699	0.684	0.667	0.651	0.634	0.616	0.597	0.578	0.559	0.539	0.518
	51	0.812	0.802	0.791	0.780	0.768	0.755	0.742	0.729	0.715	0.700	0.685	0.669	0.652	0.635	0.617	0.599	0.580	0.560	0.540	0.520
	50	0.812	0.802	0.792	0.780	0.769	0.756	0.743	0.730	0.716	0.701	0.686	0.670	0.653	0.636	0.618	0.600	0.581	0.562	0.542	0.522
	49	0.813	0.803	0.792	0.781	0.770	0.757	0.744	0.731	0.717	0.702	0.687	0.671	0.654	0.637	0.620	0.601	0.582	0.563	0.543	0.523
	48	0.814	0.804	0.793	0.782	0.770	0.758	0.745	0.732	0.718	0.703	0.688	0.672	0.656	0.639	0.621	0.603	0.584	0.565	0.545	0.525
	47	0.815	0.805	0.794	0.783	0.771	0.759	0.746	0.733	0.719	0.705	0.689	0.674	0.657	0.640	0.623	0.604	0.586	0.566	0.547	0.527
	46	0.815	0.805	0.795	0.784	0.772	0.760	0.748	0.734	0.720	0.706	0.691	0.675	0.659	0.642	0.624	0.606	0.587	0.568	0.549	0.529
	45	0.816	0.806	0.796	0.785	0.773	0.761	0.749	0.735	0.722	0.707	0.692	0.676	0.660	0.643	0.626	0.608	0.589	0.570	0.551	0.531
	44	0.817	0.807	0.797	0.786	0.775	0.763	0.750	0.737	0.723	0.709	0.694	0.678	0.662	0.645	0.628	0.610	0.591	0.572	0.553	0.533
	43	0.818	0.808	0.798	0.787	0.776	0.764	0.751	0.738	0.724	0.710	0.695	0.680	0.664	0.647	0.630	0.612	0.593	0.574	0.555	0.535
	42	0.819	0.809	0.799	0.788	0.777	0.765	0.753	0.740	0.726	0.712	0.697	0.681	0.665	0.649	0.632	0.614	0.595	0.576	0.557	0.537
	41	0.820	0.811	0.800	0.790	0.778	0.767	0.754	0.741	0.728	0.713	0.699	0.683	0.667	0.651	0.634	0.616	0.598	0.579	0.560	0.540
	40	0.821	0.812	0.802	0.791	0.780	0.768	0.756	0.743	0.729	0.715	0.700	0.685	0.669	0.653	0.636	0.618	0.600	0.581	0.562	0.543
	39	0.823	0.813	0.803	0.792	0.781	0.769	0.757	0.744	0.731	0.717	0.702	0.687	0.671	0.655	0.638	0.621	0.603	0.584	0.565	0.545
	38	0.824	0.814	0.804	0.794	0.783	0.771	0.759	0.746	0.733	0.719	0.704	0.689	0.674	0.657	0.641	0.623	0.605	0.587	0.568	0.548
	37	0.825	0.816	0.806	0.795	0.784	0.773	0.761	0.748	0.735	0.721	0.707	0.692	0.676	0.660	0.643	0.626	0.608	0.589	0.571	0.551
	36	0.826	0.817	0.807	0.797	0.786	0.775	0.763	0.750	0.737	0.723	0.709	0.694	0.679	0.662	0.646	0.629	0.611	0.592	0.574	0.555
	35	0.828	0.819	0.809	0.799	0.788	0.776	0.765	0.752	0.739	0.725	0.711	0.696	0.681	0.665	0.649	0.632	0.614	0.596	0.577	0.558
	34	0.829	0.820	0.811	0.800	0.790	0.778	0.767	0.754	0.741	0.728	0.714	0.699	0.684	0.668	0.652	0.635	0.617	0.599	0.580	0.561
	33	0.831	0.822	0.812	0.802	0.792	0.780	0.769	0.756	0.744	0.730	0.716	0.702	0.687	0.671	0.655	0.638	0.620	0.602	0.584	0.565
	32	0.833	0.824	0.814	0.804	0.794	0.783	0.771	0.759	0.746	0.733	0.719	0.705	0.690	0.674	0.658	0.641	0.624	0.606	0.587	0.569
	31	0.834	0.825	0.816	0.806	0.796	0.785	0.773	0.761	0.749	0.736	0.722	0.708	0.693	0.677	0.661	0.645	0.627	0.610	0.591	0.573

**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)**  
**Actuarial Equivalency Factors Effective January 1, 2024**

**Table 9a: 50% Joint and Survivor Annuity with Pop-up Feature - Option 3A - Healthy Members**  
 (Factor Multiplied by Option 1 Non-Refund Life Annuity)

Beneficiary Age Difference	Attained Age at Retirement																				
	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	
30	0.836	0.827	0.818	0.808	0.798	0.787	0.776	0.764	0.751	0.738	0.725	0.711	0.696	0.681	0.665	0.648	0.631	0.613	0.595	0.577	
29	0.838	0.829	0.820	0.810	0.800	0.790	0.778	0.767	0.754	0.741	0.728	0.714	0.699	0.684	0.668	0.652	0.635	0.618	0.600	0.581	
28	0.840	0.831	0.822	0.813	0.803	0.792	0.781	0.769	0.757	0.744	0.731	0.717	0.703	0.688	0.672	0.656	0.639	0.622	0.604	0.586	
27	0.842	0.834	0.825	0.815	0.805	0.795	0.784	0.772	0.760	0.748	0.734	0.721	0.706	0.692	0.676	0.660	0.644	0.626	0.609	0.591	
26	0.844	0.836	0.827	0.818	0.808	0.798	0.787	0.775	0.763	0.751	0.738	0.724	0.710	0.696	0.680	0.665	0.648	0.631	0.614	0.596	
Beneficiary younger than Retiree	25	0.846	0.838	0.829	0.820	0.811	0.800	0.790	0.779	0.767	0.755	0.742	0.728	0.714	0.700	0.685	0.669	0.653	0.636	0.619	0.602
	24	0.849	0.841	0.832	0.823	0.813	0.803	0.793	0.782	0.770	0.758	0.746	0.732	0.719	0.704	0.689	0.674	0.658	0.642	0.625	0.608
	23	0.851	0.843	0.835	0.826	0.816	0.807	0.796	0.785	0.774	0.762	0.750	0.737	0.723	0.709	0.694	0.679	0.663	0.647	0.631	0.614
	22	0.854	0.846	0.838	0.829	0.820	0.810	0.800	0.789	0.778	0.766	0.754	0.741	0.728	0.714	0.699	0.685	0.669	0.653	0.637	0.620
	21	0.856	0.849	0.841	0.832	0.823	0.813	0.803	0.793	0.782	0.770	0.758	0.746	0.732	0.719	0.705	0.690	0.675	0.659	0.643	0.627
	20	0.859	0.852	0.844	0.835	0.826	0.817	0.807	0.797	0.786	0.774	0.763	0.750	0.738	0.724	0.710	0.696	0.681	0.666	0.650	0.634
	19	0.862	0.855	0.847	0.838	0.830	0.820	0.811	0.801	0.790	0.779	0.767	0.755	0.743	0.730	0.716	0.702	0.688	0.672	0.657	0.641
	18	0.865	0.858	0.850	0.842	0.833	0.824	0.815	0.805	0.795	0.784	0.772	0.761	0.748	0.736	0.722	0.709	0.694	0.680	0.664	0.649
	17	0.868	0.861	0.853	0.845	0.837	0.828	0.819	0.809	0.799	0.789	0.778	0.766	0.754	0.742	0.729	0.715	0.701	0.687	0.672	0.657
	16	0.871	0.864	0.857	0.849	0.841	0.832	0.823	0.814	0.804	0.794	0.783	0.772	0.760	0.748	0.735	0.722	0.708	0.694	0.680	0.665
	15	0.874	0.868	0.860	0.853	0.845	0.837	0.828	0.819	0.809	0.799	0.788	0.777	0.766	0.754	0.742	0.729	0.716	0.702	0.688	0.674
	14	0.878	0.871	0.864	0.857	0.849	0.841	0.832	0.823	0.814	0.804	0.794	0.784	0.772	0.761	0.749	0.737	0.724	0.711	0.697	0.683
	13	0.881	0.875	0.868	0.861	0.853	0.845	0.837	0.828	0.819	0.810	0.800	0.790	0.779	0.768	0.756	0.744	0.732	0.719	0.706	0.692
	12	0.885	0.878	0.872	0.865	0.858	0.850	0.842	0.834	0.825	0.816	0.806	0.796	0.786	0.775	0.764	0.752	0.740	0.728	0.715	0.702
	11	0.888	0.882	0.876	0.869	0.862	0.855	0.847	0.839	0.830	0.822	0.812	0.803	0.793	0.782	0.772	0.760	0.749	0.737	0.724	0.712
	10	0.892	0.886	0.880	0.873	0.867	0.860	0.852	0.844	0.836	0.828	0.819	0.809	0.800	0.790	0.779	0.769	0.757	0.746	0.734	0.722
	9	0.896	0.890	0.884	0.878	0.871	0.865	0.857	0.850	0.842	0.834	0.825	0.816	0.807	0.797	0.787	0.777	0.766	0.755	0.744	0.732
	8	0.899	0.894	0.888	0.882	0.876	0.870	0.863	0.855	0.848	0.840	0.832	0.823	0.814	0.805	0.796	0.786	0.775	0.765	0.754	0.742
	7	0.903	0.898	0.893	0.887	0.881	0.875	0.868	0.861	0.854	0.846	0.839	0.830	0.822	0.813	0.804	0.794	0.784	0.774	0.764	0.753
	6	0.907	0.902	0.897	0.891	0.886	0.880	0.873	0.867	0.860	0.853	0.845	0.837	0.829	0.821	0.812	0.803	0.794	0.784	0.774	0.764
Beneficiary younger than Retiree	5	0.911	0.906	0.901	0.896	0.891	0.885	0.879	0.873	0.866	0.859	0.852	0.845	0.837	0.829	0.821	0.812	0.803	0.794	0.784	0.774
	4	0.915	0.910	0.906	0.901	0.895	0.890	0.884	0.878	0.872	0.866	0.859	0.852	0.844	0.837	0.829	0.821	0.812	0.803	0.794	0.785
	3	0.919	0.914	0.910	0.905	0.900	0.895	0.890	0.884	0.878	0.872	0.865	0.859	0.852	0.845	0.837	0.830	0.821	0.813	0.805	0.796
	2	0.922	0.918	0.914	0.910	0.905	0.900	0.895	0.890	0.884	0.878	0.872	0.866	0.859	0.853	0.846	0.838	0.831	0.823	0.815	0.806
	1	0.926	0.922	0.918	0.914	0.910	0.905	0.900	0.895	0.890	0.885	0.879	0.873	0.867	0.860	0.854	0.847	0.840	0.832	0.825	0.817
Beneficiary same age as Retiree	0	<b>0.930</b>	<b>0.926</b>	<b>0.923</b>	<b>0.919</b>	<b>0.914</b>	<b>0.910</b>	<b>0.906</b>	<b>0.901</b>	<b>0.896</b>	<b>0.891</b>	<b>0.885</b>	<b>0.880</b>	<b>0.874</b>	<b>0.868</b>	<b>0.862</b>	<b>0.855</b>	<b>0.849</b>	<b>0.842</b>	<b>0.834</b>	<b>0.827</b>
Beneficiary older than	-1	0.934	0.930	0.927	0.923	0.919	0.915	0.911	0.906	0.902	0.897	0.892	0.886	0.881	0.875	0.870	0.864	0.857	0.851	0.844	0.837
	-2	0.937	0.934	0.931	0.927	0.923	0.920	0.916	0.911	0.907	0.903	0.898	0.893	0.888	0.883	0.877	0.872	0.866	0.859	0.853	0.846
	-3	0.941	0.938	0.935	0.931	0.928	0.924	0.920	0.917	0.913	0.908	0.904	0.899	0.895	0.890	0.885	0.879	0.874	0.868	0.862	0.855

**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)**  
**Actuarial Equivalency Factors Effective January 1, 2024**

**Table 9a: 50% Joint and Survivor Annuity with Pop-up Feature - Option 3A - Healthy Members**  
 (Factor Multiplied by Option 1 Non-Refund Life Annuity)

Beneficiary Age Difference	Attained Age at Retirement																					
	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84		
Retiree	-4	0.944	0.941	0.938	0.935	0.932	0.929	0.925	0.922	0.918	0.914	0.910	0.906	0.901	0.897	0.892	0.887	0.882	0.876	0.870	0.864	
	-5	0.947	0.945	0.942	0.939	0.936	0.933	0.930	0.926	0.923	0.919	0.915	0.911	0.907	0.903	0.899	0.894	0.889	0.884	0.878	0.872	
	-6	0.950	0.948	0.945	0.943	0.940	0.937	0.934	0.931	0.928	0.924	0.921	0.917	0.913	0.909	0.905	0.901	0.896	0.891	0.886	0.880	
	-7	0.953	0.951	0.949	0.946	0.944	0.941	0.938	0.935	0.932	0.929	0.926	0.923	0.919	0.915	0.911	0.907	0.903	0.898	0.893	0.888	
	-8	0.956	0.954	0.952	0.950	0.947	0.945	0.942	0.940	0.937	0.934	0.931	0.928	0.924	0.921	0.917	0.913	0.909	0.905	0.900	0.895	
	-9	0.959	0.957	0.955	0.953	0.951	0.948	0.946	0.944	0.941	0.938	0.935	0.933	0.929	0.926	0.923	0.919	0.915	0.911	0.906	0.901	
	-10	0.961	0.960	0.958	0.956	0.954	0.952	0.950	0.947	0.945	0.943	0.940	0.937	0.934	0.931	0.928	0.924	0.921	0.917	0.912	0.907	
	-11	0.964	0.962	0.961	0.959	0.957	0.955	0.953	0.951	0.949	0.946	0.944	0.941	0.939	0.936	0.933	0.930	0.926	0.922	0.918	0.913	
	-12	0.966	0.965	0.963	0.962	0.960	0.958	0.956	0.954	0.952	0.950	0.948	0.945	0.943	0.940	0.937	0.934	0.931	0.927	0.923	0.918	
	-13	0.969	0.967	0.966	0.964	0.963	0.961	0.959	0.958	0.956	0.954	0.951	0.949	0.947	0.944	0.942	0.939	0.935	0.932	0.928	0.923	
	-14	0.971	0.969	0.968	0.967	0.965	0.964	0.962	0.961	0.959	0.957	0.955	0.953	0.950	0.948	0.945	0.943	0.939	0.936	0.932	0.928	
	-15	0.973	0.972	0.970	0.969	0.968	0.966	0.965	0.963	0.962	0.960	0.958	0.956	0.954	0.952	0.949	0.946	0.943	0.940	0.936	0.932	
	Beneficiary older than Retiree	-16	0.974	0.973	0.972	0.971	0.970	0.969	0.967	0.966	0.964	0.963	0.961	0.959	0.957	0.955	0.952	0.950	0.947	0.944	0.940	0.936
		-17	0.976	0.975	0.974	0.973	0.972	0.971	0.970	0.968	0.967	0.965	0.964	0.962	0.960	0.958	0.955	0.953	0.950	0.947	0.944	0.940
		-18	0.978	0.977	0.976	0.975	0.974	0.973	0.972	0.970	0.969	0.968	0.966	0.964	0.962	0.960	0.958	0.956	0.953	0.950	0.947	0.943
-19		0.979	0.979	0.978	0.977	0.976	0.975	0.974	0.973	0.971	0.970	0.968	0.967	0.965	0.963	0.961	0.959	0.956	0.953	0.950	0.946	
-20		0.981	0.980	0.979	0.979	0.978	0.977	0.976	0.974	0.973	0.972	0.970	0.969	0.967	0.965	0.963	0.961	0.959	0.956	0.953	0.949	
-21		0.982	0.982	0.981	0.980	0.979	0.978	0.977	0.976	0.975	0.974	0.972	0.971	0.969	0.968	0.966	0.963	0.961	0.958	0.955	0.952	
-22		0.983	0.983	0.982	0.981	0.981	0.980	0.979	0.978	0.977	0.975	0.974	0.973	0.971	0.969	0.968	0.966	0.963	0.960	0.957	0.954	
-23		0.985	0.984	0.983	0.983	0.982	0.981	0.980	0.979	0.978	0.977	0.976	0.974	0.973	0.971	0.969	0.967	0.965	0.962	0.959	0.956	
-24		0.986	0.985	0.985	0.984	0.983	0.982	0.982	0.981	0.980	0.979	0.977	0.976	0.975	0.973	0.971	0.969	0.967	0.964	0.961	0.957	
-25		0.987	0.986	0.986	0.985	0.984	0.984	0.983	0.982	0.981	0.980	0.979	0.977	0.976	0.974	0.973	0.971	0.968	0.966	0.962	0.959	
-26		0.988	0.987	0.987	0.986	0.985	0.985	0.984	0.983	0.982	0.981	0.980	0.979	0.977	0.976	0.974	0.972	0.970	0.967	0.964	0.960	
-27		0.988	0.988	0.988	0.987	0.986	0.986	0.985	0.984	0.983	0.982	0.981	0.980	0.978	0.977	0.975	0.973	0.971	0.968	0.965		
-28		0.989	0.989	0.988	0.988	0.987	0.987	0.986	0.985	0.984	0.983	0.982	0.981	0.980	0.978	0.976	0.974	0.972	0.969			
-29		0.990	0.990	0.989	0.989	0.988	0.987	0.987	0.986	0.985	0.984	0.983	0.982	0.981	0.979	0.977	0.975	0.972				
-30		0.991	0.990	0.990	0.989	0.989	0.988	0.988	0.987	0.986	0.985	0.984	0.983	0.981	0.980	0.978	0.976					
-31		0.991	0.991	0.990	0.990	0.990	0.989	0.988	0.988	0.987	0.986	0.985	0.983	0.982	0.980	0.978						
-32		0.992	0.991	0.991	0.991	0.990	0.990	0.989	0.988	0.987	0.986	0.985	0.984	0.983	0.981							
-33		0.992	0.992	0.992	0.991	0.991	0.990	0.990	0.989	0.988	0.987	0.986	0.985	0.983								
-34		0.993	0.992	0.992	0.992	0.991	0.991	0.990	0.989	0.988	0.987	0.986	0.985									
-35		0.993	0.993	0.993	0.992	0.992	0.991	0.990	0.990	0.989	0.988	0.987										
-36		0.994	0.993	0.993	0.993	0.992	0.992	0.991	0.990	0.989	0.988											
-37		0.994	0.994	0.993	0.993	0.992	0.992	0.991	0.990	0.990												
-38		0.994	0.994	0.994	0.993	0.993	0.992	0.992	0.991													
-39		0.995	0.994	0.994	0.994	0.993	0.992	0.992														



**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)**  
**Actuarial Equivalency Factors Effective January 1, 2024**

**Table 9a: 50% Joint and Survivor Annuity with Pop-up Feature - Option 3A - Healthy Members**  
 (Factor Multiplied by Option 1 Non-Refund Life Annuity)

Beneficiary Age Difference	Attained Age at Retirement																			
	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84
-40	0.995	0.995	0.994	0.994	0.993	0.993														
-41	0.995	0.995	0.994	0.994	0.993															
-42	0.995	0.995	0.995	0.994																
-43	0.996	0.995	0.995																	
-44	0.996	0.995																		
-45	0.996																			
-46																				
-47																				
-48																				
-49																				
-50																				
Beneficiary older than Retiree	-51																			
	-52																			
	-53																			
	-54																			
	-55																			
Beneficiary older than Retiree	-56																			
	-57																			
	-58																			
	-59																			
	-60																			
Beneficiary older than Retiree	-61																			
	-62																			
	-63																			
	-64																			
	-65																			

**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)**  
**Actuarial Equivalency Factors Effective January 1, 2024**

**Table 9a: 50% Joint and Survivor Annuity with Pop-up Feature - Option 3A - Healthy Members**  
 (Factor Multiplied by Option 1 Non-Refund Life Annuity)

Beneficiary Age Difference	Attained Age at Retirement															
	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
Beneficiary younger than Retiree																
100																
99																0.218
98															0.230	0.218
97														0.242	0.230	0.218
96													0.255	0.242	0.230	0.219
95												0.269	0.255	0.242	0.230	0.219
94											0.284	0.269	0.255	0.242	0.230	0.219
93										0.300	0.284	0.269	0.256	0.243	0.230	0.219
92									0.317	0.300	0.284	0.270	0.256	0.243	0.231	0.219
91								0.334	0.317	0.300	0.285	0.270	0.256	0.243	0.231	0.219
90							0.353	0.334	0.317	0.300	0.285	0.270	0.256	0.243	0.231	0.220
89						0.372	0.353	0.335	0.317	0.301	0.285	0.270	0.256	0.244	0.231	0.220
88					0.392	0.372	0.353	0.335	0.317	0.301	0.285	0.271	0.257	0.244	0.232	0.220
87				0.413	0.392	0.373	0.353	0.335	0.318	0.301	0.286	0.271	0.257	0.244	0.232	0.220
86			0.434	0.413	0.393	0.373	0.354	0.335	0.318	0.301	0.286	0.271	0.257	0.244	0.232	0.221
85		0.455	0.434	0.413	0.393	0.373	0.354	0.336	0.318	0.302	0.286	0.271	0.258	0.245	0.232	0.221
84	0.476	0.455	0.434	0.413	0.393	0.373	0.354	0.336	0.319	0.302	0.286	0.272	0.258	0.245	0.233	0.221
83	0.476	0.455	0.434	0.414	0.393	0.374	0.355	0.336	0.319	0.302	0.287	0.272	0.258	0.245	0.233	0.222
82	0.477	0.456	0.435	0.414	0.394	0.374	0.355	0.337	0.319	0.303	0.287	0.272	0.258	0.246	0.233	0.222
81	0.477	0.456	0.435	0.414	0.394	0.374	0.355	0.337	0.320	0.303	0.287	0.273	0.259	0.246	0.234	0.222
80	0.477	0.456	0.435	0.415	0.394	0.375	0.356	0.337	0.320	0.303	0.288	0.273	0.259	0.246	0.234	0.223
79	0.477	0.456	0.436	0.415	0.395	0.375	0.356	0.338	0.320	0.304	0.288	0.273	0.260	0.247	0.234	0.223
78	0.478	0.457	0.436	0.415	0.395	0.375	0.356	0.338	0.321	0.304	0.289	0.274	0.260	0.247	0.235	0.224
77	0.478	0.457	0.436	0.416	0.396	0.376	0.357	0.339	0.321	0.305	0.289	0.274	0.260	0.247	0.235	0.224
76	0.479	0.458	0.437	0.416	0.396	0.376	0.357	0.339	0.322	0.305	0.289	0.275	0.261	0.248	0.236	0.224
75	0.479	0.458	0.437	0.417	0.396	0.377	0.358	0.339	0.322	0.305	0.290	0.275	0.261	0.248	0.236	0.225
74	0.479	0.458	0.438	0.417	0.397	0.377	0.358	0.340	0.322	0.306	0.290	0.276	0.262	0.249	0.237	0.225
73	0.480	0.459	0.438	0.418	0.397	0.378	0.359	0.340	0.323	0.306	0.291	0.276	0.262	0.249	0.237	0.226
72	0.480	0.459	0.439	0.418	0.398	0.378	0.359	0.341	0.324	0.307	0.291	0.277	0.263	0.250	0.238	0.227
71	0.481	0.460	0.439	0.419	0.398	0.379	0.360	0.341	0.324	0.308	0.292	0.277	0.264	0.251	0.239	0.227
70	0.481	0.460	0.440	0.419	0.399	0.379	0.360	0.342	0.325	0.308	0.293	0.278	0.264	0.251	0.239	0.228
69	0.482	0.461	0.440	0.420	0.400	0.380	0.361	0.343	0.325	0.309	0.293	0.279	0.265	0.252	0.240	0.229
68	0.483	0.462	0.441	0.420	0.400	0.381	0.362	0.343	0.326	0.310	0.294	0.279	0.266	0.253	0.241	0.229
67	0.483	0.462	0.442	0.421	0.401	0.381	0.362	0.344	0.327	0.310	0.295	0.280	0.266	0.253	0.241	0.230
66	0.484	0.463	0.442	0.422	0.402	0.382	0.363	0.345	0.327	0.311	0.295	0.281	0.267	0.254	0.242	0.231

**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)**  
**Actuarial Equivalency Factors Effective January 1, 2024**

**Table 9a: 50% Joint and Survivor Annuity with Pop-up Feature - Option 3A - Healthy Members**  
 (Factor Multiplied by Option 1 Non-Refund Life Annuity)

	Beneficiary Age Difference	Attained Age at Retirement															
		85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
Beneficiary younger than Retiree	65	0.485	0.464	0.443	0.422	0.402	0.383	0.364	0.346	0.328	0.312	0.296	0.282	0.268	0.255	0.243	0.232
	64	0.485	0.464	0.444	0.423	0.403	0.384	0.365	0.346	0.329	0.313	0.297	0.283	0.269	0.256	0.244	0.233
	63	0.486	0.465	0.444	0.424	0.404	0.384	0.365	0.347	0.330	0.314	0.298	0.284	0.270	0.257	0.245	0.234
	62	0.487	0.466	0.445	0.425	0.405	0.385	0.366	0.348	0.331	0.315	0.299	0.285	0.271	0.258	0.246	0.235
	61	0.488	0.467	0.446	0.426	0.406	0.386	0.367	0.349	0.332	0.316	0.300	0.286	0.272	0.259	0.247	0.236
Beneficiary younger than Retiree	60	0.489	0.468	0.447	0.427	0.407	0.387	0.368	0.350	0.333	0.317	0.301	0.287	0.273	0.260	0.248	0.237
	59	0.490	0.469	0.448	0.428	0.408	0.388	0.370	0.351	0.334	0.318	0.302	0.288	0.274	0.262	0.250	0.239
	58	0.491	0.470	0.449	0.429	0.409	0.390	0.371	0.353	0.335	0.319	0.304	0.289	0.276	0.263	0.251	0.240
	57	0.492	0.471	0.450	0.430	0.410	0.391	0.372	0.354	0.337	0.320	0.305	0.291	0.277	0.264	0.252	0.241
	56	0.493	0.472	0.452	0.431	0.411	0.392	0.373	0.355	0.338	0.322	0.306	0.292	0.278	0.266	0.254	0.243
	55	0.494	0.473	0.453	0.433	0.413	0.393	0.375	0.357	0.340	0.323	0.308	0.293	0.280	0.267	0.255	0.244
	54	0.495	0.475	0.454	0.434	0.414	0.395	0.376	0.358	0.341	0.325	0.309	0.295	0.282	0.269	0.257	0.246
	53	0.497	0.476	0.456	0.435	0.416	0.396	0.378	0.360	0.343	0.326	0.311	0.297	0.283	0.271	0.259	0.248
	52	0.498	0.478	0.457	0.437	0.417	0.398	0.379	0.361	0.344	0.328	0.313	0.299	0.285	0.273	0.261	0.250
	51	0.500	0.479	0.459	0.439	0.419	0.400	0.381	0.363	0.346	0.330	0.315	0.300	0.287	0.275	0.263	0.252
Beneficiary younger than Retiree	50	0.501	0.481	0.460	0.440	0.421	0.401	0.383	0.365	0.348	0.332	0.317	0.303	0.289	0.277	0.265	0.254
	49	0.503	0.483	0.462	0.442	0.423	0.403	0.385	0.367	0.350	0.334	0.319	0.305	0.291	0.279	0.267	0.256
	48	0.505	0.484	0.464	0.444	0.425	0.405	0.387	0.369	0.352	0.336	0.321	0.307	0.294	0.281	0.269	0.258
	47	0.507	0.486	0.466	0.446	0.427	0.408	0.389	0.371	0.355	0.338	0.323	0.309	0.296	0.283	0.272	0.261
	46	0.509	0.488	0.468	0.448	0.429	0.410	0.391	0.374	0.357	0.341	0.326	0.312	0.298	0.286	0.274	0.263
	45	0.511	0.491	0.471	0.451	0.431	0.412	0.394	0.376	0.359	0.343	0.328	0.314	0.301	0.288	0.277	0.266
	44	0.513	0.493	0.473	0.453	0.434	0.415	0.396	0.379	0.362	0.346	0.331	0.317	0.303	0.291	0.279	0.269
	43	0.515	0.495	0.475	0.456	0.436	0.417	0.399	0.381	0.365	0.349	0.334	0.320	0.306	0.294	0.282	0.272
	42	0.518	0.498	0.478	0.458	0.439	0.420	0.402	0.384	0.367	0.352	0.337	0.322	0.309	0.297	0.286	0.275
	41	0.520	0.500	0.481	0.461	0.442	0.423	0.405	0.387	0.370	0.355	0.340	0.326	0.313	0.300	0.289	0.278
Beneficiary younger than Retiree	40	0.523	0.503	0.483	0.464	0.445	0.426	0.408	0.390	0.374	0.358	0.343	0.329	0.316	0.304	0.293	0.282
	39	0.526	0.506	0.486	0.467	0.448	0.429	0.411	0.393	0.377	0.361	0.346	0.332	0.320	0.308	0.296	0.286
	38	0.529	0.509	0.490	0.470	0.451	0.432	0.414	0.397	0.380	0.365	0.350	0.336	0.323	0.311	0.300	0.290
	37	0.532	0.512	0.493	0.473	0.454	0.436	0.418	0.401	0.384	0.369	0.354	0.340	0.328	0.316	0.305	0.295
	36	0.535	0.516	0.496	0.477	0.458	0.439	0.422	0.404	0.388	0.373	0.358	0.345	0.332	0.320	0.309	0.300
	35	0.539	0.519	0.500	0.481	0.462	0.443	0.426	0.408	0.392	0.377	0.363	0.349	0.337	0.325	0.314	0.305
	34	0.542	0.523	0.504	0.484	0.466	0.447	0.430	0.413	0.397	0.381	0.367	0.354	0.342	0.330	0.320	0.310
	33	0.546	0.527	0.508	0.489	0.470	0.452	0.434	0.417	0.401	0.386	0.372	0.359	0.347	0.336	0.325	0.316
	32	0.550	0.531	0.512	0.493	0.474	0.456	0.439	0.422	0.406	0.392	0.378	0.365	0.353	0.341	0.331	0.322
	31	0.554	0.535	0.516	0.498	0.479	0.461	0.444	0.428	0.412	0.397	0.383	0.370	0.359	0.348	0.338	0.329

**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)**  
**Actuarial Equivalency Factors Effective January 1, 2024**

**Table 9a: 50% Joint and Survivor Annuity with Pop-up Feature - Option 3A - Healthy Members**  
 (Factor Multiplied by Option 1 Non-Refund Life Annuity)

Beneficiary Age Difference	Attained Age at Retirement																
	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100	
30	0.558	0.540	0.521	0.502	0.484	0.466	0.449	0.433	0.418	0.403	0.389	0.377	0.365	0.354	0.345	0.336	
29	0.563	0.544	0.526	0.508	0.490	0.472	0.455	0.439	0.424	0.409	0.396	0.383	0.372	0.361	0.352	0.343	
28	0.568	0.549	0.531	0.513	0.495	0.478	0.461	0.445	0.430	0.416	0.403	0.390	0.379	0.369	0.359	0.351	
27	0.573	0.555	0.537	0.519	0.501	0.484	0.467	0.452	0.437	0.423	0.410	0.398	0.387	0.377	0.368	0.360	
26	0.578	0.561	0.543	0.525	0.507	0.491	0.474	0.459	0.444	0.430	0.417	0.406	0.395	0.385	0.376	0.369	
Beneficiary younger than Retiree	25	0.584	0.566	0.549	0.531	0.514	0.497	0.481	0.466	0.452	0.438	0.425	0.414	0.403	0.394	0.386	0.378
	24	0.590	0.573	0.555	0.538	0.521	0.505	0.489	0.474	0.460	0.446	0.434	0.423	0.413	0.403	0.395	0.388
	23	0.597	0.579	0.562	0.545	0.529	0.512	0.497	0.482	0.468	0.455	0.443	0.432	0.422	0.413	0.406	0.399
	22	0.603	0.586	0.569	0.553	0.536	0.520	0.505	0.491	0.477	0.464	0.453	0.442	0.433	0.424	0.417	0.410
	21	0.610	0.594	0.577	0.561	0.545	0.529	0.514	0.500	0.486	0.474	0.463	0.452	0.443	0.435	0.428	0.422
	20	0.618	0.601	0.585	0.569	0.553	0.538	0.523	0.509	0.496	0.484	0.473	0.463	0.455	0.447	0.440	0.435
	19	0.625	0.609	0.593	0.578	0.562	0.547	0.533	0.519	0.507	0.495	0.485	0.475	0.467	0.459	0.453	0.448
	18	0.633	0.618	0.602	0.587	0.572	0.557	0.543	0.530	0.518	0.506	0.496	0.487	0.479	0.472	0.467	0.462
	17	0.642	0.626	0.611	0.596	0.581	0.567	0.554	0.541	0.529	0.518	0.509	0.500	0.492	0.486	0.481	0.477
	16	0.651	0.636	0.621	0.606	0.592	0.578	0.565	0.552	0.541	0.531	0.521	0.513	0.506	0.500	0.495	0.492
	15	0.660	0.645	0.631	0.616	0.602	0.589	0.576	0.564	0.553	0.544	0.535	0.527	0.520	0.515	0.511	0.507
	14	0.669	0.655	0.641	0.627	0.614	0.601	0.588	0.577	0.566	0.557	0.549	0.541	0.535	0.530	0.526	0.523
	13	0.679	0.665	0.651	0.638	0.625	0.613	0.601	0.590	0.580	0.571	0.563	0.556	0.550	0.545	0.542	0.539
	12	0.689	0.675	0.662	0.649	0.637	0.625	0.614	0.603	0.594	0.585	0.577	0.571	0.566	0.561	0.558	0.555
	11	0.699	0.686	0.674	0.661	0.649	0.638	0.627	0.617	0.608	0.600	0.592	0.586	0.581	0.577	0.574	0.571
	10	0.709	0.697	0.685	0.673	0.662	0.651	0.640	0.631	0.622	0.614	0.607	0.602	0.597	0.593	0.590	0.587
	9	0.720	0.708	0.697	0.685	0.674	0.664	0.654	0.645	0.637	0.629	0.623	0.617	0.612	0.609	0.605	0.603
	8	0.731	0.720	0.709	0.698	0.687	0.677	0.668	0.659	0.651	0.644	0.638	0.633	0.628	0.624	0.621	0.619
	7	0.742	0.732	0.721	0.711	0.700	0.691	0.682	0.673	0.666	0.659	0.653	0.648	0.643	0.640	0.637	0.634
	6	0.753	0.743	0.733	0.723	0.714	0.704	0.696	0.688	0.680	0.674	0.668	0.663	0.658	0.655	0.652	0.649
Beneficiary younger than Retiree	5	0.765	0.755	0.745	0.736	0.727	0.718	0.709	0.702	0.695	0.688	0.683	0.678	0.673	0.670	0.666	0.664
	4	0.776	0.767	0.757	0.748	0.740	0.731	0.723	0.716	0.709	0.702	0.697	0.692	0.688	0.684	0.681	0.678
	3	0.787	0.778	0.769	0.761	0.752	0.744	0.736	0.729	0.722	0.716	0.711	0.706	0.702	0.698	0.695	0.692
	2	0.798	0.790	0.781	0.773	0.765	0.757	0.749	0.742	0.736	0.730	0.724	0.719	0.715	0.711	0.708	0.705
	1	0.809	0.801	0.793	0.785	0.777	0.769	0.762	0.755	0.749	0.743	0.737	0.732	0.728	0.724	0.721	0.718
Beneficiary same age as Retiree	0	<b>0.819</b>	<b>0.812</b>	<b>0.804</b>	<b>0.796</b>	<b>0.789</b>	<b>0.781</b>	<b>0.774</b>	<b>0.767</b>	<b>0.761</b>	<b>0.755</b>	<b>0.750</b>	<b>0.745</b>	<b>0.740</b>	<b>0.737</b>	<b>0.733</b>	<b>0.730</b>
Beneficiary older than	-1	0.829	0.822	0.815	0.807	0.800	0.793	0.786	0.779	0.773	0.767	0.762	0.757	0.752	0.748	0.745	0.741
	-2	0.839	0.832	0.825	0.818	0.811	0.804	0.797	0.791	0.784	0.779	0.773	0.768	0.764	0.760	0.756	0.752
	-3	0.849	0.842	0.835	0.828	0.821	0.815	0.808	0.801	0.795	0.790	0.784	0.779	0.775	0.770	0.766	0.763

**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)**  
**Actuarial Equivalency Factors Effective January 1, 2024**

**Table 9a: 50% Joint and Survivor Annuity with Pop-up Feature - Option 3A - Healthy Members**  
 (Factor Multiplied by Option 1 Non-Refund Life Annuity)

Beneficiary Age Difference	Attained Age at Retirement																
	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100	
Retiree	-4	0.858	0.851	0.845	0.838	0.831	0.825	0.818	0.812	0.806	0.800	0.795	0.790	0.785	0.781	0.776	0.772
	-5	0.866	0.860	0.854	0.847	0.841	0.834	0.828	0.821	0.815	0.810	0.804	0.799	0.795	0.790	0.785	0.781
	-6	0.874	0.868	0.862	0.856	0.850	0.843	0.837	0.831	0.825	0.819	0.814	0.809	0.804	0.799	0.794	0.789
	-7	0.882	0.876	0.870	0.864	0.858	0.852	0.845	0.839	0.834	0.828	0.822	0.817	0.812	0.807	0.802	0.796
	-8	0.889	0.884	0.878	0.872	0.866	0.860	0.854	0.848	0.842	0.836	0.830	0.825	0.819	0.814	0.809	0.803
	-9	0.896	0.891	0.885	0.879	0.873	0.867	0.861	0.855	0.849	0.844	0.838	0.832	0.826	0.821	0.815	0.808
	-10	0.902	0.897	0.892	0.886	0.880	0.874	0.868	0.862	0.856	0.851	0.845	0.839	0.833	0.826	0.820	0.812
	-11	0.908	0.903	0.898	0.892	0.887	0.881	0.875	0.869	0.863	0.857	0.851	0.845	0.838	0.831	0.824	
	-12	0.914	0.909	0.904	0.898	0.893	0.887	0.881	0.875	0.869	0.863	0.856	0.850	0.843	0.835		
	-13	0.919	0.914	0.909	0.904	0.898	0.893	0.887	0.881	0.874	0.868	0.861	0.854	0.846			
	-14	0.924	0.919	0.914	0.909	0.903	0.898	0.892	0.885	0.879	0.872	0.865	0.857				
	-15	0.928	0.924	0.919	0.914	0.908	0.902	0.896	0.890	0.883	0.876	0.868					
	Beneficiary older than Retiree	-16	0.932	0.928	0.923	0.918	0.912	0.906	0.900	0.894	0.887	0.879					
		-17	0.936	0.932	0.927	0.922	0.916	0.910	0.904	0.897	0.889						
		-18	0.939	0.935	0.930	0.925	0.919	0.913	0.907	0.899							
-19		0.942	0.938	0.933	0.928	0.922	0.916	0.909									
-20		0.945	0.941	0.936	0.931	0.925	0.918										
-21		0.948	0.943	0.938	0.933	0.926											
-22		0.950	0.945	0.940	0.934												
-23		0.952	0.947	0.942													
-24		0.953	0.948														
-25		0.954															
-26																	
-27																	
-28																	
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**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)**  
**Actuarial Equivalency Factors Effective January 1, 2024**

**Table 9a: 50% Joint and Survivor Annuity with Pop-up Feature - Option 3A - Healthy Members**  
 (Factor Multiplied by Option 1 Non-Refund Life Annuity)

Beneficiary Age Difference	Attained Age at Retirement															
	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
-40																
-41																
-42																
-43																
-44																
-45																
-46																
-47																
-48																
-49																
-50																
Beneficiary older than Retiree -51																
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-54																
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Beneficiary older than Retiree -56																
-57																
-58																
-59																
-60																
Beneficiary older than Retiree -61																
-62																
-63																
-64																
-65																

**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)**  
**Actuarial Equivalency Factors Effective January 1, 2024**

**Table 9b: 50% Joint and Survivor Annuity with Pop-up Feature - Option 3A - Disabled Members**  
 (Factor Multiplied by Option 1 Non-Refund Life Annuity)

Beneficiary Age Difference	Attained Age at Retirement																			
	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39
Beneficiary 75																				
younger 74																				
than 73																				
Retiree 72																				
71																				
70																				
69																				
68																				
67																				
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Beneficiary 40																				
younger 39																				
than 38																				
Retiree 37																				0.887
36																			0.892	0.887
																		0.896	0.892	0.887

**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)**  
**Actuarial Equivalency Factors Effective January 1, 2024**

**Table 9b: 50% Joint and Survivor Annuity with Pop-up Feature - Option 3A - Disabled Members**  
 (Factor Multiplied by Option 1 Non-Refund Life Annuity)

Beneficiary Age Difference	Attained Age at Retirement																				
	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	
35																	0.901	0.897	0.892	0.888	
34																0.905	0.901	0.897	0.893	0.888	
33															0.909	0.906	0.902	0.897	0.893	0.889	
32														0.914	0.910	0.906	0.902	0.898	0.893	0.889	
31													0.917	0.914	0.910	0.906	0.902	0.898	0.894	0.890	
30												0.921	0.918	0.914	0.910	0.907	0.903	0.899	0.894	0.890	
29											0.925	0.921	0.918	0.915	0.911	0.907	0.903	0.899	0.895	0.890	
28										0.928	0.925	0.922	0.918	0.915	0.911	0.907	0.904	0.899	0.895	0.891	
27									0.931	0.928	0.925	0.922	0.919	0.915	0.912	0.908	0.904	0.900	0.896	0.891	
26								0.935	0.932	0.929	0.926	0.922	0.919	0.916	0.912	0.908	0.904	0.900	0.896	0.892	
25							0.938	0.935	0.932	0.929	0.926	0.923	0.920	0.916	0.913	0.909	0.905	0.901	0.897	0.893	
24						0.941	0.938	0.935	0.932	0.929	0.926	0.923	0.920	0.917	0.913	0.909	0.905	0.902	0.897	0.893	
23				0.943	0.941	0.938	0.935	0.932	0.929	0.926	0.923	0.920	0.917	0.913	0.910	0.906	0.902	0.898	0.894	0.890	
22			0.946	0.944	0.941	0.939	0.936	0.933	0.930	0.927	0.924	0.921	0.917	0.914	0.910	0.907	0.903	0.899	0.895	0.891	
21		0.948	0.946	0.944	0.941	0.939	0.936	0.934	0.931	0.928	0.925	0.921	0.918	0.915	0.911	0.907	0.903	0.899	0.895	0.891	
20	0.953	0.951	0.949	0.947	0.944	0.942	0.939	0.937	0.934	0.931	0.928	0.925	0.922	0.919	0.915	0.912	0.908	0.904	0.900	0.896	
19	0.953	0.951	0.949	0.947	0.945	0.943	0.940	0.937	0.935	0.932	0.929	0.926	0.922	0.919	0.916	0.912	0.908	0.905	0.901	0.897	
18	0.953	0.951	0.949	0.947	0.945	0.943	0.940	0.937	0.935	0.932	0.929	0.926	0.923	0.920	0.916	0.913	0.909	0.905	0.902	0.898	
17	0.953	0.951	0.950	0.948	0.945	0.943	0.940	0.938	0.935	0.932	0.930	0.927	0.924	0.920	0.917	0.913	0.910	0.906	0.902	0.898	
16	0.953	0.952	0.950	0.948	0.946	0.943	0.941	0.938	0.936	0.933	0.930	0.927	0.924	0.921	0.918	0.914	0.911	0.907	0.903	0.899	
15	0.954	0.952	0.950	0.948	0.946	0.944	0.941	0.939	0.936	0.934	0.931	0.928	0.925	0.922	0.918	0.915	0.911	0.908	0.904	0.900	
14	0.954	0.953	0.951	0.949	0.947	0.944	0.942	0.939	0.937	0.934	0.931	0.928	0.925	0.922	0.919	0.916	0.912	0.909	0.905	0.901	
13	0.954	0.953	0.951	0.949	0.947	0.945	0.942	0.940	0.937	0.935	0.932	0.929	0.926	0.923	0.920	0.916	0.913	0.909	0.906	0.902	
12	0.955	0.953	0.952	0.950	0.947	0.945	0.943	0.940	0.938	0.935	0.932	0.930	0.927	0.924	0.921	0.917	0.914	0.910	0.907	0.903	
11	0.955	0.954	0.952	0.950	0.948	0.946	0.943	0.941	0.938	0.936	0.933	0.930	0.927	0.924	0.921	0.918	0.915	0.911	0.908	0.904	
10	0.956	0.954	0.952	0.950	0.948	0.946	0.944	0.942	0.939	0.936	0.934	0.931	0.928	0.925	0.922	0.919	0.916	0.912	0.909	0.905	
9	0.956	0.955	0.953	0.951	0.949	0.947	0.944	0.942	0.940	0.937	0.935	0.932	0.929	0.926	0.923	0.920	0.917	0.913	0.910	0.906	
8	0.956	0.955	0.953	0.951	0.949	0.947	0.945	0.943	0.940	0.938	0.935	0.933	0.930	0.927	0.924	0.921	0.918	0.914	0.911	0.907	
7	0.957	0.955	0.954	0.952	0.950	0.948	0.946	0.943	0.941	0.939	0.936	0.933	0.931	0.928	0.925	0.922	0.919	0.915	0.912	0.909	
6	0.957	0.956	0.954	0.952	0.950	0.948	0.946	0.944	0.942	0.939	0.937	0.934	0.931	0.929	0.926	0.923	0.920	0.917	0.913	0.910	
Beneficiary younger than Retiree																					
5	0.958	0.956	0.955	0.953	0.951	0.949	0.947	0.945	0.942	0.940	0.937	0.935	0.932	0.930	0.927	0.924	0.921	0.918	0.914	0.911	
4	0.958	0.957	0.955	0.954	0.952	0.950	0.947	0.945	0.943	0.941	0.938	0.936	0.933	0.930	0.928	0.925	0.922	0.919	0.916	0.912	
3	0.959	0.957	0.956	0.954	0.952	0.950	0.948	0.946	0.944	0.941	0.939	0.937	0.934	0.931	0.929	0.926	0.923	0.920	0.917	0.914	
2	0.959	0.958	0.956	0.955	0.953	0.951	0.949	0.947	0.945	0.942	0.940	0.937	0.935	0.932	0.930	0.927	0.924	0.921	0.918	0.915	
1	0.960	0.958	0.957	0.955	0.953	0.951	0.949	0.947	0.945	0.943	0.941	0.938	0.936	0.933	0.931	0.928	0.925	0.922	0.919	0.916	
Beneficiary same age as Retiree	0	0.960	0.959	0.957	0.956	0.954	0.952	0.950	0.948	0.946	0.944	0.942	0.939	0.937	0.934	0.932	0.929	0.926	0.924	0.921	0.918



**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)**  
**Actuarial Equivalency Factors Effective January 1, 2024**

**Table 9b: 50% Joint and Survivor Annuity with Pop-up Feature - Option 3A - Disabled Members**  
 (Factor Multiplied by Option 1 Non-Refund Life Annuity)

Beneficiary Age Difference	Attained Age at Retirement																			
	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39
Beneficiary older than Retiree -1	0.961	0.959	0.958	0.956	0.955	0.953	0.951	0.949	0.947	0.945	0.942	0.940	0.938	0.935	0.933	0.930	0.928	0.925	0.922	0.919
-2	0.961	0.960	0.959	0.957	0.955	0.953	0.952	0.950	0.948	0.946	0.943	0.941	0.939	0.936	0.934	0.931	0.929	0.926	0.923	0.921
-3	0.962	0.961	0.959	0.958	0.956	0.954	0.952	0.950	0.948	0.946	0.944	0.942	0.940	0.937	0.935	0.933	0.930	0.927	0.925	0.922
-4	0.962	0.961	0.960	0.958	0.957	0.955	0.953	0.951	0.949	0.947	0.945	0.943	0.941	0.939	0.936	0.934	0.931	0.929	0.926	0.923
-5	0.963	0.962	0.960	0.959	0.957	0.956	0.954	0.952	0.950	0.948	0.946	0.944	0.942	0.940	0.937	0.935	0.932	0.930	0.927	0.925
-6	0.963	0.962	0.961	0.960	0.958	0.956	0.954	0.953	0.951	0.949	0.947	0.945	0.943	0.941	0.938	0.936	0.934	0.931	0.929	0.926
-7	0.964	0.963	0.962	0.960	0.959	0.957	0.955	0.953	0.952	0.950	0.948	0.946	0.944	0.942	0.940	0.937	0.935	0.933	0.930	0.928
-8	0.964	0.963	0.962	0.961	0.959	0.958	0.956	0.954	0.952	0.951	0.949	0.947	0.945	0.943	0.941	0.938	0.936	0.934	0.932	0.929
-9	0.965	0.964	0.963	0.961	0.960	0.958	0.957	0.955	0.953	0.952	0.950	0.948	0.946	0.944	0.942	0.940	0.937	0.935	0.933	0.931
-10	0.965	0.964	0.963	0.962	0.961	0.959	0.957	0.956	0.954	0.952	0.951	0.949	0.947	0.945	0.943	0.941	0.939	0.937	0.934	0.932
-11	0.966	0.965	0.964	0.963	0.961	0.960	0.958	0.957	0.955	0.953	0.952	0.950	0.948	0.946	0.944	0.942	0.940	0.938	0.936	0.934
-12	0.967	0.966	0.965	0.963	0.962	0.960	0.959	0.957	0.956	0.954	0.952	0.951	0.949	0.947	0.945	0.943	0.941	0.939	0.937	0.935
-13	0.967	0.966	0.965	0.964	0.963	0.961	0.960	0.958	0.957	0.955	0.953	0.952	0.950	0.948	0.946	0.944	0.943	0.941	0.938	0.936
-14	0.968	0.967	0.966	0.965	0.963	0.962	0.961	0.959	0.958	0.956	0.954	0.953	0.951	0.949	0.947	0.946	0.944	0.942	0.940	0.938
-15	0.968	0.967	0.966	0.965	0.964	0.963	0.961	0.960	0.958	0.957	0.955	0.954	0.952	0.950	0.949	0.947	0.945	0.943	0.941	0.939
-16	0.969	0.968	0.967	0.966	0.965	0.963	0.962	0.961	0.959	0.958	0.956	0.955	0.953	0.951	0.950	0.948	0.946	0.945	0.943	0.941
-17	0.969	0.969	0.968	0.967	0.965	0.964	0.963	0.961	0.960	0.959	0.957	0.956	0.954	0.953	0.951	0.949	0.948	0.946	0.944	0.942
-18	0.970	0.969	0.968	0.967	0.966	0.964	0.962	0.961	0.960	0.958	0.957	0.955	0.954	0.952	0.951	0.949	0.947	0.946	0.944	0.944
-19	0.970	0.970	0.969	0.968	0.967	0.966	0.964	0.963	0.962	0.961	0.959	0.958	0.956	0.955	0.953	0.952	0.950	0.949	0.947	0.945
-20	0.971	0.970	0.970	0.969	0.968	0.966	0.965	0.964	0.963	0.961	0.960	0.959	0.957	0.956	0.954	0.953	0.951	0.950	0.948	0.947
-21	0.972	0.971	0.970	0.969	0.968	0.967	0.966	0.965	0.964	0.962	0.961	0.960	0.958	0.957	0.956	0.954	0.953	0.951	0.950	0.948
-22	0.972	0.972	0.971	0.970	0.969	0.968	0.967	0.966	0.964	0.963	0.962	0.961	0.960	0.958	0.957	0.955	0.954	0.953	0.951	0.950
-23	0.973	0.972	0.972	0.971	0.970	0.969	0.968	0.967	0.965	0.964	0.963	0.962	0.961	0.959	0.958	0.957	0.955	0.954	0.953	0.951
-24	0.973	0.973	0.972	0.971	0.970	0.969	0.968	0.967	0.966	0.965	0.964	0.963	0.962	0.960	0.959	0.958	0.957	0.955	0.954	0.953
-25	0.974	0.974	0.973	0.972	0.971	0.970	0.969	0.968	0.967	0.966	0.965	0.964	0.963	0.962	0.960	0.959	0.958	0.957	0.956	0.954
-26	0.975	0.974	0.974	0.973	0.972	0.971	0.970	0.969	0.968	0.967	0.966	0.965	0.964	0.963	0.962	0.961	0.959	0.958	0.957	0.956
-27	0.975	0.975	0.974	0.974	0.973	0.972	0.971	0.970	0.969	0.968	0.967	0.966	0.965	0.964	0.963	0.962	0.961	0.960	0.958	0.957
-28	0.976	0.975	0.975	0.974	0.973	0.973	0.972	0.971	0.970	0.969	0.968	0.967	0.966	0.965	0.964	0.963	0.962	0.961	0.960	0.959
-29	0.976	0.976	0.976	0.975	0.974	0.973	0.973	0.972	0.971	0.970	0.969	0.968	0.967	0.966	0.965	0.964	0.963	0.962	0.961	0.960
-30	0.977	0.977	0.976	0.976	0.975	0.974	0.973	0.973	0.972	0.971	0.970	0.969	0.968	0.967	0.967	0.966	0.965	0.964	0.963	0.962
-31	0.978	0.977	0.977	0.976	0.976	0.975	0.974	0.973	0.973	0.972	0.971	0.970	0.969	0.969	0.968	0.967	0.966	0.965	0.964	0.963
-32	0.978	0.978	0.978	0.977	0.976	0.976	0.975	0.974	0.974	0.973	0.972	0.971	0.971	0.970	0.969	0.968	0.967	0.967	0.966	0.965
-33	0.979	0.979	0.978	0.978	0.977	0.977	0.976	0.975	0.974	0.974	0.973	0.972	0.972	0.971	0.970	0.969	0.969	0.968	0.967	0.966
-34	0.980	0.979	0.979	0.979	0.978	0.977	0.977	0.976	0.975	0.975	0.974	0.973	0.973	0.972	0.971	0.970	0.969	0.969	0.968	0.968
-35	0.980	0.980	0.980	0.979	0.979	0.978	0.978	0.977	0.976	0.976	0.975	0.974	0.974	0.973	0.973	0.972	0.971	0.971	0.970	0.969
Beneficiary older than Retiree -36	0.981	0.981	0.980	0.980	0.979	0.979	0.978	0.978	0.977	0.977	0.976	0.975	0.975	0.974	0.974	0.973	0.973	0.972	0.971	0.971
-37	0.981	0.981	0.981	0.981	0.980	0.980	0.979	0.979	0.978	0.978	0.977	0.977	0.976	0.975	0.975	0.974	0.974	0.973	0.973	0.972
-38	0.982	0.982	0.982	0.981	0.981	0.980	0.980	0.979	0.979	0.978	0.977	0.977	0.976	0.975	0.975	0.974	0.974	0.973	0.973	0.972
-39	0.983	0.983	0.982	0.982	0.982	0.981	0.981	0.980	0.980	0.979	0.979	0.978	0.978	0.977	0.977	0.976	0.975	0.975	0.974	0.974
-40	0.983	0.983	0.983	0.983	0.982	0.982	0.982	0.981	0.981	0.980	0.980	0.979	0.979	0.978	0.978	0.977	0.976	0.976	0.975	0.975

**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)**  
**Actuarial Equivalency Factors Effective January 1, 2024**

**Table 9b: 50% Joint and Survivor Annuity with Pop-up Feature - Option 3A - Disabled Members**  
 (Factor Multiplied by Option 1 Non-Refund Life Annuity)

Beneficiary Age Difference	Attained Age at Retirement																			
	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39
Beneficiary older than Retiree -41	0.984	0.984	0.984	0.983	0.983	0.983	0.982	0.982	0.982	0.981	0.981	0.980	0.980	0.980	0.979	0.979	0.979	0.978	0.978	0.978
-42	0.984	0.984	0.984	0.984	0.984	0.984	0.983	0.983	0.983	0.982	0.982	0.981	0.981	0.981	0.980	0.980	0.980	0.979	0.979	0.979
-43	0.985	0.985	0.985	0.985	0.984	0.984	0.984	0.984	0.983	0.983	0.983	0.982	0.982	0.982	0.981	0.981	0.981	0.981	0.980	0.980
-44	0.986	0.986	0.986	0.985	0.985	0.985	0.985	0.984	0.984	0.984	0.983	0.983	0.983	0.983	0.982	0.982	0.982	0.982	0.981	0.981
-45	0.986	0.986	0.986	0.986	0.986	0.986	0.985	0.985	0.985	0.985	0.984	0.984	0.984	0.984	0.983	0.983	0.983	0.983	0.983	0.982
-46	0.987	0.987	0.987	0.987	0.986	0.986	0.986	0.986	0.986	0.985	0.985	0.985	0.985	0.985	0.984	0.984	0.984	0.984	0.984	0.983
-47	0.987	0.987	0.987	0.987	0.987	0.987	0.987	0.986	0.986	0.986	0.986	0.986	0.986	0.985	0.985	0.985	0.985	0.985	0.985	0.984
-48	0.988	0.988	0.988	0.988	0.988	0.988	0.988	0.987	0.987	0.987	0.987	0.987	0.987	0.986	0.986	0.986	0.986	0.986	0.986	0.985
-49	0.988	0.988	0.988	0.988	0.988	0.988	0.988	0.988	0.988	0.988	0.987	0.987	0.987	0.987	0.987	0.987	0.987	0.987	0.986	0.986
-50	0.989	0.989	0.989	0.989	0.989	0.989	0.989	0.988	0.988	0.988	0.988	0.988	0.988	0.988	0.988	0.988	0.988	0.987	0.987	0.987
-51	0.989	0.989	0.990	0.990	0.989	0.989	0.989	0.989	0.989	0.989	0.989	0.989	0.989	0.989	0.988	0.988	0.988	0.988	0.988	0.988
-52	0.990	0.990	0.990	0.990	0.990	0.990	0.990	0.990	0.990	0.990	0.989	0.989	0.989	0.989	0.989	0.989	0.989	0.989	0.989	0.989
-53	0.990	0.990	0.991	0.991	0.991	0.990	0.990	0.990	0.990	0.990	0.990	0.990	0.990	0.990	0.990	0.990	0.990	0.990	0.990	0.989
-54	0.991	0.991	0.991	0.991	0.991	0.991	0.991	0.991	0.991	0.991	0.991	0.991	0.991	0.991	0.991	0.990	0.990	0.990	0.990	0.990
-55	0.991	0.991	0.992	0.992	0.992	0.991	0.991	0.991	0.991	0.991	0.991	0.991	0.991	0.991	0.991	0.991	0.991	0.991	0.991	0.991
-56	0.991	0.992	0.992	0.992	0.992	0.992	0.992	0.992	0.992	0.992	0.992	0.992	0.992	0.992	0.992	0.992	0.992	0.991	0.991	0.991
-57	0.992	0.992	0.992	0.992	0.992	0.992	0.992	0.992	0.992	0.992	0.992	0.992	0.992	0.992	0.992	0.992	0.992	0.992	0.992	0.992
-58	0.992	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.992	0.992
-59	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993
-60	0.993	0.993	0.994	0.994	0.994	0.994	0.994	0.994	0.994	0.994	0.994	0.994	0.994	0.994	0.994	0.994	0.993	0.993	0.993	0.993
-61	0.993	0.994	0.994	0.994	0.994	0.994	0.994	0.994	0.994	0.994	0.994	0.994	0.994	0.994	0.994	0.994	0.994	0.994	0.994	0.994
-62	0.994	0.994	0.994	0.994	0.994	0.994	0.994	0.994	0.994	0.994	0.994	0.994	0.994	0.994	0.994	0.994	0.994	0.994	0.994	0.994
-63	0.994	0.994	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.994	0.994	0.994
-64	0.994	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995
-65	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995
-66	0.995	0.995	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.995	0.995	0.995	0.995
-67	0.995	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.995	0.995
-68	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996
-69	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996
-70	0.996	0.996	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.996	0.996	0.996	0.996	0.996	0.996	0.996
-71	0.996	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.996	0.996	0.996	0.996
-72	0.996	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.996	0.996	0.996
-73	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.996	0.996
-74	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997
-75	0.997	0.997	0.997	0.998	0.998	0.998	0.998	0.998	0.998	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997
Beneficiary older than Retiree -76	0.997	0.997	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997
-77	0.997	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.997	0.997	0.997	0.997	0.997	0.997	0.997	0.997
-78	0.997	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998
Beneficiary Retiree -79	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998
-80	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998

**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)**  
**Actuarial Equivalency Factors Effective January 1, 2024**

**Table 9b: 50% Joint and Survivor Annuity with Pop-up Feature - Option 3A - Disabled Members**  
 (Factor Multiplied by Option 1 Non-Refund Life Annuity)

	Beneficiary Age Difference	Attained Age at Retirement																			
		20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39
Beneficiary	-81	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998										
older	-82	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998										
than	-83	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998										
Retiree	-84	0.998	0.998	0.998	0.998	0.998	0.998	0.998	0.998												
	-85	0.998	0.998	0.998	0.999	0.999	0.998														
	-86	0.998	0.998	0.999	0.999	0.999															
	-87	0.998	0.998	0.999	0.999																
	-88	0.998	0.999	0.999																	
	-89	0.998	0.999																		
	-90	0.998																			

**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)**  
**Actuarial Equivalency Factors Effective January 1, 2024**

**Table 9b: 50% Joint and Survivor Annuity with Pop-up Feature - Option 3A - Disabled Members**  
 (Factor Multiplied by Option 1 Non-Refund Life Annuity)

Beneficiary Age Difference	Attained Age at Retirement																						
	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59			
Beneficiary 75																							
younger 74																							
than 73																							
Retiree 72																							
71																							
70																							
69																							
68																							
67																							
66																							
65																							
64																							
63																							
62																							
61																							
60																							
59																							
58																				0.769			
57																			0.777	0.770			
56																		0.784	0.777	0.770			
55																	0.791	0.784	0.778	0.770			
54																0.797	0.791	0.785	0.778	0.771			
53															0.804	0.798	0.792	0.785	0.778	0.771			
52														0.810	0.804	0.798	0.792	0.786	0.779	0.772			
51													0.816	0.810	0.804	0.798	0.792	0.786	0.779	0.772			
50												0.821	0.816	0.810	0.805	0.799	0.793	0.786	0.780	0.773			
49												0.827	0.822	0.817	0.811	0.806	0.799	0.793	0.787	0.780	0.773		
48												0.833	0.827	0.822	0.817	0.811	0.806	0.800	0.794	0.787	0.781	0.774	
47												0.838	0.833	0.828	0.823	0.817	0.812	0.806	0.800	0.794	0.788	0.781	0.774
46									0.844	0.839	0.833	0.828	0.823	0.818	0.812	0.806	0.801	0.795	0.788	0.782	0.775		
45								0.849	0.844	0.839	0.834	0.829	0.823	0.818	0.813	0.807	0.801	0.795	0.789	0.782	0.775		
44							0.855	0.850	0.844	0.839	0.834	0.829	0.824	0.818	0.813	0.807	0.802	0.796	0.790	0.783	0.776		
43						0.860	0.855	0.850	0.845	0.840	0.835	0.829	0.824	0.819	0.814	0.808	0.802	0.796	0.790	0.784	0.777		
42				0.866	0.861	0.856	0.850	0.845	0.840	0.835	0.830	0.825	0.819	0.814	0.809	0.803	0.797	0.791	0.784	0.777			
41			0.871	0.866	0.861	0.856	0.851	0.846	0.841	0.835	0.830	0.825	0.820	0.815	0.809	0.803	0.798	0.791	0.785	0.778			
Beneficiary 40																							
younger 39	0.882	0.877	0.872	0.867	0.862	0.856	0.851	0.846	0.841	0.836	0.831	0.826	0.821	0.815	0.810	0.804	0.798	0.792	0.786	0.779			
than 38	0.882	0.877	0.872	0.867	0.862	0.857	0.852	0.847	0.841	0.836	0.831	0.826	0.821	0.816	0.810	0.805	0.799	0.793	0.787	0.780			
Retiree 37	0.882	0.878	0.873	0.868	0.863	0.858	0.853	0.848	0.842	0.837	0.832	0.827	0.822	0.816	0.811	0.806	0.800	0.794	0.787	0.781			
36	0.883	0.878	0.873	0.868	0.863	0.858	0.853	0.848	0.843	0.838	0.833	0.828	0.823	0.818	0.813	0.807	0.801	0.796	0.789	0.783			

**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)**  
**Actuarial Equivalency Factors Effective January 1, 2024**

**Table 9b: 50% Joint and Survivor Annuity with Pop-up Feature - Option 3A - Disabled Members**  
 (Factor Multiplied by Option 1 Non-Refund Life Annuity)

Beneficiary Age Difference	Attained Age at Retirement																				
	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	
35	0.883	0.878	0.874	0.869	0.864	0.859	0.854	0.849	0.844	0.839	0.834	0.829	0.824	0.819	0.813	0.808	0.802	0.796	0.790	0.784	
34	0.884	0.879	0.874	0.869	0.864	0.859	0.854	0.849	0.844	0.839	0.835	0.830	0.825	0.819	0.814	0.809	0.803	0.797	0.791	0.785	
33	0.884	0.879	0.875	0.870	0.865	0.860	0.855	0.850	0.845	0.840	0.835	0.830	0.825	0.820	0.815	0.810	0.804	0.798	0.792	0.786	
32	0.884	0.880	0.875	0.870	0.865	0.860	0.855	0.850	0.846	0.841	0.836	0.831	0.826	0.821	0.816	0.811	0.805	0.800	0.794	0.787	
31	0.885	0.880	0.876	0.871	0.866	0.861	0.856	0.851	0.846	0.841	0.837	0.832	0.827	0.822	0.817	0.812	0.806	0.801	0.795	0.789	
30	0.885	0.881	0.876	0.871	0.866	0.862	0.857	0.852	0.847	0.842	0.838	0.833	0.828	0.823	0.818	0.813	0.808	0.802	0.796	0.790	
29	0.886	0.881	0.877	0.872	0.867	0.862	0.857	0.853	0.848	0.843	0.838	0.834	0.829	0.824	0.819	0.814	0.809	0.803	0.797	0.791	
28	0.887	0.882	0.877	0.873	0.868	0.863	0.858	0.853	0.849	0.844	0.839	0.835	0.830	0.825	0.820	0.815	0.810	0.805	0.799	0.793	
27	0.887	0.883	0.878	0.873	0.868	0.864	0.859	0.854	0.849	0.845	0.840	0.836	0.831	0.826	0.821	0.816	0.811	0.806	0.800	0.794	
26	0.888	0.883	0.879	0.874	0.869	0.864	0.860	0.855	0.850	0.846	0.841	0.837	0.832	0.827	0.823	0.818	0.813	0.807	0.802	0.796	
25	0.888	0.884	0.879	0.875	0.870	0.865	0.861	0.856	0.851	0.847	0.842	0.838	0.833	0.829	0.824	0.819	0.814	0.809	0.803	0.798	
24	0.889	0.884	0.880	0.875	0.871	0.866	0.861	0.857	0.852	0.848	0.843	0.839	0.835	0.830	0.825	0.821	0.816	0.810	0.805	0.799	
23	0.890	0.885	0.881	0.876	0.872	0.867	0.862	0.858	0.853	0.849	0.845	0.840	0.836	0.831	0.827	0.822	0.817	0.812	0.807	0.801	
22	0.890	0.886	0.881	0.877	0.872	0.868	0.863	0.859	0.854	0.850	0.846	0.842	0.837	0.833	0.828	0.824	0.819	0.814	0.809	0.803	
21	0.891	0.887	0.882	0.878	0.873	0.869	0.864	0.860	0.856	0.851	0.847	0.843	0.839	0.834	0.830	0.825	0.821	0.816	0.811	0.805	
20	0.892	0.888	0.883	0.879	0.874	0.870	0.865	0.861	0.857	0.853	0.848	0.844	0.840	0.836	0.831	0.827	0.822	0.818	0.813	0.807	
19	0.893	0.888	0.884	0.880	0.875	0.871	0.867	0.862	0.858	0.854	0.850	0.846	0.842	0.837	0.833	0.829	0.824	0.820	0.815	0.809	
18	0.893	0.889	0.885	0.881	0.876	0.872	0.868	0.863	0.859	0.855	0.851	0.847	0.843	0.839	0.835	0.831	0.826	0.822	0.817	0.812	
17	0.894	0.890	0.886	0.882	0.877	0.873	0.869	0.865	0.861	0.857	0.853	0.849	0.845	0.841	0.837	0.833	0.828	0.824	0.819	0.814	
16	0.895	0.891	0.887	0.883	0.879	0.874	0.870	0.866	0.862	0.858	0.854	0.850	0.847	0.843	0.839	0.835	0.830	0.826	0.821	0.817	
15	0.896	0.892	0.888	0.884	0.880	0.876	0.871	0.867	0.863	0.860	0.856	0.852	0.848	0.844	0.841	0.837	0.833	0.828	0.824	0.819	
14	0.897	0.893	0.889	0.885	0.881	0.877	0.873	0.869	0.865	0.861	0.858	0.854	0.850	0.846	0.843	0.839	0.835	0.831	0.826	0.822	
13	0.898	0.894	0.890	0.886	0.882	0.878	0.874	0.870	0.867	0.863	0.859	0.856	0.852	0.848	0.845	0.841	0.837	0.833	0.829	0.825	
12	0.899	0.895	0.891	0.888	0.884	0.880	0.876	0.872	0.868	0.865	0.861	0.858	0.854	0.851	0.847	0.843	0.840	0.836	0.832	0.827	
11	0.900	0.897	0.893	0.889	0.885	0.881	0.877	0.873	0.870	0.866	0.863	0.860	0.856	0.853	0.849	0.846	0.842	0.838	0.834	0.830	
10	0.902	0.898	0.894	0.890	0.886	0.883	0.879	0.875	0.872	0.868	0.865	0.862	0.858	0.855	0.852	0.848	0.845	0.841	0.837	0.833	
9	0.903	0.899	0.895	0.892	0.888	0.884	0.880	0.877	0.873	0.870	0.867	0.864	0.860	0.857	0.854	0.851	0.847	0.844	0.840	0.836	
8	0.904	0.900	0.897	0.893	0.889	0.886	0.882	0.879	0.875	0.872	0.869	0.866	0.863	0.860	0.857	0.853	0.850	0.847	0.843	0.840	
7	0.905	0.902	0.898	0.894	0.891	0.887	0.884	0.880	0.877	0.874	0.871	0.868	0.865	0.862	0.859	0.856	0.853	0.850	0.846	0.843	
6	0.906	0.903	0.899	0.896	0.892	0.889	0.885	0.882	0.879	0.876	0.873	0.870	0.867	0.865	0.862	0.859	0.856	0.853	0.850	0.846	
Beneficiary younger than Retiree																					
5	0.908	0.904	0.901	0.897	0.894	0.891	0.887	0.884	0.881	0.878	0.875	0.873	0.870	0.867	0.864	0.862	0.859	0.856	0.853	0.850	
4	0.909	0.906	0.902	0.899	0.896	0.892	0.889	0.886	0.883	0.880	0.878	0.875	0.872	0.870	0.867	0.865	0.862	0.859	0.856	0.853	
3	0.910	0.907	0.904	0.901	0.897	0.894	0.891	0.888	0.885	0.882	0.880	0.877	0.875	0.872	0.870	0.867	0.865	0.862	0.860	0.857	
2	0.912	0.909	0.905	0.902	0.899	0.896	0.893	0.890	0.887	0.885	0.882	0.880	0.877	0.875	0.873	0.870	0.868	0.866	0.863	0.860	
1	0.913	0.910	0.907	0.904	0.901	0.898	0.895	0.892	0.889	0.887	0.884	0.882	0.880	0.878	0.876	0.873	0.871	0.869	0.867	0.864	
Beneficiary same age as Retiree	<b>0</b>	<b>0.915</b>	<b>0.912</b>	<b>0.909</b>	<b>0.906</b>	<b>0.903</b>	<b>0.900</b>	<b>0.897</b>	<b>0.894</b>	<b>0.891</b>	<b>0.889</b>	<b>0.887</b>	<b>0.885</b>	<b>0.882</b>	<b>0.880</b>	<b>0.878</b>	<b>0.876</b>	<b>0.874</b>	<b>0.872</b>	<b>0.870</b>	<b>0.868</b>

**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)**  
**Actuarial Equivalency Factors Effective January 1, 2024**

**Table 9b: 50% Joint and Survivor Annuity with Pop-up Feature - Option 3A - Disabled Members**  
 (Factor Multiplied by Option 1 Non-Refund Life Annuity)

Beneficiary Age Difference	Attained Age at Retirement																			
	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59
Beneficiary older than Retiree -1	0.916	0.913	0.910	0.907	0.904	0.901	0.899	0.896	0.894	0.891	0.889	0.887	0.885	0.883	0.881	0.879	0.878	0.876	0.874	0.872
-2	0.918	0.915	0.912	0.909	0.906	0.903	0.901	0.898	0.896	0.894	0.892	0.890	0.888	0.886	0.884	0.883	0.881	0.879	0.877	0.875
-3	0.919	0.916	0.914	0.911	0.908	0.905	0.903	0.900	0.898	0.896	0.894	0.892	0.890	0.889	0.887	0.886	0.884	0.883	0.881	0.879
-4	0.921	0.918	0.915	0.912	0.910	0.907	0.905	0.902	0.900	0.898	0.896	0.895	0.893	0.892	0.890	0.889	0.887	0.886	0.884	0.883
-5	0.922	0.919	0.917	0.914	0.912	0.909	0.907	0.904	0.902	0.900	0.899	0.897	0.896	0.894	0.893	0.892	0.891	0.889	0.888	0.887
-6	0.924	0.921	0.918	0.916	0.913	0.911	0.909	0.907	0.905	0.903	0.901	0.900	0.899	0.897	0.896	0.895	0.894	0.893	0.892	0.890
-7	0.925	0.923	0.920	0.918	0.915	0.913	0.911	0.909	0.907	0.905	0.904	0.902	0.901	0.900	0.899	0.898	0.897	0.896	0.895	0.894
-8	0.927	0.924	0.922	0.919	0.917	0.915	0.913	0.911	0.909	0.907	0.906	0.905	0.904	0.903	0.902	0.901	0.900	0.900	0.899	0.898
-9	0.928	0.926	0.924	0.921	0.919	0.917	0.915	0.913	0.911	0.910	0.909	0.908	0.907	0.906	0.905	0.904	0.904	0.903	0.902	0.902
-10	0.930	0.927	0.925	0.923	0.921	0.919	0.917	0.915	0.913	0.912	0.911	0.910	0.909	0.909	0.908	0.907	0.907	0.906	0.906	0.905
-11	0.931	0.929	0.927	0.925	0.923	0.921	0.919	0.917	0.916	0.914	0.914	0.913	0.912	0.911	0.911	0.910	0.910	0.910	0.909	0.909
-12	0.933	0.931	0.929	0.926	0.924	0.923	0.921	0.919	0.918	0.917	0.916	0.915	0.915	0.914	0.914	0.913	0.913	0.913	0.913	0.912
-13	0.934	0.932	0.930	0.928	0.926	0.925	0.923	0.921	0.920	0.919	0.918	0.918	0.917	0.917	0.917	0.916	0.916	0.916	0.916	0.916
-14	0.936	0.934	0.932	0.930	0.928	0.926	0.925	0.924	0.922	0.921	0.921	0.920	0.920	0.920	0.919	0.919	0.919	0.919	0.919	0.919
-15	0.937	0.936	0.934	0.932	0.930	0.928	0.927	0.926	0.925	0.924	0.923	0.923	0.922	0.922	0.922	0.922	0.922	0.923	0.923	0.923
-16	0.939	0.937	0.935	0.934	0.932	0.930	0.929	0.928	0.927	0.926	0.926	0.925	0.925	0.925	0.925	0.925	0.925	0.926	0.926	0.926
-17	0.941	0.939	0.937	0.935	0.934	0.932	0.931	0.930	0.929	0.928	0.928	0.928	0.928	0.928	0.928	0.928	0.928	0.929	0.929	0.929
-18	0.942	0.940	0.939	0.937	0.936	0.934	0.933	0.932	0.931	0.931	0.930	0.930	0.930	0.930	0.930	0.931	0.931	0.932	0.932	0.933
-19	0.944	0.942	0.940	0.939	0.937	0.936	0.935	0.934	0.933	0.933	0.933	0.933	0.933	0.933	0.933	0.934	0.934	0.935	0.935	0.936
-20	0.945	0.944	0.942	0.941	0.939	0.938	0.937	0.936	0.935	0.935	0.935	0.935	0.935	0.935	0.936	0.936	0.937	0.937	0.938	0.939
-21	0.947	0.945	0.944	0.942	0.941	0.940	0.939	0.938	0.938	0.937	0.937	0.937	0.938	0.938	0.938	0.939	0.940	0.940	0.941	0.942
-22	0.948	0.947	0.946	0.944	0.943	0.942	0.941	0.940	0.940	0.940	0.940	0.940	0.940	0.941	0.941	0.942	0.942	0.943	0.944	0.945
-23	0.950	0.949	0.947	0.946	0.945	0.944	0.943	0.942	0.942	0.942	0.942	0.942	0.942	0.943	0.943	0.944	0.945	0.946	0.947	0.947
-24	0.952	0.950	0.949	0.948	0.947	0.946	0.945	0.944	0.944	0.944	0.944	0.944	0.945	0.945	0.946	0.947	0.948	0.948	0.949	0.950
-25	0.953	0.952	0.951	0.950	0.949	0.948	0.947	0.946	0.946	0.946	0.946	0.947	0.947	0.948	0.948	0.949	0.950	0.951	0.952	0.953
-26	0.955	0.954	0.952	0.951	0.950	0.950	0.949	0.948	0.948	0.948	0.948	0.949	0.949	0.950	0.951	0.952	0.953	0.953	0.954	0.955
-27	0.956	0.955	0.954	0.953	0.952	0.952	0.951	0.951	0.950	0.950	0.951	0.951	0.952	0.952	0.953	0.954	0.955	0.956	0.957	0.958
-28	0.958	0.957	0.956	0.955	0.954	0.953	0.953	0.953	0.952	0.952	0.953	0.953	0.954	0.955	0.955	0.956	0.957	0.958	0.959	0.960
-29	0.959	0.958	0.958	0.957	0.956	0.955	0.955	0.955	0.954	0.954	0.955	0.955	0.956	0.957	0.958	0.958	0.959	0.960	0.961	0.962
-30	0.961	0.960	0.959	0.958	0.958	0.957	0.957	0.956	0.956	0.957	0.957	0.958	0.958	0.959	0.960	0.961	0.962	0.963	0.963	0.964
-31	0.963	0.962	0.961	0.960	0.960	0.959	0.959	0.958	0.958	0.959	0.959	0.960	0.960	0.961	0.962	0.963	0.964	0.965	0.965	0.966
-32	0.964	0.963	0.963	0.962	0.961	0.961	0.960	0.960	0.960	0.961	0.961	0.962	0.962	0.963	0.964	0.965	0.966	0.967	0.967	0.968
-33	0.966	0.965	0.964	0.964	0.963	0.963	0.962	0.962	0.962	0.962	0.963	0.964	0.964	0.965	0.966	0.967	0.968	0.969	0.970	0.970
-34	0.967	0.966	0.966	0.965	0.965	0.964	0.964	0.964	0.964	0.964	0.965	0.965	0.966	0.967	0.968	0.968	0.969	0.970	0.971	0.972
-35	0.969	0.968	0.967	0.967	0.966	0.966	0.966	0.966	0.966	0.966	0.967	0.967	0.968	0.969	0.969	0.970	0.971	0.972	0.973	0.973
Beneficiary older than Retiree -36	0.970	0.970	0.969	0.969	0.968	0.968	0.968	0.968	0.968	0.968	0.968	0.969	0.970	0.970	0.971	0.972	0.973	0.973	0.974	0.975
-37	0.972	0.971	0.971	0.970	0.970	0.969	0.969	0.969	0.969	0.970	0.970	0.971	0.971	0.972	0.973	0.973	0.974	0.975	0.976	0.976
-38	0.973	0.973	0.972	0.972	0.971	0.971	0.971	0.971	0.971	0.971	0.972	0.972	0.973	0.973	0.974	0.975	0.976	0.976	0.977	0.977
-39	0.974	0.974	0.974	0.973	0.973	0.973	0.973	0.973	0.973	0.973	0.973	0.974	0.974	0.975	0.976	0.977	0.978	0.978	0.979	0.979
-40	0.976	0.975	0.975	0.975	0.974	0.974	0.974	0.974	0.974	0.974	0.975	0.975	0.976	0.976	0.977	0.977	0.978	0.979	0.979	0.980

**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)**  
**Actuarial Equivalency Factors Effective January 1, 2024**

**Table 9b: 50% Joint and Survivor Annuity with Pop-up Feature - Option 3A - Disabled Members**  
 (Factor Multiplied by Option 1 Non-Refund Life Annuity)

Beneficiary Age Difference	Attained Age at Retirement																			
	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59
Beneficiary older than Retiree -41	0.977	0.977	0.976	0.976	0.976	0.976	0.976	0.975	0.976	0.976	0.976	0.977	0.977	0.978	0.978	0.979	0.979	0.980	0.980	0.981
-42	0.978	0.978	0.978	0.978	0.977	0.977	0.977	0.977	0.977	0.977	0.978	0.978	0.978	0.979	0.979	0.980	0.980	0.981	0.981	0.982
-43	0.980	0.979	0.979	0.979	0.979	0.978	0.978	0.978	0.978	0.978	0.979	0.979	0.980	0.980	0.980	0.981	0.981	0.982	0.982	0.983
-44	0.981	0.981	0.980	0.980	0.980	0.980	0.980	0.979	0.980	0.980	0.980	0.980	0.981	0.981	0.982	0.982	0.982	0.983	0.983	0.984
-45	0.982	0.982	0.982	0.981	0.981	0.981	0.981	0.981	0.981	0.981	0.981	0.981	0.982	0.982	0.983	0.983	0.983	0.984	0.984	0.984
-46	0.983	0.983	0.983	0.982	0.982	0.982	0.982	0.982	0.982	0.982	0.982	0.982	0.983	0.983	0.983	0.984	0.984	0.985	0.985	0.985
-47	0.984	0.984	0.984	0.983	0.983	0.983	0.983	0.983	0.983	0.983	0.983	0.984	0.984	0.984	0.984	0.985	0.985	0.985	0.986	0.986
-48	0.985	0.985	0.985	0.984	0.984	0.984	0.984	0.984	0.984	0.984	0.984	0.984	0.984	0.985	0.985	0.985	0.986	0.986	0.986	0.986
-49	0.986	0.986	0.986	0.985	0.985	0.985	0.985	0.985	0.985	0.985	0.985	0.985	0.985	0.986	0.986	0.986	0.986	0.986	0.987	0.987
-50	0.987	0.987	0.987	0.986	0.986	0.986	0.986	0.986	0.986	0.986	0.986	0.986	0.986	0.986	0.986	0.987	0.987	0.987	0.987	0.987
-51	0.988	0.988	0.987	0.987	0.987	0.987	0.987	0.986	0.986	0.986	0.987	0.987	0.987	0.987	0.987	0.987	0.987	0.987	0.987	0.987
-52	0.989	0.988	0.988	0.988	0.988	0.988	0.987	0.987	0.987	0.987	0.987	0.987	0.987	0.987	0.988	0.988	0.988	0.988	0.988	0.988
-53	0.989	0.989	0.989	0.989	0.988	0.988	0.988	0.988	0.988	0.988	0.988	0.988	0.988	0.988	0.988	0.988	0.988	0.988	0.988	0.988
-54	0.990	0.990	0.990	0.989	0.989	0.989	0.989	0.989	0.988	0.988	0.988	0.988	0.988	0.988	0.988	0.988	0.988	0.988	0.988	0.988
-55	0.991	0.990	0.990	0.990	0.990	0.990	0.989	0.989	0.989	0.989	0.989	0.989	0.989	0.989	0.989	0.989	0.989	0.989	0.989	0.989
-56	0.991	0.991	0.991	0.991	0.990	0.990	0.990	0.990	0.990	0.989	0.989	0.989	0.989	0.989	0.989	0.989	0.989	0.989	0.989	0.989
-57	0.992	0.992	0.991	0.991	0.991	0.991	0.990	0.990	0.990	0.990	0.990	0.990	0.990	0.990	0.989	0.989	0.989	0.989	0.989	0.989
-58	0.992	0.992	0.992	0.992	0.991	0.991	0.991	0.991	0.991	0.990	0.990	0.990	0.990	0.990	0.990	0.990	0.990	0.990	0.990	0.990
-59	0.993	0.992	0.992	0.992	0.992	0.992	0.992	0.991	0.991	0.991	0.991	0.990	0.990	0.990	0.990	0.990	0.990	0.990	0.990	0.990
-60	0.993	0.993	0.993	0.992	0.992	0.992	0.992	0.992	0.991	0.991	0.991	0.991	0.991	0.990	0.990	0.990	0.990	0.990	0.990	0.990
-61	0.993	0.993	0.993	0.993	0.993	0.992	0.992	0.992	0.991	0.991	0.991	0.991	0.991	0.990	0.990	0.990	0.990	0.990	0.990	0.990
-62	0.994	0.994	0.993	0.993	0.993	0.993	0.992	0.992	0.992	0.992	0.992	0.992	0.992	0.992	0.992	0.992	0.992	0.992	0.992	0.992
-63	0.994	0.994	0.994	0.994	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993
-64	0.994	0.994	0.994	0.994	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993
-65	0.995	0.995	0.994	0.994	0.994	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993	0.993
-66	0.995	0.995	0.994	0.994	0.994	0.994	0.994	0.994	0.994	0.994	0.994	0.994	0.994	0.994	0.994	0.994	0.994	0.994	0.994	0.994
-67	0.995	0.995	0.995	0.994	0.994	0.994	0.994	0.994	0.994	0.994	0.994	0.994	0.994	0.994	0.994	0.994	0.994	0.994	0.994	0.994
-68	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995
-69	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995	0.995
-70	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996
-71																				
-72																				
-73																				
-74																				
-75																				
Beneficiary older than Retiree -76																				
-77																				
-78																				
-79																				
-80																				

**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)**  
**Actuarial Equivalency Factors Effective January 1, 2024**

**Table 9b: 50% Joint and Survivor Annuity with Pop-up Feature - Option 3A - Disabled Members**  
 (Factor Multiplied by Option 1 Non-Refund Life Annuity)

Beneficiary Age Difference	Attained Age at Retirement																			
	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59
Beneficiary older than Retiree	-81	-82	-83	-84	-85	-86	-87	-88	-89	-90										



**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)**  
**Actuarial Equivalency Factors Effective January 1, 2024**

**Table 9b: 50% Joint and Survivor Annuity with Pop-up Feature - Option 3A - Disabled Members**  
 (Factor Multiplied by Option 1 Non-Refund Life Annuity)

Beneficiary Age Difference	Attained Age at Retirement															
	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75
Beneficiary younger than Retiree																
75																
74																0.584
73															0.599	0.584
72														0.614	0.599	0.584
71													0.628	0.614	0.599	0.584
70												0.642	0.628	0.614	0.600	0.585
69											0.655	0.642	0.629	0.615	0.600	0.585
68										0.668	0.656	0.643	0.629	0.615	0.601	0.586
67									0.681	0.669	0.656	0.643	0.629	0.615	0.601	0.586
66								0.692	0.681	0.669	0.656	0.643	0.630	0.616	0.601	0.586
65							0.704	0.693	0.681	0.669	0.657	0.644	0.630	0.616	0.602	0.587
64						0.715	0.704	0.693	0.682	0.670	0.657	0.644	0.631	0.617	0.602	0.587
63					0.725	0.715	0.704	0.693	0.682	0.670	0.658	0.645	0.631	0.617	0.603	0.588
62				0.735	0.725	0.715	0.705	0.694	0.682	0.670	0.658	0.645	0.632	0.618	0.603	0.588
61			0.744	0.735	0.726	0.716	0.705	0.694	0.683	0.671	0.658	0.646	0.632	0.618	0.604	0.589
60		0.753	0.744	0.735	0.726	0.716	0.706	0.695	0.683	0.671	0.659	0.646	0.633	0.619	0.604	0.590
59	0.761	0.753	0.745	0.736	0.726	0.716	0.706	0.695	0.684	0.672	0.659	0.647	0.633	0.619	0.605	0.590
58	0.762	0.754	0.745	0.736	0.727	0.717	0.706	0.696	0.684	0.672	0.660	0.647	0.634	0.620	0.606	0.591
57	0.762	0.754	0.746	0.737	0.727	0.717	0.707	0.696	0.685	0.673	0.661	0.648	0.634	0.621	0.606	0.592
56	0.762	0.754	0.746	0.737	0.728	0.718	0.707	0.697	0.685	0.673	0.661	0.648	0.635	0.621	0.607	0.592
55	0.763	0.755	0.746	0.738	0.728	0.718	0.708	0.697	0.686	0.674	0.662	0.649	0.636	0.622	0.608	0.593
54	0.763	0.755	0.747	0.738	0.729	0.719	0.709	0.698	0.686	0.675	0.662	0.650	0.636	0.623	0.609	0.594
53	0.764	0.756	0.747	0.738	0.729	0.719	0.709	0.698	0.687	0.675	0.663	0.650	0.637	0.624	0.609	0.595
52	0.764	0.756	0.748	0.739	0.730	0.720	0.710	0.699	0.688	0.676	0.664	0.651	0.638	0.624	0.610	0.596
51	0.765	0.757	0.748	0.740	0.730	0.721	0.710	0.700	0.689	0.677	0.665	0.652	0.639	0.625	0.611	0.597
50	0.765	0.757	0.749	0.740	0.731	0.721	0.711	0.700	0.689	0.678	0.665	0.653	0.640	0.626	0.612	0.598
49	0.766	0.758	0.750	0.741	0.732	0.722	0.712	0.701	0.690	0.678	0.666	0.654	0.641	0.627	0.613	0.599
48	0.766	0.758	0.750	0.741	0.732	0.723	0.713	0.702	0.691	0.679	0.667	0.655	0.642	0.628	0.614	0.600
47	0.767	0.759	0.751	0.742	0.733	0.723	0.713	0.703	0.692	0.680	0.668	0.656	0.643	0.629	0.615	0.601
46	0.767	0.760	0.751	0.743	0.734	0.724	0.714	0.704	0.693	0.681	0.669	0.657	0.644	0.631	0.617	0.602
45	0.768	0.760	0.752	0.744	0.735	0.725	0.715	0.705	0.694	0.682	0.670	0.658	0.645	0.632	0.618	0.604
44	0.769	0.761	0.753	0.744	0.735	0.726	0.716	0.706	0.695	0.683	0.671	0.659	0.646	0.633	0.619	0.605
43	0.770	0.762	0.754	0.745	0.736	0.727	0.717	0.707	0.696	0.684	0.673	0.660	0.648	0.634	0.621	0.607
42	0.770	0.763	0.755	0.746	0.737	0.728	0.718	0.708	0.697	0.686	0.674	0.662	0.649	0.636	0.622	0.608
41	0.771	0.764	0.756	0.747	0.738	0.729	0.719	0.709	0.698	0.687	0.675	0.663	0.651	0.637	0.624	0.610
Beneficiary younger than Retiree																
40	0.772	0.764	0.756	0.748	0.739	0.730	0.720	0.710	0.699	0.688	0.677	0.665	0.652	0.639	0.626	0.612
39	0.773	0.765	0.757	0.749	0.740	0.731	0.721	0.711	0.701	0.690	0.678	0.666	0.654	0.641	0.627	0.614
38	0.774	0.766	0.759	0.750	0.742	0.732	0.723	0.713	0.702	0.691	0.680	0.668	0.655	0.643	0.629	0.616
37	0.775	0.767	0.760	0.751	0.743	0.734	0.724	0.714	0.704	0.693	0.681	0.670	0.657	0.644	0.631	0.618
36	0.776	0.769	0.761	0.753	0.744	0.735	0.726	0.716	0.705	0.694	0.683	0.671	0.659	0.646	0.633	0.620

**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)**  
**Actuarial Equivalency Factors Effective January 1, 2024**

**Table 9b: 50% Joint and Survivor Annuity with Pop-up Feature - Option 3A - Disabled Members**  
 (Factor Multiplied by Option 1 Non-Refund Life Annuity)

Beneficiary Age Difference	Attained Age at Retirement															
	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75
35	0.777	0.770	0.762	0.754	0.745	0.736	0.727	0.717	0.707	0.696	0.685	0.673	0.661	0.648	0.635	0.622
34	0.778	0.771	0.763	0.755	0.747	0.738	0.729	0.719	0.709	0.698	0.687	0.675	0.663	0.651	0.638	0.624
33	0.779	0.772	0.765	0.757	0.748	0.739	0.730	0.721	0.710	0.700	0.689	0.677	0.665	0.653	0.640	0.627
32	0.781	0.774	0.766	0.758	0.750	0.741	0.732	0.722	0.712	0.702	0.691	0.680	0.668	0.655	0.643	0.630
31	0.782	0.775	0.768	0.760	0.752	0.743	0.734	0.724	0.714	0.704	0.693	0.682	0.670	0.658	0.645	0.632
30	0.783	0.776	0.769	0.761	0.753	0.745	0.736	0.726	0.716	0.706	0.695	0.684	0.673	0.661	0.648	0.635
29	0.785	0.778	0.771	0.763	0.755	0.747	0.738	0.728	0.719	0.708	0.698	0.687	0.675	0.663	0.651	0.638
28	0.786	0.780	0.772	0.765	0.757	0.749	0.740	0.731	0.721	0.711	0.700	0.689	0.678	0.666	0.654	0.641
27	0.788	0.781	0.774	0.767	0.759	0.751	0.742	0.733	0.723	0.713	0.703	0.692	0.681	0.669	0.657	0.645
26	0.790	0.783	0.776	0.769	0.761	0.753	0.744	0.735	0.726	0.716	0.706	0.695	0.684	0.672	0.660	0.648
25	0.791	0.785	0.778	0.771	0.763	0.755	0.747	0.738	0.729	0.719	0.709	0.698	0.687	0.676	0.664	0.652
24	0.793	0.787	0.780	0.773	0.765	0.758	0.749	0.740	0.731	0.722	0.712	0.701	0.691	0.679	0.668	0.655
23	0.795	0.789	0.782	0.775	0.768	0.760	0.752	0.743	0.734	0.725	0.715	0.705	0.694	0.683	0.671	0.659
22	0.797	0.791	0.785	0.778	0.770	0.763	0.755	0.746	0.737	0.728	0.718	0.708	0.698	0.687	0.675	0.663
21	0.799	0.793	0.787	0.780	0.773	0.765	0.757	0.749	0.740	0.731	0.722	0.712	0.701	0.691	0.679	0.668
20	0.802	0.796	0.789	0.783	0.776	0.768	0.760	0.752	0.744	0.735	0.725	0.715	0.705	0.695	0.684	0.672
19	0.804	0.798	0.792	0.785	0.778	0.771	0.764	0.756	0.747	0.738	0.729	0.719	0.709	0.699	0.688	0.677
18	0.806	0.801	0.795	0.788	0.781	0.774	0.767	0.759	0.751	0.742	0.733	0.723	0.714	0.704	0.693	0.682
17	0.809	0.803	0.797	0.791	0.784	0.777	0.770	0.762	0.754	0.746	0.737	0.728	0.718	0.708	0.698	0.687
16	0.811	0.806	0.800	0.794	0.788	0.781	0.774	0.766	0.758	0.750	0.741	0.732	0.723	0.713	0.703	0.693
15	0.814	0.809	0.803	0.797	0.791	0.784	0.777	0.770	0.762	0.754	0.746	0.737	0.728	0.718	0.709	0.698
14	0.817	0.812	0.806	0.800	0.794	0.788	0.781	0.774	0.766	0.758	0.750	0.742	0.733	0.724	0.714	0.704
13	0.820	0.815	0.809	0.804	0.798	0.792	0.785	0.778	0.771	0.763	0.755	0.747	0.738	0.729	0.720	0.711
12	0.823	0.818	0.813	0.807	0.801	0.795	0.789	0.782	0.775	0.768	0.760	0.752	0.744	0.735	0.726	0.717
11	0.826	0.821	0.816	0.811	0.805	0.799	0.793	0.787	0.780	0.773	0.765	0.757	0.749	0.741	0.733	0.724
10	0.829	0.824	0.820	0.815	0.809	0.803	0.797	0.791	0.785	0.778	0.771	0.763	0.755	0.747	0.739	0.731
9	0.832	0.828	0.823	0.818	0.813	0.808	0.802	0.796	0.790	0.783	0.776	0.769	0.761	0.754	0.746	0.738
8	0.836	0.831	0.827	0.822	0.817	0.812	0.807	0.801	0.795	0.788	0.782	0.775	0.768	0.760	0.753	0.745
7	0.839	0.835	0.831	0.826	0.822	0.817	0.811	0.806	0.800	0.794	0.788	0.781	0.774	0.767	0.760	0.752
6	0.843	0.839	0.835	0.830	0.826	0.821	0.816	0.811	0.805	0.800	0.794	0.787	0.781	0.774	0.767	0.760
Beneficiary younger than Retiree																
5	0.846	0.843	0.839	0.835	0.830	0.826	0.821	0.816	0.811	0.805	0.800	0.794	0.788	0.781	0.775	0.768
4	0.850	0.847	0.843	0.839	0.835	0.831	0.826	0.821	0.816	0.811	0.806	0.800	0.794	0.788	0.782	0.776
3	0.854	0.851	0.847	0.843	0.840	0.836	0.831	0.827	0.822	0.817	0.812	0.807	0.801	0.796	0.790	0.784
2	0.858	0.855	0.851	0.848	0.844	0.840	0.836	0.832	0.828	0.823	0.819	0.814	0.808	0.803	0.798	0.792
1	0.861	0.859	0.856	0.852	0.849	0.845	0.842	0.838	0.834	0.829	0.825	0.820	0.816	0.811	0.805	0.800
Beneficiary same age as Retiree																
0	<b>0.865</b>	<b>0.863</b>	<b>0.860</b>	<b>0.857</b>	<b>0.854</b>	<b>0.851</b>	<b>0.847</b>	<b>0.843</b>	<b>0.840</b>	<b>0.836</b>	<b>0.831</b>	<b>0.827</b>	<b>0.823</b>	<b>0.818</b>	<b>0.813</b>	<b>0.808</b>

**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)**  
**Actuarial Equivalency Factors Effective January 1, 2024**

**Table 9b: 50% Joint and Survivor Annuity with Pop-up Feature - Option 3A - Disabled Members**  
 (Factor Multiplied by Option 1 Non-Refund Life Annuity)

Beneficiary Age Difference	Attained Age at Retirement															
	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75
Beneficiary older than Retiree -1	0.869	0.867	0.864	0.862	0.859	0.856	0.852	0.849	0.845	0.842	0.838	0.834	0.830	0.826	0.821	0.817
-2	0.873	0.871	0.869	0.866	0.864	0.861	0.858	0.855	0.851	0.848	0.844	0.841	0.837	0.833	0.829	0.825
-3	0.877	0.875	0.873	0.871	0.868	0.866	0.863	0.860	0.857	0.854	0.851	0.848	0.844	0.840	0.837	0.833
-4	0.881	0.879	0.878	0.875	0.873	0.871	0.868	0.866	0.863	0.860	0.857	0.854	0.851	0.848	0.844	0.841
-5	0.885	0.884	0.882	0.880	0.878	0.876	0.874	0.871	0.869	0.866	0.864	0.861	0.858	0.855	0.852	0.849
-6	0.889	0.888	0.886	0.885	0.883	0.881	0.879	0.877	0.875	0.872	0.870	0.868	0.865	0.862	0.860	0.857
-7	0.893	0.892	0.891	0.889	0.888	0.886	0.884	0.882	0.880	0.878	0.876	0.874	0.872	0.869	0.867	0.864
-8	0.897	0.896	0.895	0.894	0.892	0.891	0.889	0.888	0.886	0.884	0.882	0.880	0.878	0.876	0.874	0.872
-9	0.901	0.900	0.899	0.898	0.897	0.896	0.894	0.893	0.891	0.890	0.888	0.887	0.885	0.883	0.881	0.879
-10	0.905	0.904	0.903	0.902	0.901	0.900	0.899	0.898	0.897	0.895	0.894	0.893	0.891	0.889	0.888	0.886
-11	0.908	0.908	0.907	0.907	0.906	0.905	0.904	0.903	0.902	0.901	0.900	0.898	0.897	0.896	0.894	0.892
-12	0.912	0.912	0.911	0.911	0.910	0.910	0.909	0.908	0.907	0.906	0.905	0.904	0.903	0.902	0.900	0.899
-13	0.916	0.916	0.915	0.915	0.914	0.914	0.913	0.913	0.912	0.911	0.910	0.909	0.908	0.907	0.906	0.905
-14	0.919	0.919	0.919	0.919	0.919	0.918	0.918	0.917	0.917	0.916	0.916	0.915	0.914	0.913	0.912	0.910
-15	0.923	0.923	0.923	0.923	0.923	0.923	0.922	0.922	0.921	0.921	0.920	0.920	0.919	0.918	0.917	0.916
-16	0.926	0.927	0.927	0.927	0.927	0.927	0.926	0.926	0.926	0.925	0.925	0.924	0.924	0.923	0.922	0.921
-17	0.930	0.930	0.930	0.930	0.931	0.931	0.930	0.930	0.930	0.930	0.929	0.929	0.928	0.927	0.927	0.925
-18	0.933	0.933	0.934	0.934	0.934	0.934	0.934	0.934	0.934	0.934	0.934	0.933	0.933	0.932	0.931	0.930
-19	0.936	0.937	0.937	0.938	0.938	0.938	0.938	0.938	0.938	0.938	0.938	0.937	0.937	0.936	0.935	0.934
-20	0.939	0.940	0.940	0.941	0.941	0.941	0.942	0.942	0.942	0.942	0.941	0.941	0.940	0.940	0.939	0.938
-21	0.942	0.943	0.944	0.944	0.944	0.945	0.945	0.945	0.945	0.945	0.945	0.945	0.944	0.943	0.943	0.942
-22	0.945	0.946	0.947	0.947	0.948	0.948	0.948	0.948	0.948	0.948	0.948	0.948	0.947	0.947	0.946	0.945
-23	0.948	0.949	0.950	0.950	0.951	0.951	0.951	0.951	0.951	0.951	0.951	0.951	0.950	0.950	0.949	0.948
-24	0.951	0.952	0.952	0.953	0.953	0.954	0.954	0.954	0.954	0.954	0.954	0.954	0.953	0.953	0.952	0.951
-25	0.954	0.954	0.955	0.956	0.956	0.957	0.957	0.957	0.957	0.957	0.957	0.957	0.956	0.956	0.955	0.954
-26	0.956	0.957	0.958	0.958	0.959	0.959	0.959	0.960	0.960	0.960	0.959	0.959	0.959	0.958	0.957	0.956
-27	0.959	0.959	0.960	0.961	0.961	0.961	0.962	0.962	0.962	0.962	0.962	0.961	0.961	0.960	0.960	0.959
-28	0.961	0.962	0.962	0.963	0.963	0.964	0.964	0.964	0.964	0.964	0.964	0.964	0.963	0.963	0.962	0.961
-29	0.963	0.964	0.964	0.965	0.966	0.966	0.966	0.966	0.966	0.966	0.966	0.966	0.965	0.965	0.964	0.963
-30	0.965	0.966	0.967	0.967	0.967	0.968	0.968	0.968	0.968	0.968	0.968	0.967	0.967	0.966	0.966	0.965
-31	0.967	0.968	0.968	0.969	0.969	0.970	0.970	0.970	0.970	0.970	0.970	0.969	0.969	0.968	0.967	0.966
-32	0.969	0.970	0.970	0.971	0.971	0.971	0.972	0.972	0.972	0.971	0.971	0.971	0.970	0.969	0.969	0.967
-33	0.971	0.971	0.972	0.972	0.973	0.973	0.973	0.973	0.973	0.973	0.973	0.972	0.972	0.971	0.970	0.969
-34	0.972	0.973	0.974	0.974	0.974	0.974	0.975	0.975	0.975	0.974	0.974	0.973	0.973	0.972	0.971	0.970
-35	0.974	0.974	0.975	0.975	0.976	0.976	0.976	0.976	0.976	0.976	0.975	0.975	0.974	0.973	0.972	0.970
Beneficiary older than Retiree -36	0.975	0.976	0.976	0.977	0.977	0.977	0.977	0.977	0.977	0.977	0.976	0.976	0.975	0.974	0.972	
-37	0.977	0.977	0.978	0.978	0.978	0.978	0.978	0.978	0.978	0.978	0.977	0.977	0.976	0.974		
-38	0.978	0.978	0.979	0.979	0.979	0.979	0.979	0.979	0.979	0.979	0.978	0.977	0.976			
-39	0.979	0.980	0.980	0.980	0.980	0.980	0.980	0.980	0.980	0.980	0.979	0.979	0.978			
-40	0.980	0.981	0.981	0.981	0.981	0.981	0.981	0.981	0.981	0.980	0.979					

**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)**  
**Actuarial Equivalency Factors Effective January 1, 2024**

**Table 9b: 50% Joint and Survivor Annuity with Pop-up Feature - Option 3A - Disabled Members**  
 (Factor Multiplied by Option 1 Non-Refund Life Annuity)

	Beneficiary Age Difference	Attained Age at Retirement															
		60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75
Beneficiary	-41	0.981	0.982	0.982	0.982	0.982	0.982	0.982	0.982	0.981	0.980						
older	-42	0.982	0.983	0.983	0.983	0.983	0.983	0.983	0.982	0.982							
than	-43	0.983	0.983	0.984	0.984	0.984	0.983	0.983	0.983	0.983							
Retiree	-44	0.984	0.984	0.984	0.984	0.984	0.984	0.983									
	-45	0.985	0.985	0.985	0.985	0.985	0.984										
	-46	0.985	0.985	0.985	0.985	0.985											
	-47	0.986	0.986	0.986	0.986												
	-48	0.986	0.986	0.986													
	-49	0.987	0.987														
	-50	0.987															
	-51																
	-52																
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	-71																
	-72																
	-73																
	-74																
	-75																
Beneficiary	-76																
older	-77																
than	-78																
Retiree	-79																
	-80																

**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)**  
**Actuarial Equivalency Factors Effective January 1, 2024**

**Table 9b: 50% Joint and Survivor Annuity with Pop-up Feature - Option 3A - Disabled Members**  
 (Factor Multiplied by Option 1 Non-Refund Life Annuity)

Beneficiary Age Difference	Attained Age at Retirement															
	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75
Beneficiary older than Retiree -81																
-82																
-83																
-84																
-85																
-86																
-87																
-88																
-89																
-90																

**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)**  
**Actuarial Equivalency Factors Effective January 1, 2024**

**Table 10: P&F Additional Unit Benefits - After Age 60 - Healthy and Disabled Members (Tier One / Tier Two only)**  
 (Amount of Monthly Annuity per \$1,000 Paid by Member - Member's Portion Only)

No. of Months Units are Paid, up to Age 65	Factor	No. of Months Units are Paid, up to Age 65	Factor
1	1,000.00	31	35.02
2	501.39	32	34.02
3	335.19	33	33.08
4	252.09	34	32.19
5	202.23	35	31.35
6	168.99	36	30.57
7	145.25	37	29.82
8	127.45	38	29.11
9	113.60	39	28.44
10	102.52	40	27.81
11	93.46	41	27.20
12	85.91	42	26.62
13	79.52	43	26.07
14	74.04	44	25.55
15	69.29	45	25.05
16	65.14	46	24.57
17	61.48	47	24.11
18	58.22	48	23.67
19	55.31	49	23.25
20	52.69	50	22.85
21	50.31	51	22.46
22	48.16	52	22.08
23	46.19	53	21.72
24	44.39	54	21.38
25	42.73	55	21.04
26	41.19	56	20.72
27	39.78	57	20.41
28	38.46	58	20.11
29	37.23	59	19.83
30	36.09	60	19.55

**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)**  
**Actuarial Equivalency Factors Effective January 1, 2024**

**Table 11: P&F Additional Unit Benefits - Before Age 60 - Healthy and Disabled Members (Tier One / Tier Two only)**  
 (Amount of Monthly Annuity per \$1,000 - Member's Portion Plus Matching Employer Portion)

No. of Months Units are Paid, up to Age 65		No. of Months Units are Paid, up to Age 65		No. of Months Units are Paid, up to Age 65		No. of Months Units are Paid, up to Age 65		No. of Months Units are Paid, up to Age 65		No. of Months Units are Paid, up to Age 65	
	Factor		Factor		Factor		Factor		Factor		Factor
60	39.09	90	28.17	120	22.78	150	19.60	180	17.54	210	16.10
61	38.55	91	27.93	121	22.65	151	19.52	181	17.48	211	16.06
62	38.03	92	27.69	122	22.51	152	19.44	182	17.42	212	16.02
63	37.53	93	27.47	123	22.39	153	19.36	183	17.37	213	15.98
64	37.04	94	27.24	124	22.26	154	19.28	184	17.31	214	15.94
65	36.56	95	27.02	125	22.14	155	19.20	185	17.26	215	15.90
66	36.10	96	26.81	126	22.02	156	19.12	186	17.21	216	15.86
67	35.66	97	26.60	127	21.90	157	19.05	187	17.15	217	15.82
68	35.22	98	26.40	128	21.78	158	18.97	188	17.10	218	15.79
69	34.80	99	26.20	129	21.66	159	18.90	189	17.05	219	15.75
70	34.40	100	26.00	130	21.55	160	18.82	190	17.00	220	15.71
71	34.00	101	25.81	131	21.44	161	18.75	191	16.95	221	15.68
72	33.61	102	25.62	132	21.33	162	18.68	192	16.90	222	15.64
73	33.24	103	25.43	133	21.22	163	18.61	193	16.85	223	15.61
74	32.88	104	25.25	134	21.11	164	18.54	194	16.80	224	15.57
75	32.52	105	25.08	135	21.01	165	18.47	195	16.76	225	15.54
76	32.18	106	24.90	136	20.90	166	18.40	196	16.71	226	15.50
77	31.84	107	24.73	137	20.80	167	18.33	197	16.66	227	15.47
78	31.51	108	24.56	138	20.70	168	18.27	198	16.62	228	15.43
79	31.20	109	24.40	139	20.60	169	18.20	199	16.57	229	15.40
80	30.89	110	24.24	140	20.50	170	18.14	200	16.52	230	15.37
81	30.58	111	24.08	141	20.41	171	18.07	201	16.48	231	15.33
82	30.29	112	23.92	142	20.31	172	18.01	202	16.44	232	15.30
83	30.00	113	23.77	143	20.22	173	17.95	203	16.39	233	15.27
84	29.72	114	23.62	144	20.13	174	17.89	204	16.35	234	15.24
85	29.44	115	23.47	145	20.04	175	17.83	205	16.31	235	15.21
86	29.18	116	23.33	146	19.95	176	17.77	206	16.26	236	15.18
87	28.91	117	23.19	147	19.86	177	17.71	207	16.22	237	15.14
88	28.66	118	23.05	148	19.77	178	17.65	208	16.18	238	15.11
89	28.41	119	22.91	149	19.69	179	17.59	209	16.14	239	15.08
										240	15.05

**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)**  
**Actuarial Equivalency Factors Effective January 1, 2024**

**Table 12: P&F Additional Unit Purchases by Payroll Deductions - Healthy and Disabled Members (Tier One / Tier Two only)**  
 (Based on a Purchase of 8 Units and a Monthly Payroll Period)

Age	Months of Attained Age at Commencement of Payroll Deduction											
	0	1	2	3	4	5	6	7	8	9	10	11
20	1.66	1.67	1.68	1.69	1.70	1.71	1.72	1.73	1.74	1.75	1.76	1.77
21	1.79	1.80	1.81	1.82	1.83	1.84	1.85	1.86	1.87	1.88	1.90	1.91
22	1.92	1.93	1.94	1.95	1.97	1.98	1.99	2.00	2.01	2.03	2.04	2.05
23	2.06	2.08	2.09	2.10	2.11	2.13	2.14	2.15	2.17	2.18	2.19	2.21
24	2.22	2.23	2.25	2.26	2.28	2.29	2.30	2.32	2.33	2.35	2.36	2.38
25	2.39	2.40	2.42	2.43	2.45	2.46	2.48	2.50	2.51	2.53	2.54	2.56
26	2.57	2.59	2.61	2.62	2.64	2.65	2.67	2.69	2.70	2.72	2.74	2.76
27	2.77	2.79	2.81	2.83	2.84	2.86	2.88	2.90	2.92	2.93	2.95	2.97
28	2.99	3.01	3.03	3.05	3.07	3.09	3.11	3.13	3.15	3.17	3.19	3.21
29	3.23	3.25	3.27	3.29	3.31	3.33	3.35	3.37	3.40	3.42	3.44	3.46
30	3.48	3.51	3.53	3.55	3.57	3.60	3.62	3.64	3.67	3.69	3.72	3.74
31	3.76	3.79	3.81	3.84	3.86	3.89	3.92	3.94	3.97	3.99	4.02	4.05
32	4.07	4.10	4.13	4.15	4.18	4.21	4.24	4.26	4.29	4.32	4.35	4.38
33	4.41	4.44	4.47	4.50	4.53	4.56	4.59	4.62	4.65	4.68	4.71	4.75
34	4.78	4.81	4.84	4.88	4.91	4.94	4.98	5.01	5.04	5.08	5.11	5.15
35	5.18	5.22	5.26	5.29	5.33	5.37	5.40	5.44	5.48	5.52	5.55	5.59
36	5.63	5.67	5.71	5.75	5.79	5.83	5.87	5.92	5.96	6.00	6.04	6.08
37	6.13	6.17	6.22	6.26	6.30	6.35	6.40	6.44	6.49	6.53	6.58	6.63
38	6.68	6.73	6.77	6.82	6.87	6.92	6.97	7.03	7.08	7.13	7.18	7.23
39	7.29	7.34	7.40	7.45	7.51	7.56	7.62	7.68	7.73	7.79	7.85	7.91



**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)**  
**Actuarial Equivalency Factors Effective January 1, 2024**

**Table 12: P&F Additional Unit Purchases by Payroll Deductions - Healthy and Disabled Members (Tier One / Tier Two only)**  
 (Based on a Purchase of 8 Units and a Monthly Payroll Period)

Age	Months of Attained Age at Commencement of Payroll Deduction											
	0	1	2	3	4	5	6	7	8	9	10	11
40	7.97	8.03	8.09	8.15	8.22	8.28	8.34	8.41	8.47	8.54	8.60	8.67
41	8.74	8.80	8.87	8.94	9.01	9.08	9.15	9.23	9.30	9.37	9.45	9.52
42	9.60	9.68	9.75	9.83	9.91	9.99	10.07	10.15	10.24	10.32	10.40	10.49
43	10.58	10.66	10.75	10.84	10.93	11.02	11.11	11.21	11.30	11.40	11.49	11.59
44	11.69	11.79	11.89	11.99	12.09	12.20	12.30	12.41	12.52	12.63	12.74	12.85
45	12.96	13.08	13.19	13.31	13.43	13.55	13.67	13.80	13.92	14.05	14.17	14.30
46	14.44	14.57	14.70	14.84	14.98	15.12	15.26	15.40	15.55	15.70	15.85	16.00
47	16.15	16.31	16.47	16.63	16.79	16.95	17.12	17.29	17.46	17.64	17.81	17.99
48	18.18	18.36	18.55	18.74	18.93	19.13	19.33	19.53	19.73	19.94	20.15	20.37
49	20.59	20.81	21.04	21.26	21.50	21.73	21.97	22.22	22.47	22.72	22.98	23.24
50	23.51	23.78	24.05	24.33	24.62	24.91	25.20	25.51	25.81	26.12	26.44	26.77
51	27.10	27.44	27.78	28.13	28.49	28.85	29.22	29.60	29.99	30.38	30.79	31.20
52	31.62	32.05	32.49	32.94	33.39	33.86	34.34	34.83	35.34	35.85	36.37	36.91
53	37.47	38.03	38.61	39.20	39.81	40.44	41.08	41.73	42.41	43.10	43.82	44.55
54	45.30	46.08	46.87	47.69	48.54	49.41	50.30	51.23	52.18	53.17	54.18	55.23
55	56.32	57.44	58.60	59.81	61.05	62.35	63.69	65.08	66.52	68.02	69.59	71.21
56	72.91	74.68	76.52	78.45	80.46	82.57	84.79	87.10	89.54	92.10	94.80	97.64
57	100.64	103.81	107.17	110.74	114.53	118.56	122.86	127.46	132.39	137.69	143.39	149.55
58	156.23	163.48	171.40	180.07	189.61	200.16	211.88	224.97	239.71	256.41	275.50	297.53
59	323.23	353.61	390.07	434.62	490.32	561.94	657.43	791.13	991.68	1325.93	1994.44	4000.00

**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)**  
**Actuarial Equivalency Factors Effective January 1, 2024**

**Table 13a: Full Cost Factors for Purchasing Service - Factor 1 - Healthy Members (Tier One / Tier Two only)**  
(Present value of \$1 of increased monthly benefit beginning at retirement age)

Age	Months of Attained Age at Retirement											
	0	1	2	3	4	5	6	7	8	9	10	11
45	205.47	205.34	205.20	205.07	204.93	204.80	204.66	204.53	204.39	204.26	204.12	203.99
46	203.85	203.71	203.57	203.43	203.28	203.14	203.00	202.86	202.72	202.58	202.43	202.29
47	202.15	202.00	201.85	201.71	201.56	201.41	201.26	201.11	200.96	200.82	200.67	200.52
48	200.37	200.21	200.06	199.90	199.75	199.59	199.44	199.28	199.12	198.97	198.81	198.66
49	198.50	198.34	198.17	198.01	197.85	197.68	197.52	197.36	197.19	197.03	196.87	196.70
50	196.54	196.37	196.21	196.04	195.88	195.71	195.55	195.38	195.21	195.05	194.88	194.72
51	194.55	194.38	194.21	194.05	193.88	193.71	193.54	193.37	193.20	193.04	192.87	192.70
52	192.53	192.35	192.18	192.00	191.83	191.65	191.48	191.30	191.12	190.95	190.77	190.60
53	190.42	190.24	190.05	189.87	189.68	189.50	189.32	189.13	188.95	188.76	188.58	188.39
54	188.21	188.02	187.83	187.64	187.44	187.25	187.06	186.87	186.68	186.49	186.29	186.10
55	185.91	185.71	185.52	185.32	185.12	184.92	184.73	184.53	184.33	184.13	183.94	183.74
56	183.54	183.34	183.13	182.93	182.72	182.52	182.31	182.11	181.90	181.70	181.49	181.29
57	181.08	180.87	180.65	180.44	180.22	180.01	179.80	179.58	179.37	179.15	178.94	178.72
58	178.51	178.29	178.06	177.84	177.62	177.39	177.17	176.95	176.72	176.50	176.28	176.05
59	175.83	175.60	175.37	175.13	174.90	174.67	174.44	174.20	173.97	173.74	173.51	173.27
60	173.04	172.80	172.56	172.32	172.07	171.83	171.59	171.35	171.11	170.87	170.62	170.38
61	170.14	169.89	169.64	169.39	169.13	168.88	168.63	168.38	168.13	167.88	167.62	167.37
62	167.12	166.86	166.60	166.34	166.07	165.81	165.55	165.29	165.03	164.77	164.50	164.24
63	163.98	163.71	163.44	163.17	162.89	162.62	162.35	162.08	161.81	161.54	161.26	160.99
64	160.72	160.44	160.16	159.88	159.59	159.31	159.03	158.75	158.47	158.19	157.90	157.62
65	157.34	157.05	156.76	156.47	156.17	155.88	155.59	155.30	155.01	154.72	154.42	154.13
66	153.84	153.54	153.24	152.94	152.63	152.33	152.03	151.73	151.43	151.13	150.82	150.52
67	150.22	149.91	149.60	149.29	148.98	148.67	148.36	148.04	147.73	147.42	147.11	146.80
68	146.49	146.17	145.85	145.53	145.21	144.89	144.57	144.25	143.93	143.61	143.29	142.97
69	142.65	142.32	141.99	141.66	141.33	141.00	140.68	140.35	140.02	139.69	139.36	139.03
70	138.70	138.36	138.03	137.69	137.35	137.01	136.68	136.34	136.00	135.66	135.33	134.99
71	134.65	134.31	133.96	133.62	133.27	132.93	132.59	132.24	131.90	131.55	131.21	130.86
72	130.52	130.17	129.82	129.47	129.11	128.76	128.41	128.06	127.71	127.36	127.00	126.65
73	126.30	125.94	125.58	125.23	124.87	124.51	124.15	123.79	123.43	123.08	122.72	122.36
74	122.00	121.64	121.27	120.91	120.55	120.18	119.82	119.46	119.09	118.73	118.37	118.00

**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)**  
**Actuarial Equivalency Factors Effective January 1, 2024**

**Table 13a: Full Cost Factors for Purchasing Service - Factor 1 - Healthy Members (Tier One / Tier Two only)**  
(Present value of \$1 of increased monthly benefit beginning at retirement age)

Age	Months of Attained Age at Retirement											
	0	1	2	3	4	5	6	7	8	9	10	11
75	117.64	117.27	116.90	116.54	116.17	115.80	115.43	115.06	114.69	114.33	113.96	113.59
76	113.22	112.85	112.48	112.11	111.73	111.36	110.99	110.62	110.25	109.88	109.50	109.13
77	108.76	108.39	108.01	107.64	107.26	106.89	106.51	106.14	105.76	105.39	105.01	104.64
78	104.26	103.88	103.51	103.13	102.75	102.37	102.00	101.62	101.24	100.86	100.49	100.11
79	99.73	99.35	98.97	98.60	98.22	97.84	97.46	97.08	96.70	96.33	95.95	95.57
80	95.19	94.81	94.43	94.05	93.67	93.29	92.92	92.54	92.16	91.78	91.40	91.02
81	90.64	90.26	89.88	89.51	89.13	88.75	88.37	87.99	87.61	87.24	86.86	86.48
82	86.10	85.73	85.35	84.98	84.60	84.23	83.86	83.48	83.11	82.73	82.36	81.98
83	81.61	81.24	80.87	80.50	80.13	79.76	79.40	79.03	78.66	78.29	77.92	77.55
84	77.18	76.82	76.46	76.10	75.73	75.37	75.01	74.65	74.29	73.93	73.56	73.20
85	72.84	72.49	72.14	71.79	71.43	71.08	70.73	70.38	70.03	69.68	69.32	68.97
86	68.62	68.28	67.94	67.60	67.26	66.92	66.58	66.24	65.90	65.56	65.22	64.88
87	64.54	64.21	63.89	63.56	63.23	62.91	62.58	62.25	61.93	61.60	61.27	60.95
88	60.62	60.31	60.00	59.68	59.37	59.06	58.75	58.43	58.12	57.81	57.50	57.18
89	56.87	56.57	56.28	55.98	55.68	55.39	55.09	54.79	54.50	54.20	53.90	53.61
90	53.31	53.03	52.75	52.47	52.19	51.91	51.63	51.35	51.07	50.79	50.51	50.23
91	49.95	49.69	49.43	49.16	48.90	48.64	48.38	48.11	47.85	47.59	47.33	47.06
92	46.80	46.56	46.31	46.07	45.82	45.58	45.33	45.09	44.84	44.60	44.35	44.11
93	43.86	43.63	43.41	43.18	42.95	42.72	42.50	42.27	42.04	41.81	41.59	41.36
94	41.13	40.92	40.71	40.50	40.29	40.08	39.87	39.65	39.44	39.23	39.02	38.81
95	38.60	38.41	38.21	38.02	37.82	37.63	37.43	37.24	37.04	36.85	36.65	36.46
96	36.26	36.08	35.90	35.72	35.54	35.36	35.18	34.99	34.81	34.63	34.45	34.27
97	34.09	33.92	33.76	33.59	33.42	33.26	33.09	32.92	32.76	32.59	32.42	32.26
98	32.09	31.94	31.78	31.63	31.48	31.32	31.17	31.02	30.86	30.71	30.56	30.40
99	30.25	30.11	29.97	29.82	29.68	29.54	29.40	29.25	29.11	28.97	28.83	28.68
100	28.54											

**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)**  
**Actuarial Equivalency Factors Effective January 1, 2024**

**Table 13b: Full Cost Factors for Purchasing Service - Factor 1 - Disabled Members (Tier One / Tier Two only)**  
(Present value of \$1 of increased monthly benefit beginning at retirement age)

Age	Months of Attained Age at Retirement											
	0	1	2	3	4	5	6	7	8	9	10	11
45	174.29	174.13	173.96	173.80	173.63	173.47	173.30	173.14	172.97	172.81	172.64	172.48
46	172.31	172.15	171.98	171.82	171.65	171.49	171.33	171.16	171.00	170.83	170.67	170.50
47	170.34	170.18	170.02	169.86	169.69	169.53	169.37	169.21	169.05	168.89	168.72	168.56
48	168.40	168.24	168.08	167.92	167.76	167.60	167.45	167.29	167.13	166.97	166.81	166.65
49	166.49	166.33	166.17	166.02	165.86	165.70	165.54	165.38	165.22	165.07	164.91	164.75
50	164.59	164.43	164.27	164.11	163.95	163.79	163.64	163.48	163.32	163.16	163.00	162.84
51	162.68	162.52	162.36	162.20	162.03	161.87	161.71	161.55	161.39	161.23	161.06	160.90
52	160.74	160.58	160.41	160.25	160.08	159.92	159.76	159.59	159.43	159.26	159.10	158.93
53	158.77	158.60	158.44	158.27	158.11	157.94	157.78	157.61	157.44	157.28	157.11	156.95
54	156.78	156.61	156.44	156.27	156.10	155.93	155.76	155.58	155.41	155.24	155.07	154.90
55	154.73	154.56	154.38	154.21	154.03	153.86	153.69	153.51	153.34	153.16	152.99	152.81
56	152.64	152.46	152.28	152.10	151.92	151.74	151.56	151.37	151.19	151.01	150.83	150.65
57	150.47	150.28	150.09	149.91	149.72	149.53	149.34	149.15	148.96	148.78	148.59	148.40
58	148.21	148.02	147.82	147.63	147.43	147.24	147.04	146.85	146.65	146.46	146.26	146.07
59	145.87	145.67	145.46	145.26	145.06	144.85	144.65	144.45	144.24	144.04	143.84	143.63
60	143.43	143.22	143.01	142.79	142.58	142.37	142.16	141.94	141.73	141.52	141.31	141.09
61	140.88	140.66	140.44	140.22	140.00	139.78	139.56	139.34	139.12	138.90	138.68	138.46
62	138.24	138.01	137.78	137.55	137.32	137.09	136.87	136.64	136.41	136.18	135.95	135.72
63	135.49	135.25	135.02	134.78	134.54	134.31	134.07	133.83	133.60	133.36	133.12	132.89
64	132.65	132.40	132.16	131.91	131.67	131.42	131.18	130.93	130.68	130.44	130.19	129.95
65	129.70	129.45	129.20	128.94	128.69	128.44	128.19	127.93	127.68	127.43	127.18	126.92
66	126.67	126.41	126.15	125.89	125.63	125.37	125.11	124.84	124.58	124.32	124.06	123.80
67	123.54	123.27	123.01	122.74	122.47	122.21	121.94	121.67	121.41	121.14	120.87	120.61
68	120.34	120.07	119.79	119.52	119.24	118.97	118.70	118.42	118.15	117.87	117.60	117.32
69	117.05	116.77	116.49	116.21	115.93	115.65	115.38	115.10	114.82	114.54	114.26	113.98
70	113.70	113.42	113.13	112.85	112.56	112.28	111.99	111.71	111.42	111.14	110.85	110.57
71	110.28	109.99	109.70	109.41	109.12	108.83	108.54	108.25	107.96	107.67	107.38	107.09
72	106.80	106.51	106.21	105.92	105.62	105.33	105.04	104.74	104.45	104.15	103.86	103.56
73	103.27	102.97	102.67	102.38	102.08	101.78	101.48	101.18	100.88	100.59	100.29	99.99
74	99.69	99.39	99.09	98.79	98.49	98.19	97.89	97.59	97.29	96.99	96.69	96.39

**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)**  
**Actuarial Equivalency Factors Effective January 1, 2024**

**Table 13b: Full Cost Factors for Purchasing Service - Factor 1 - Disabled Members (Tier One / Tier Two only)**  
(Present value of \$1 of increased monthly benefit beginning at retirement age)

Age	Months of Attained Age at Retirement											
	0	1	2	3	4	5	6	7	8	9	10	11
75	96.09	95.79	95.49	95.19	94.88	94.58	94.28	93.98	93.68	93.38	93.07	92.77
76	92.47	92.17	91.87	91.56	91.26	90.96	90.66	90.35	90.05	89.75	89.45	89.14
77	88.84	88.54	88.23	87.93	87.62	87.32	87.02	86.71	86.41	86.10	85.80	85.49
78	85.19	84.89	84.58	84.28	83.98	83.67	83.37	83.07	82.76	82.46	82.16	81.85
79	81.55	81.25	80.95	80.65	80.34	80.04	79.74	79.44	79.14	78.84	78.53	78.23
80	77.93	77.63	77.33	77.04	76.74	76.44	76.14	75.84	75.54	75.25	74.95	74.65
81	74.35	74.06	73.76	73.47	73.17	72.88	72.59	72.29	72.00	71.70	71.41	71.11
82	70.82	70.53	70.25	69.96	69.67	69.38	69.10	68.81	68.52	68.23	67.95	67.66
83	67.37	67.09	66.81	66.53	66.25	65.97	65.70	65.42	65.14	64.86	64.58	64.30
84	64.02	63.75	63.48	63.21	62.94	62.67	62.40	62.13	61.86	61.59	61.32	61.05
85	60.78	60.52	60.26	60.00	59.73	59.47	59.21	58.95	58.69	58.43	58.16	57.90
86	57.64	57.39	57.14	56.89	56.63	56.38	56.13	55.88	55.63	55.38	55.12	54.87
87	54.62	54.38	54.14	53.90	53.65	53.41	53.17	52.93	52.69	52.45	52.20	51.96
88	51.72	51.49	51.26	51.03	50.80	50.57	50.34	50.11	49.88	49.65	49.42	49.19
89	48.96	48.74	48.52	48.31	48.09	47.87	47.65	47.43	47.21	47.00	46.78	46.56
90	46.34	46.13	45.92	45.72	45.51	45.30	45.09	44.88	44.67	44.47	44.26	44.05
91	43.84	43.64	43.44	43.25	43.05	42.85	42.65	42.45	42.25	42.06	41.86	41.66
92	41.46	41.27	41.08	40.89	40.70	40.51	40.32	40.13	39.94	39.75	39.56	39.37
93	39.18	39.00	38.82	38.64	38.46	38.28	38.10	37.92	37.74	37.56	37.38	37.20
94	37.02	36.85	36.68	36.51	36.33	36.16	35.99	35.82	35.65	35.48	35.30	35.13
95	34.96	34.80	34.64	34.47	34.31	34.15	33.99	33.82	33.66	33.50	33.34	33.17
96	33.01	32.86	32.70	32.55	32.39	32.24	32.09	31.93	31.78	31.62	31.47	31.31
97	31.16	31.02	30.87	30.73	30.58	30.44	30.29	30.15	30.00	29.86	29.71	29.57
98	29.42	29.28	29.15	29.01	28.88	28.74	28.61	28.47	28.33	28.20	28.06	27.93
99	27.79	27.67	27.54	27.42	27.29	27.17	27.04	26.92	26.79	26.67	26.54	26.42
100	26.29											

**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)**  
**Actuarial Equivalency Factors Effective January 1, 2024**

**Table 14: Full Cost Factors for Purchasing Service - Factor 2 - Healthy and Disabled Members (Tier One / Tier Two only)**  
 (Used in combination with Tables 13 and 15 to calculate full cost present value adjustment of 1.60% COLA for years and months prior to earliest retirement age)

Months Purchased to Accelerate Earliest Retirement Age												
Years Purchased to Accelerate Earliest Retirement Age	0	1	2	3	4	5	6	7	8	9	10	11
0	1.000	0.999	0.997	0.996	0.995	0.993	0.992	0.991	0.989	0.988	0.987	0.985
1	0.984	0.983	0.982	0.980	0.979	0.978	0.977	0.975	0.974	0.973	0.972	0.970
2	0.969	0.968	0.966	0.965	0.964	0.962	0.961	0.960	0.958	0.957	0.956	0.954
3	0.953	0.952	0.951	0.949	0.948	0.947	0.946	0.944	0.943	0.942	0.941	0.939
4	0.938	0.937	0.936	0.935	0.933	0.932	0.931	0.930	0.929	0.928	0.926	0.925
5	0.924	0.923	0.922	0.920	0.919	0.918	0.917	0.915	0.914	0.913	0.912	0.910
6	0.909	0.908	0.907	0.906	0.904	0.903	0.902	0.901	0.900	0.899	0.897	0.896
7	0.895	0.894	0.893	0.892	0.890	0.889	0.888	0.887	0.886	0.885	0.883	0.882
8	0.881	0.880	0.879	0.878	0.876	0.875	0.874	0.873	0.872	0.871	0.869	0.868
9	0.867	0.866	0.865	0.864	0.862	0.861	0.860	0.859	0.858	0.857	0.855	0.854
10	0.853											

**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)**  
**Actuarial Equivalency Factors Effective January 1, 2024**

**Table 15: Full Cost Factors for Purchasing Service - Factor 3 - Healthy and Disabled Members (Tier One / Tier Two only)**

(Used in combination with Tables 13 and 14 to calculate full cost present value of additional monthly benefits that will be distributed because purchase allows the member to retire before earliest retirement age)

Years Purchased to Accelerate Earliest Retirement Age	Months Purchased to Accelerate Earliest Retirement Age											
	0	1	2	3	4	5	6	7	8	9	10	11
0	0.000	0.994	1.982	2.963	3.937	4.904	5.865	6.819	7.767	8.708	9.642	10.570
1	11.491	12.406	13.315	14.218	15.114	16.003	16.887	17.764	18.636	19.501	20.360	21.213
2	22.060	22.901	23.736	24.565	25.389	26.206	27.018	27.824	28.624	29.419	30.208	30.991
3	31.768	32.540	33.307	34.068	34.824	35.574	36.318	37.058	37.792	38.520	39.244	39.962
4	40.675	41.383	42.085	42.783	43.475	44.162	44.845	45.522	46.194	46.861	47.524	48.181
5	48.834	49.482	50.125	50.763	51.396	52.025	52.649	53.269	53.883	54.493	55.099	55.700
6	56.296	56.888	57.476	58.059	58.638	59.212	59.782	60.347	60.908	61.465	62.018	62.566
7	63.110	63.650	64.186	64.717	65.245	65.768	66.288	66.803	67.314	67.822	68.325	68.824
8	69.320	69.811	70.299	70.782	71.262	71.738	72.211	72.679	73.144	73.605	74.062	74.516
9	74.966	75.413	75.855	76.295	76.730	77.162	77.591	78.016	78.437	78.855	79.270	79.681
10	80.089											

**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)**  
**Actuarial Equivalency Factors Effective January 1, 2024**

**Table 16a: Full Cost Factors for Purchasing Service - Factor 5 - Healthy Members (Tier One / Tier Two only)**  
(Present value of RHIA benefit payable at age 65, or retirement age if later, with no mortality during deferral period)

Age	Months of Attained Age at Retirement											
	0	1	2	3	4	5	6	7	8	9	10	11
45	2,199	2,211	2,224	2,236	2,249	2,261	2,274	2,286	2,298	2,311	2,323	2,336
46	2,348	2,361	2,375	2,388	2,401	2,414	2,428	2,441	2,454	2,467	2,481	2,494
47	2,507	2,521	2,535	2,549	2,563	2,577	2,592	2,606	2,620	2,634	2,648	2,662
48	2,676	2,691	2,706	2,721	2,736	2,751	2,767	2,782	2,797	2,812	2,827	2,842
49	2,857	2,873	2,889	2,905	2,921	2,937	2,954	2,970	2,986	3,002	3,018	3,034
50	3,050	3,067	3,085	3,102	3,119	3,136	3,154	3,171	3,188	3,205	3,223	3,240
51	3,257	3,275	3,294	3,312	3,330	3,349	3,367	3,385	3,404	3,422	3,440	3,459
52	3,477	3,497	3,516	3,536	3,555	3,575	3,595	3,614	3,634	3,653	3,673	3,692
53	3,712	3,733	3,754	3,775	3,795	3,816	3,837	3,858	3,879	3,900	3,920	3,941
54	3,962	3,984	4,007	4,029	4,051	4,074	4,096	4,118	4,141	4,163	4,185	4,208
55	4,230	4,254	4,278	4,301	4,325	4,349	4,373	4,396	4,420	4,444	4,468	4,491
56	4,515	4,540	4,566	4,591	4,617	4,642	4,668	4,693	4,718	4,744	4,769	4,795
57	4,820	4,847	4,874	4,902	4,929	4,956	4,983	5,010	5,037	5,065	5,092	5,119
58	5,146	5,175	5,204	5,233	5,262	5,291	5,320	5,348	5,377	5,406	5,435	5,464
59	5,493	5,524	5,555	5,586	5,617	5,648	5,679	5,709	5,740	5,771	5,802	5,833
60	5,864	5,897	5,930	5,963	5,996	6,029	6,062	6,094	6,127	6,160	6,193	6,226
61	6,259	6,294	6,329	6,365	6,400	6,435	6,470	6,505	6,540	6,576	6,611	6,646
62	6,681	6,719	6,756	6,794	6,831	6,869	6,907	6,944	6,982	7,019	7,057	7,094
63	7,132	7,172	7,212	7,252	7,292	7,332	7,373	7,413	7,453	7,493	7,533	7,573
64	7,613	7,656	7,699	7,741	7,784	7,827	7,870	7,912	7,955	7,998	8,041	8,083
65	8,126	8,113	8,101	8,088	8,076	8,063	8,051	8,038	8,025	8,013	8,000	7,988
66	7,975	7,962	7,949	7,936	7,922	7,909	7,896	7,883	7,870	7,857	7,843	7,830
67	7,817	7,803	7,789	7,776	7,762	7,748	7,734	7,720	7,706	7,693	7,679	7,665
68	7,651	7,637	7,623	7,608	7,594	7,580	7,566	7,551	7,537	7,523	7,509	7,494
69	7,480	7,465	7,450	7,435	7,420	7,405	7,391	7,376	7,361	7,346	7,331	7,316
70	7,301	7,286	7,270	7,255	7,239	7,224	7,209	7,193	7,178	7,162	7,147	7,131
71	7,116	7,100	7,084	7,068	7,052	7,036	7,021	7,005	6,989	6,973	6,957	6,941
72	6,925	6,909	6,892	6,876	6,859	6,843	6,827	6,810	6,794	6,777	6,761	6,744
73	6,728	6,711	6,694	6,677	6,660	6,643	6,627	6,610	6,593	6,576	6,559	6,542
74	6,525	6,508	6,491	6,473	6,456	6,439	6,422	6,404	6,387	6,370	6,353	6,335



**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)**  
**Actuarial Equivalency Factors Effective January 1, 2024**

**Table 16a: Full Cost Factors for Purchasing Service - Factor 5 - Healthy Members (Tier One / Tier Two only)**  
(Present value of RHIA benefit payable at age 65, or retirement age if later, with no mortality during deferral period)

Age	Months of Attained Age at Retirement											
	0	1	2	3	4	5	6	7	8	9	10	11
75	6,318	6,300	6,283	6,265	6,247	6,229	6,212	6,194	6,176	6,158	6,141	6,123
76	6,105	6,087	6,069	6,051	6,033	6,015	5,997	5,978	5,960	5,942	5,924	5,906
77	5,888	5,870	5,851	5,833	5,814	5,796	5,778	5,759	5,741	5,722	5,704	5,685
78	5,667	5,648	5,630	5,611	5,592	5,574	5,555	5,536	5,518	5,499	5,480	5,462
79	5,443	5,424	5,405	5,386	5,367	5,348	5,329	5,310	5,291	5,272	5,253	5,234
80	5,215	5,196	5,177	5,158	5,139	5,120	5,101	5,081	5,062	5,043	5,024	5,005
81	4,986	4,967	4,948	4,928	4,909	4,890	4,871	4,851	4,832	4,813	4,794	4,774
82	4,755	4,736	4,717	4,697	4,678	4,659	4,640	4,620	4,601	4,582	4,563	4,543
83	4,524	4,505	4,486	4,467	4,447	4,428	4,409	4,390	4,371	4,352	4,332	4,313
84	4,294	4,275	4,256	4,238	4,219	4,200	4,181	4,162	4,143	4,125	4,106	4,087
85	4,068	4,050	4,031	4,013	3,994	3,976	3,957	3,939	3,920	3,902	3,883	3,865
86	3,846	3,828	3,810	3,792	3,774	3,756	3,738	3,720	3,702	3,684	3,666	3,648
87	3,630	3,613	3,595	3,578	3,560	3,543	3,526	3,508	3,491	3,473	3,456	3,438
88	3,421	3,404	3,387	3,371	3,354	3,337	3,320	3,303	3,286	3,270	3,253	3,236
89	3,219	3,203	3,187	3,171	3,155	3,139	3,123	3,107	3,091	3,075	3,059	3,043
90	3,027	3,012	2,997	2,982	2,966	2,951	2,936	2,921	2,906	2,891	2,875	2,860
91	2,845	2,831	2,816	2,802	2,788	2,773	2,759	2,745	2,730	2,716	2,702	2,687
92	2,673	2,660	2,646	2,633	2,619	2,606	2,593	2,579	2,566	2,552	2,539	2,525
93	2,512	2,499	2,487	2,474	2,462	2,449	2,437	2,424	2,411	2,399	2,386	2,374
94	2,361	2,349	2,338	2,326	2,314	2,303	2,291	2,279	2,268	2,256	2,244	2,233
95	2,221	2,210	2,199	2,189	2,178	2,167	2,156	2,145	2,134	2,124	2,113	2,102
96	2,091	2,081	2,071	2,061	2,051	2,041	2,031	2,020	2,010	2,000	1,990	1,980
97	1,970	1,961	1,951	1,942	1,933	1,923	1,914	1,905	1,895	1,886	1,877	1,867
98	1,858	1,849	1,841	1,832	1,823	1,815	1,806	1,797	1,789	1,780	1,771	1,763
99	1,754	1,746	1,738	1,730	1,722	1,714	1,706	1,698	1,690	1,682	1,674	1,666
100	1,658											

**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)**  
**Actuarial Equivalency Factors Effective January 1, 2024**

**Table 16b: Full Cost Factors for Purchasing Service - Factor 5 - Disabled Members (Tier One / Tier Two only)**  
(Present value of RHIA benefit payable at age 65, or retirement age if later, with no mortality during deferral period)

Age	Months of Attained Age at Retirement											
	0	1	2	3	4	5	6	7	8	9	10	11
45	1,901	1,912	1,922	1,933	1,943	1,954	1,964	1,975	1,985	1,996	2,006	2,017
46	2,027	2,038	2,050	2,061	2,072	2,083	2,095	2,106	2,117	2,128	2,140	2,151
47	2,162	2,174	2,186	2,198	2,210	2,222	2,234	2,245	2,257	2,269	2,281	2,293
48	2,305	2,318	2,331	2,343	2,356	2,369	2,382	2,394	2,407	2,420	2,433	2,445
49	2,458	2,472	2,485	2,499	2,512	2,526	2,539	2,553	2,566	2,580	2,593	2,607
50	2,620	2,635	2,649	2,664	2,678	2,693	2,707	2,722	2,736	2,751	2,765	2,780
51	2,794	2,809	2,825	2,840	2,855	2,871	2,886	2,901	2,917	2,932	2,947	2,963
52	2,978	2,994	3,011	3,027	3,044	3,060	3,077	3,093	3,109	3,126	3,142	3,159
53	3,175	3,193	3,210	3,228	3,245	3,263	3,280	3,298	3,315	3,333	3,350	3,368
54	3,385	3,404	3,422	3,441	3,460	3,478	3,497	3,516	3,534	3,553	3,572	3,590
55	3,609	3,629	3,649	3,669	3,688	3,708	3,728	3,748	3,768	3,788	3,807	3,827
56	3,847	3,868	3,889	3,911	3,932	3,953	3,974	3,995	4,016	4,038	4,059	4,080
57	4,101	4,124	4,146	4,169	4,191	4,214	4,237	4,259	4,282	4,304	4,327	4,349
58	4,372	4,396	4,420	4,444	4,468	4,492	4,516	4,540	4,564	4,588	4,612	4,636
59	4,660	4,686	4,711	4,737	4,763	4,788	4,814	4,840	4,865	4,891	4,917	4,942
60	4,968	4,995	5,023	5,050	5,077	5,104	5,132	5,159	5,186	5,213	5,241	5,268
61	5,295	5,324	5,353	5,382	5,411	5,440	5,470	5,499	5,528	5,557	5,586	5,615
62	5,644	5,675	5,706	5,737	5,768	5,799	5,830	5,861	5,892	5,923	5,954	5,985
63	6,016	6,049	6,082	6,115	6,148	6,181	6,214	6,247	6,280	6,313	6,346	6,379
64	6,412	6,447	6,482	6,518	6,553	6,588	6,623	6,658	6,693	6,729	6,764	6,799
65	6,834	6,823	6,811	6,800	6,788	6,777	6,765	6,754	6,742	6,731	6,719	6,708
66	6,696	6,684	6,672	6,660	6,648	6,636	6,624	6,612	6,600	6,588	6,576	6,564
67	6,552	6,540	6,527	6,515	6,503	6,490	6,478	6,466	6,453	6,441	6,429	6,416
68	6,404	6,391	6,379	6,366	6,353	6,340	6,328	6,315	6,302	6,289	6,277	6,264
69	6,251	6,238	6,225	6,211	6,198	6,185	6,172	6,158	6,145	6,132	6,119	6,105
70	6,092	6,078	6,065	6,051	6,038	6,024	6,011	5,997	5,983	5,970	5,956	5,943
71	5,929	5,915	5,901	5,887	5,873	5,859	5,846	5,832	5,818	5,804	5,790	5,776
72	5,762	5,748	5,734	5,719	5,705	5,691	5,677	5,662	5,648	5,634	5,620	5,605
73	5,591	5,576	5,562	5,547	5,533	5,518	5,504	5,489	5,474	5,460	5,445	5,431
74	5,416	5,401	5,387	5,372	5,357	5,342	5,328	5,313	5,298	5,283	5,269	5,254

**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)**  
**Actuarial Equivalency Factors Effective January 1, 2024**

**Table 16b: Full Cost Factors for Purchasing Service - Factor 5 - Disabled Members (Tier One / Tier Two only)**  
(Present value of RHIA benefit payable at age 65, or retirement age if later, with no mortality during deferral period)

Age	Months of Attained Age at Retirement											
	0	1	2	3	4	5	6	7	8	9	10	11
75	5,239	5,224	5,209	5,194	5,179	5,164	5,149	5,134	5,119	5,104	5,089	5,074
76	5,059	5,044	5,029	5,014	4,998	4,983	4,968	4,953	4,938	4,923	4,907	4,892
77	4,877	4,862	4,846	4,831	4,816	4,800	4,785	4,770	4,754	4,739	4,724	4,708
78	4,693	4,678	4,662	4,647	4,631	4,616	4,600	4,585	4,569	4,554	4,538	4,523
79	4,507	4,492	4,476	4,461	4,445	4,430	4,414	4,399	4,383	4,368	4,352	4,337
80	4,321	4,306	4,290	4,275	4,259	4,244	4,229	4,213	4,198	4,182	4,167	4,151
81	4,136	4,121	4,106	4,090	4,075	4,060	4,045	4,029	4,014	3,999	3,984	3,968
82	3,953	3,938	3,923	3,908	3,893	3,878	3,863	3,847	3,832	3,817	3,802	3,787
83	3,772	3,757	3,743	3,728	3,713	3,698	3,684	3,669	3,654	3,639	3,625	3,610
84	3,595	3,581	3,566	3,552	3,538	3,523	3,509	3,495	3,480	3,466	3,452	3,437
85	3,423	3,409	3,395	3,381	3,367	3,353	3,340	3,326	3,312	3,298	3,284	3,270
86	3,256	3,243	3,229	3,216	3,202	3,189	3,175	3,162	3,148	3,135	3,121	3,108
87	3,094	3,081	3,068	3,055	3,042	3,029	3,016	3,003	2,990	2,977	2,964	2,951
88	2,938	2,926	2,913	2,901	2,888	2,876	2,863	2,851	2,838	2,826	2,813	2,801
89	2,788	2,776	2,764	2,752	2,740	2,728	2,717	2,705	2,693	2,681	2,669	2,657
90	2,645	2,634	2,622	2,611	2,600	2,588	2,577	2,566	2,554	2,543	2,532	2,520
91	2,509	2,498	2,487	2,476	2,465	2,454	2,444	2,433	2,422	2,411	2,400	2,389
92	2,378	2,368	2,357	2,347	2,336	2,326	2,316	2,305	2,295	2,284	2,274	2,263
93	2,253	2,243	2,233	2,223	2,213	2,203	2,193	2,183	2,173	2,163	2,153	2,143
94	2,133	2,123	2,114	2,104	2,095	2,085	2,076	2,066	2,056	2,047	2,037	2,028
95	2,018	2,009	2,000	1,991	1,982	1,973	1,964	1,954	1,945	1,936	1,927	1,918
96	1,909	1,900	1,892	1,883	1,875	1,866	1,858	1,849	1,840	1,832	1,823	1,815
97	1,806	1,798	1,790	1,782	1,773	1,765	1,757	1,749	1,741	1,733	1,724	1,716
98	1,708	1,700	1,693	1,685	1,677	1,670	1,662	1,654	1,647	1,639	1,631	1,624
99	1,616	1,609	1,602	1,595	1,588	1,581	1,574	1,566	1,559	1,552	1,545	1,538
100	1,531											

**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)  
Actuarial Equivalency Factors Effective January 1, 2024**

**Table 17: Lump Sum Cash Out Factors Prior to Early Retirement Eligibility - General Service with Less than 30 Years of Service- Healthy Members (OPSRP only)**  
(Factor Multiplied by Monthly Retirement Benefit at Normal Retirement Age 65)

<u>Age</u>	<u>Months of Attained Age When Cashed Out</u>											
	<u>0</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>	<u>11</u>
15	4.92839	4.95616	4.98394	5.01171	5.03948	5.06725	5.09503	5.12280	5.15057	5.17834	5.20612	5.23389
16	5.26166	5.29132	5.32098	5.35064	5.38030	5.40996	5.43962	5.46928	5.49894	5.52860	5.55826	5.58792
17	5.61758	5.64926	5.68094	5.71262	5.74429	5.77597	5.80765	5.83933	5.87101	5.90269	5.93436	5.96604
18	5.99772	6.03156	6.06539	6.09923	6.13307	6.16690	6.20074	6.23458	6.26841	6.30225	6.33609	6.36992
19	6.40376	6.43989	6.47602	6.51214	6.54827	6.58440	6.62053	6.65665	6.69278	6.72891	6.76504	6.80116
20	6.83729	6.87587	6.91444	6.95302	6.99159	7.03017	7.06874	7.10732	7.14589	7.18447	7.22304	7.26162
21	7.30019	7.34137	7.38255	7.42372	7.46490	7.50608	7.54726	7.58843	7.62961	7.67079	7.71197	7.75314
22	7.79432	7.83826	7.88220	7.92615	7.97009	8.01403	8.05797	8.10191	8.14585	8.18980	8.23374	8.27768
23	8.32162	8.36852	8.41543	8.46233	8.50923	8.55613	8.60304	8.64994	8.69684	8.74374	8.79065	8.83755
24	8.88445	8.93451	8.98456	9.03462	9.08468	9.13473	9.18479	9.23485	9.28490	9.33496	9.38502	9.43507
25	9.48513	9.53856	9.59199	9.64541	9.69884	9.75227	9.80570	9.85912	9.91255	9.96598	10.01941	10.07283
26	10.12626	10.18329	10.24031	10.29734	10.35437	10.41139	10.46842	10.52545	10.58247	10.63950	10.69653	10.75355
27	10.81058	10.87147	10.93235	10.99324	11.05412	11.11501	11.17590	11.23678	11.29767	11.35855	11.41944	11.48032
28	11.54121	11.60621	11.67121	11.73620	11.80120	11.86620	11.93120	11.99619	12.06119	12.12619	12.19119	12.25618
29	12.32118	12.39057	12.45995	12.52934	12.59873	12.66811	12.73750	12.80689	12.87627	12.94566	13.01505	13.08443
30	13.15382	13.22790	13.30198	13.37607	13.45015	13.52423	13.59831	13.67239	13.74647	13.82056	13.89464	13.96872
31	14.04280	14.12189	14.20098	14.28007	14.35916	14.43825	14.51734	14.59642	14.67551	14.75460	14.83369	14.91278
32	14.99187	15.07630	15.16074	15.24517	15.32961	15.41404	15.49848	15.58291	15.66734	15.75178	15.83621	15.92065
33	16.00508	16.09522	16.18536	16.27551	16.36565	16.45579	16.54593	16.63607	16.72621	16.81636	16.90650	16.99664
34	17.08678	17.18301	17.27924	17.37547	17.47170	17.56793	17.66416	17.76038	17.85661	17.95284	18.04907	18.14530
35	18.24153	18.34427	18.44701	18.54975	18.65249	18.75523	18.85797	18.96071	19.06345	19.16619	19.26893	19.37167
36	19.47441	19.58412	19.69383	19.80353	19.91324	20.02295	20.13266	20.24236	20.35207	20.46178	20.57149	20.68119
37	20.79090	20.90803	21.02515	21.14228	21.25941	21.37653	21.49366	21.61079	21.72791	21.84504	21.96217	22.07929
38	22.19642	22.32148	22.44654	22.57161	22.69667	22.82173	22.94679	23.07185	23.19691	23.32198	23.44704	23.57210
39	23.69716	23.83071	23.96426	24.09781	24.23135	24.36490	24.49845	24.63200	24.76555	24.89910	25.03264	25.16619
40	25.29974	25.44234	25.58495	25.72755	25.87015	26.01276	26.15536	26.29796	26.44057	26.58317	26.72577	26.86838
41	27.01098	27.16327	27.31556	27.46785	27.62013	27.77242	27.92471	28.07700	28.22929	28.38158	28.53386	28.68615
42	28.83844	29.00109	29.16374	29.32640	29.48905	29.65170	29.81435	29.97700	30.13965	30.30231	30.46496	30.62761
43	30.79026	30.96399	31.13772	31.31145	31.48518	31.65891	31.83265	32.00638	32.18011	32.35384	32.52757	32.70130
44	32.87503	33.06060	33.24616	33.43173	33.61730	33.80286	33.98843	34.17400	34.35956	34.54513	34.73070	34.91626

**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)  
Actuarial Equivalency Factors Effective January 1, 2024**

**Table 17: Lump Sum Cash Out Factors Prior to Early Retirement Eligibility - General Service with Less than 30 Years of Service- Healthy Members (OPSRP only)**  
(Factor Multiplied by Monthly Retirement Benefit at Normal Retirement Age 65)

<u>Age</u>	<u>Months of Attained Age When Cashed Out</u>											
	<u>0</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>	<u>11</u>
<b>45</b>	35.10183	35.30022	35.49860	35.69699	35.89537	36.09376	36.29215	36.49053	36.68892	36.88730	37.08569	37.28407
<b>46</b>	37.48246	37.69447	37.90649	38.11850	38.33051	38.54252	38.75454	38.96655	39.17856	39.39057	39.60259	39.81460
<b>47</b>	40.02661	40.25321	40.47981	40.70641	40.93301	41.15961	41.38621	41.61280	41.83940	42.06600	42.29260	42.51920
<b>48</b>	42.74580	42.98801	43.23023	43.47244	43.71465	43.95686	44.19908	44.44129	44.68350	44.92571	45.16793	45.41014
<b>49</b>	45.65235	45.91131	46.17026	46.42922	46.68817	46.94713	47.20609	47.46504	47.72400	47.98295	48.24191	48.50086
<b>50</b>	48.75982	49.03823	49.31665	49.59506	49.87348	50.15189	50.43031	50.70872	50.98713	51.26555	51.54396	51.82238
<b>51</b>	52.10079	52.40024	52.69969	52.99915	53.29860	53.59805	53.89750	54.19695	54.49640	54.79586	55.09531	55.39476
<b>52</b>	55.69421	56.01497	56.33572	56.65648	56.97723	57.29799	57.61874	57.93950	58.26025	58.58101	58.90176	59.22252
<b>53</b>	59.54327	59.88698	60.23069	60.57440	60.91811	61.26182	61.60553	61.94924	62.29295	62.63666	62.98037	63.32408
<b>54</b>	63.66779	64.03620	64.40460	64.77301	65.14141	65.50982	65.87823	66.24663	66.61504	66.98344	67.35185	67.72025
<b>55</b>	68.08866	68.48498	68.88130	69.27762	69.67393	70.07025	70.46657	70.86289	71.25921	71.65553	72.05184	72.44816
<b>56</b>	72.84448	73.26984	73.69519	74.12055	74.54590	74.97126	75.39662	75.82197	76.24733	76.67268	77.09804	77.52339
<b>57</b>	77.94875	78.40554	78.86233	79.31912	79.77590	80.23269	80.68948	81.14627	81.60306	82.05985	82.51663	82.97342
<b>58</b>	83.43021	83.92092	84.41164	84.90235	85.39306	85.88377	86.37449	86.86520	87.35591	87.84662	88.33734	88.82805
<b>59</b>	89.31876	89.84626	90.37376	90.90126	91.42876	91.95626	92.48376	93.01126	93.53876	94.06626	94.59376	95.12126
<b>60</b>	95.64876	96.21628	96.78379	97.35131	97.91882	98.48634	99.05385	99.62137	100.18888	100.75640	101.32391	101.89143
<b>61</b>	102.45894	103.07001	103.68108	104.29215	104.90322	105.51429	106.12537	106.73644	107.34751	107.95858	108.56965	109.18072
<b>62</b>	109.79179	110.45034	111.10890	111.76745	112.42601	113.08456	113.74312	114.40167	115.06022	115.71878	116.37733	117.03589
<b>63</b>	117.69444	118.40501	119.11559	119.82616	120.53673	121.24730	121.95788	122.66845	123.37902	124.08959	124.80017	125.51074
<b>64</b>	126.22131	126.98881	127.75630	128.52380	129.29129	130.05879	130.82628	131.59378	132.36127	133.12877	133.89626	134.66376
<b>65</b>	135.43125											

**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)  
Actuarial Equivalency Factors Effective January 1, 2024**

**Table 18: Lump Sum Cash Out Factors Prior to Early Retirement Eligibility - Police & Fire with Less than 25 Years of Service- Healthy Members (OPSRP only)**  
(Factor Multiplied by Monthly Retirement Benefit at Normal Retirement Age 60)

<u>Age</u>	<u>Months of Attained Age When Cashd Out</u>											
	<u>0</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>	<u>11</u>
15	7.39045	7.43234	7.47422	7.51611	7.55799	7.59988	7.64176	7.68365	7.72553	7.76742	7.80930	7.85119
16	7.89307	7.93782	7.98257	8.02732	8.07207	8.11682	8.16157	8.20632	8.25107	8.29582	8.34057	8.38532
17	8.43007	8.47789	8.52570	8.57352	8.62133	8.66915	8.71696	8.76478	8.81259	8.86041	8.90822	8.95604
18	9.00385	9.05494	9.10604	9.15713	9.20822	9.25931	9.31041	9.36150	9.41259	9.46368	9.51478	9.56587
19	9.61696	9.67154	9.72611	9.78069	9.83527	9.88984	9.94442	9.99900	10.05357	10.10815	10.16273	10.21730
20	10.27188	10.33018	10.38848	10.44678	10.50507	10.56337	10.62167	10.67997	10.73827	10.79657	10.85486	10.91316
21	10.97146	11.03372	11.09598	11.15823	11.22049	11.28275	11.34501	11.40726	11.46952	11.53178	11.59404	11.65629
22	11.71855	11.78502	11.85149	11.91795	11.98442	12.05089	12.11736	12.18382	12.25029	12.31676	12.38323	12.44969
23	12.51616	12.58714	12.65811	12.72909	12.80007	12.87104	12.94202	13.01300	13.08397	13.15495	13.22593	13.29690
24	13.36788	13.44366	13.51945	13.59523	13.67102	13.74680	13.82259	13.89837	13.97415	14.04994	14.12572	14.20151
25	14.27729	14.35821	14.43914	14.52006	14.60098	14.68191	14.76283	14.84375	14.92468	15.00560	15.08652	15.16745
26	15.24837	15.33478	15.42120	15.50761	15.59403	15.68044	15.76686	15.85327	15.93968	16.02610	16.11251	16.19893
27	16.28534	16.37764	16.46995	16.56225	16.65456	16.74686	16.83917	16.93147	17.02377	17.11608	17.20838	17.30069
28	17.39299	17.49157	17.59016	17.68874	17.78732	17.88591	17.98449	18.08307	18.18166	18.28024	18.37882	18.47741
29	18.57599	18.68128	18.78657	18.89186	18.99715	19.10244	19.20773	19.31301	19.41830	19.52359	19.62888	19.73417
30	19.83946	19.95193	20.06439	20.17686	20.28933	20.40179	20.51426	20.62673	20.73919	20.85166	20.96413	21.07659
31	21.18906	21.30919	21.42931	21.54944	21.66956	21.78969	21.90981	22.02994	22.15006	22.27019	22.39031	22.51044
32	22.63056	22.75886	22.88717	23.01547	23.14378	23.27208	23.40039	23.52869	23.65699	23.78530	23.91360	24.04191
33	24.17021	24.30725	24.44430	24.58134	24.71838	24.85542	24.99247	25.12951	25.26655	25.40359	25.54064	25.67768
34	25.81472	25.96109	26.10746	26.25383	26.40020	26.54657	26.69295	26.83932	26.98569	27.13206	27.27843	27.42480
35	27.57117	27.72752	27.88387	28.04022	28.19657	28.35292	28.50928	28.66563	28.82198	28.97833	29.13468	29.29103
36	29.44738	29.61442	29.78145	29.94849	30.11552	30.28256	30.44960	30.61663	30.78367	30.95070	31.11774	31.28477
37	31.45181	31.63023	31.80865	31.98708	32.16550	32.34392	32.52234	32.70076	32.87918	33.05761	33.23603	33.41445
38	33.59287	33.78348	33.97408	34.16469	34.35529	34.54590	34.73650	34.92711	35.11771	35.30832	35.49892	35.68953
39	35.88013	36.08377	36.28742	36.49106	36.69470	36.89834	37.10199	37.30563	37.50927	37.71291	37.91656	38.12020
40	38.32384	38.54140	38.75897	38.97653	39.19409	39.41166	39.62922	39.84678	40.06435	40.28191	40.49947	40.71704
41	40.93460	41.16706	41.39952	41.63198	41.86444	42.09690	42.32936	42.56181	42.79427	43.02673	43.25919	43.49165
42	43.72411	43.97252	44.22093	44.46933	44.71774	44.96615	45.21456	45.46296	45.71137	45.95978	46.20819	46.45659
43	46.70500	46.97047	47.23594	47.50141	47.76687	48.03234	48.29781	48.56328	48.82875	49.09422	49.35968	49.62515
44	49.89062	50.17433	50.45803	50.74174	51.02544	51.30915	51.59285	51.87656	52.16026	52.44397	52.72767	53.01138

**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)  
Actuarial Equivalency Factors Effective January 1, 2024**

**Table 18: Lump Sum Cash Out Factors Prior to Early Retirement Eligibility - Police & Fire with Less than 25 Years of Service- Healthy Members (OPSRP only)**  
(Factor Multiplied by Monthly Retirement Benefit at Normal Retirement Age 60)

<u>Age</u>	<u>Months of Attained Age When Cashed Out</u>											
	<u>0</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>	<u>11</u>
<b>45</b>	53.29508	53.59854	53.90201	54.20547	54.50893	54.81239	55.11586	55.41932	55.72278	56.02624	56.32971	56.63317
<b>46</b>	56.93663	57.26112	57.58560	57.91009	58.23457	58.55906	58.88354	59.20803	59.53251	59.85700	60.18148	60.50597
<b>47</b>	60.83045	61.17744	61.52444	61.87143	62.21842	62.56541	62.91241	63.25940	63.60639	63.95338	64.30038	64.64737
<b>48</b>	64.99436	65.36547	65.73658	66.10769	66.47880	66.84991	67.22102	67.59212	67.96323	68.33434	68.70545	69.07656
<b>49</b>	69.44767	69.84465	70.24163	70.63861	71.03559	71.43257	71.82955	72.22652	72.62350	73.02048	73.41746	73.81444
<b>50</b>	74.21142	74.63846	75.06549	75.49253	75.91957	76.34660	76.77364	77.20068	77.62771	78.05475	78.48179	78.90882
<b>51</b>	79.33586	79.79540	80.25494	80.71448	81.17401	81.63355	82.09309	82.55263	83.01217	83.47171	83.93124	84.39078
<b>52</b>	84.85032	85.34283	85.83534	86.32785	86.82036	87.31287	87.80538	88.29788	88.79039	89.28290	89.77541	90.26792
<b>53</b>	90.76043	91.28848	91.81652	92.34457	92.87262	93.40066	93.92871	94.45676	94.98480	95.51285	96.04090	96.56894
<b>54</b>	97.09699	97.66331	98.22963	98.79595	99.36226	99.92858	100.49490	101.06122	101.62754	102.19386	102.76017	103.32649
<b>55</b>	103.89281	104.50236	105.11191	105.72147	106.33102	106.94057	107.55012	108.15967	108.76922	109.37878	109.98833	110.59788
<b>56</b>	111.20743	111.86203	112.51662	113.17122	113.82581	114.48041	115.13501	115.78960	116.44420	117.09879	117.75339	118.40798
<b>57</b>	119.06258	119.76594	120.46930	121.17266	121.87601	122.57937	123.28273	123.98609	124.68945	125.39281	126.09616	126.79952
<b>58</b>	127.50288	128.25892	129.01496	129.77101	130.52705	131.28309	132.03913	132.79517	133.55121	134.30726	135.06330	135.81934
<b>59</b>	136.57538	137.38858	138.20178	139.01498	139.82818	140.64138	141.45458	142.26777	143.08097	143.89417	144.70737	145.52057
<b>60</b>	146.33377											

**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)  
Actuarial Equivalency Factors Effective January 1, 2024**

**Table 19: Lump Sum Cash Out Factors at or after Early Retirement Age - Healthy Members (OPSRP only)**  
(Factor Multiplied by Monthly Retirement Benefit at or after Early Retirement Age)

Age	Months of Attained Age at Retirement											
	0	1	2	3	4	5	6	7	8	9	10	11
50	161.28465	161.18428	161.08391	160.98354	160.88316	160.78279	160.68242	160.58205	160.48168	160.38131	160.28093	160.18056
51	160.08019	159.97801	159.87583	159.77365	159.67147	159.56929	159.46711	159.36493	159.26275	159.16057	159.05839	158.95621
52	158.85403	158.74587	158.63771	158.52955	158.42139	158.31323	158.20507	158.09691	157.98875	157.88059	157.77243	157.66427
53	157.55611	157.44168	157.32725	157.21282	157.09838	156.98395	156.86952	156.75509	156.64066	156.52623	156.41179	156.29736
54	156.18293	156.06186	155.94079	155.81971	155.69864	155.57757	155.45650	155.33542	155.21435	155.09328	154.97221	154.85113
55	154.73006	154.60475	154.47945	154.35414	154.22884	154.10353	153.97823	153.85292	153.72761	153.60231	153.47700	153.35170
56	153.22639	153.09414	152.96190	152.82965	152.69740	152.56516	152.43291	152.30066	152.16842	152.03617	151.90392	151.77168
57	151.63943	151.49992	151.36041	151.22090	151.08139	150.94188	150.80237	150.66286	150.52335	150.38384	150.24433	150.10482
58	149.96531	149.81805	149.67078	149.52352	149.37625	149.22899	149.08173	148.93446	148.78720	148.63993	148.49267	148.34540
59	148.19814	148.04278	147.88741	147.73205	147.57668	147.42132	147.26596	147.11059	146.95523	146.79986	146.64450	146.48913
60	146.33377	146.17004	146.00630	145.84257	145.67883	145.51510	145.35137	145.18763	145.02390	144.86016	144.69643	144.53269
61	144.36896	144.19655	144.02414	143.85172	143.67931	143.50690	143.33449	143.16207	142.98966	142.81725	142.64484	142.47242
62	142.30001	142.11857	141.93713	141.75569	141.57425	141.39281	141.21137	141.02992	140.84848	140.66704	140.48560	140.30416
63	140.12272	139.93206	139.74139	139.55073	139.36006	139.16940	138.97873	138.78807	138.59740	138.40674	138.21607	138.02541
64	137.83474	137.63445	137.43416	137.23387	137.03358	136.83329	136.63300	136.43270	136.23241	136.03212	135.83183	135.63154
65	135.43125	135.22130	135.01136	134.80141	134.59146	134.38152	134.17157	133.96162	133.75168	133.54173	133.33178	133.12184
66	132.91189	132.69223	132.47258	132.25292	132.03326	131.81360	131.59395	131.37429	131.15463	130.93497	130.71532	130.49566
67	130.27600	130.04671	129.81742	129.58814	129.35885	129.12956	128.90027	128.67098	128.44169	128.21241	127.98312	127.75383
68	127.52454	127.28578	127.04702	126.80826	126.56949	126.33073	126.09197	125.85321	125.61445	125.37569	125.13692	124.89816
69	124.65940	124.41148	124.16356	123.91564	123.66771	123.41979	123.17187	122.92395	122.67603	122.42811	122.18018	121.93226
70	121.68434	121.42751	121.17068	120.91385	120.65701	120.40018	120.14335	119.88652	119.62969	119.37286	119.11602	118.85919
71	118.60236	118.33701	118.07166	117.80631	117.54095	117.27560	117.01025	116.74490	116.47955	116.21420	115.94884	115.68349
72	115.41814	115.14453	114.87092	114.59731	114.32370	114.05009	113.77648	113.50286	113.22925	112.95564	112.68203	112.40842
73	112.13481	111.85337	111.57193	111.29049	111.00905	110.72761	110.44617	110.16472	109.88328	109.60184	109.32040	109.03896
74	108.75752	108.46870	108.17989	107.89107	107.60225	107.31344	107.02462	106.73580	106.44699	106.15817	105.86935	105.58054
75	105.29172	104.99632	104.70092	104.40552	104.11012	103.81472	103.51932	103.22391	102.92851	102.63311	102.33771	102.04231
76	101.74691	101.44574	101.14458	100.84341	100.54225	100.24108	99.93992	99.63875	99.33758	99.03642	98.73525	98.43409
77	98.13292	97.82633	97.51974	97.21315	96.90656	96.59997	96.29338	95.98678	95.68019	95.37360	95.06701	94.76042
78	94.45383	94.14225	93.83066	93.51908	93.20750	92.89591	92.58433	92.27275	91.96116	91.64958	91.33800	91.02641
79	90.71483	90.39895	90.08307	89.76719	89.45131	89.13543	88.81955	88.50367	88.18779	87.87191	87.55603	87.24015



**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)  
Actuarial Equivalency Factors Effective January 1, 2024**

**Table 19: Lump Sum Cash Out Factors at or after Early Retirement Age - Healthy Members (OPSRP only)**  
(Factor Multiplied by Monthly Retirement Benefit at or after Early Retirement Age)

<b>Age</b>	<b>Months of Attained Age at Retirement</b>											
	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>	<b>10</b>	<b>11</b>
<b>80</b>	86.92427	86.60522	86.28617	85.96713	85.64808	85.32903	85.00998	84.69093	84.37188	84.05284	83.73379	83.41474
<b>81</b>	83.09569	82.77487	82.45405	82.13323	81.81241	81.49159	81.17078	80.84996	80.52914	80.20832	79.88750	79.56668
<b>82</b>	79.24586	78.92513	78.60441	78.28368	77.96296	77.64223	77.32151	77.00078	76.68005	76.35933	76.03860	75.71788
<b>83</b>	75.39715	75.07843	74.75972	74.44100	74.12229	73.80357	73.48486	73.16614	72.84742	72.52871	72.20999	71.89128
<b>84</b>	71.57256	71.25822	70.94389	70.62955	70.31521	70.00088	69.68654	69.37220	69.05787	68.74353	68.42919	68.11486
<b>85</b>	67.80052	67.49222	67.18391	66.87561	66.56730	66.25900	65.95069	65.64239	65.33408	65.02578	64.71747	64.40917
<b>86</b>	64.10086	63.80061	63.50036	63.20011	62.89986	62.59961	62.29936	61.99911	61.69886	61.39861	61.09836	60.79811
<b>87</b>	60.49786	60.20719	59.91652	59.62586	59.33519	59.04452	58.75385	58.46318	58.17251	57.88185	57.59118	57.30051
<b>88</b>	57.00984	56.73032	56.45081	56.17129	55.89178	55.61226	55.33275	55.05323	54.77371	54.49420	54.21468	53.93517
<b>89</b>	53.65565	53.38853	53.12141	52.85428	52.58716	52.32004	52.05292	51.78579	51.51867	51.25155	50.98443	50.71730
<b>90</b>	50.45018	50.19690	49.94362	49.69033	49.43705	49.18377	48.93049	48.67720	48.42392	48.17064	47.91736	47.66407
<b>91</b>	47.41079	47.17216	46.93354	46.69491	46.45629	46.21766	45.97904	45.74041	45.50178	45.26316	45.02453	44.78591
<b>92</b>	44.54728	44.32344	44.09959	43.87575	43.65190	43.42806	43.20421	42.98037	42.75652	42.53268	42.30883	42.08499
<b>93</b>	41.86114	41.65195	41.44276	41.23357	41.02438	40.81519	40.60600	40.39680	40.18761	39.97842	39.76923	39.56004
<b>94</b>	39.35085	39.15621	38.96158	38.76694	38.57230	38.37767	38.18303	37.98839	37.79376	37.59912	37.40448	37.20985
<b>95</b>	37.01521	36.83447	36.65373	36.47299	36.29225	36.11151	35.93078	35.75004	35.56930	35.38856	35.20782	35.02708
<b>96</b>	34.84634	34.67868	34.51101	34.34335	34.17568	34.00802	33.84036	33.67269	33.50503	33.33736	33.16970	33.00203
<b>97</b>	32.83437	32.67896	32.52355	32.36814	32.21272	32.05731	31.90190	31.74649	31.59108	31.43567	31.28025	31.12484
<b>98</b>	30.96943	30.82541	30.68139	30.53737	30.39335	30.24933	30.10532	29.96130	29.81728	29.67326	29.52924	29.38522
<b>99</b>	29.24120	29.10757	28.97393	28.84030	28.70666	28.57303	28.43939	28.30576	28.17212	28.03849	27.90485	27.77122
<b>100</b>	27.63758											

**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)  
Actuarial Equivalency Factors Effective January 1, 2024**

**Table 20: Lump Sum Cash Out Factors - Beneficiaries (OPSRP only)**  
(Factor Multiplied by Survivor Benefit Payable to Spouse at Commencement Date)

Age	Months of Attained Age at Date Cashed Out											
	0	1	2	3	4	5	6	7	8	9	10	11
15	178.21393	178.20208	178.19022	178.17837	178.16652	178.15466	178.14281	178.13096	178.11910	178.10725	178.09540	178.08354
16	178.07169	178.05930	178.04692	178.03453	178.02214	178.00976	177.99737	177.98498	177.97260	177.96021	177.94782	177.93544
17	177.92305	177.91024	177.89743	177.88462	177.87180	177.85899	177.84618	177.83337	177.82056	177.80775	177.79493	177.78212
18	177.76931	177.75620	177.74309	177.72998	177.71687	177.70376	177.69065	177.67753	177.66442	177.65131	177.63820	177.62509
19	177.61198	177.59830	177.58462	177.57095	177.55727	177.54359	177.52991	177.51623	177.50255	177.48888	177.47520	177.46152
20	177.44784	177.43335	177.41886	177.40437	177.38987	177.37538	177.36089	177.34640	177.33191	177.31742	177.30292	177.28843
21	177.27394	177.25829	177.24263	177.22698	177.21133	177.19567	177.18002	177.16437	177.14871	177.13306	177.11741	177.10175
22	177.08610	177.06918	177.05226	177.03534	177.01841	177.00149	176.98457	176.96765	176.95073	176.93381	176.91688	176.89996
23	176.88304	176.86460	176.84616	176.82772	176.80928	176.79084	176.77241	176.75397	176.73553	176.71709	176.69865	176.68021
24	176.66177	176.64176	176.62176	176.60175	176.58174	176.56173	176.54173	176.52172	176.50171	176.48170	176.46170	176.44169
25	176.42168	176.40005	176.37842	176.35678	176.33515	176.31352	176.29189	176.27025	176.24862	176.22699	176.20536	176.18372
26	176.16209	176.13885	176.11561	176.09237	176.06913	176.04589	176.02265	175.99940	175.97616	175.95292	175.92968	175.90644
27	175.88320	175.85845	175.83370	175.80895	175.78420	175.75945	175.73471	175.70996	175.68521	175.66046	175.63571	175.61096
28	175.58621	175.55976	175.53330	175.50685	175.48039	175.45394	175.42749	175.40103	175.37458	175.34812	175.32167	175.29521
29	175.26876	175.24054	175.21232	175.18409	175.15587	175.12765	175.09943	175.07120	175.04298	175.01476	174.98654	174.95831
30	174.93009	174.89995	174.86981	174.83967	174.80953	174.77939	174.74925	174.71911	174.68897	174.65883	174.62869	174.59855
31	174.56841	174.53620	174.50400	174.47179	174.43959	174.40738	174.37518	174.34297	174.31076	174.27856	174.24635	174.21415
32	174.18194	174.14758	174.11321	174.07885	174.04448	174.01012	173.97575	173.94139	173.90702	173.87266	173.83829	173.80393
33	173.76956	173.73280	173.69605	173.65929	173.62253	173.58578	173.54902	173.51226	173.47551	173.43875	173.40199	173.36524
34	173.32848	173.28921	173.24994	173.21067	173.17140	173.13213	173.09287	173.05360	173.01433	172.97506	172.93579	172.89652
35	172.85725	172.81527	172.77329	172.73131	172.68933	172.64735	172.60538	172.56340	172.52142	172.47944	172.43746	172.39548
36	172.35350	172.30868	172.26385	172.21903	172.17421	172.12938	172.08456	172.03974	171.99491	171.95009	171.90527	171.86044
37	171.81562	171.76778	171.71995	171.67211	171.62427	171.57644	171.52860	171.48076	171.43293	171.38509	171.33725	171.28942
38	171.24158	171.19042	171.13926	171.08809	171.03693	170.98577	170.93461	170.88344	170.83228	170.78112	170.72996	170.67879
39	170.62763	170.57301	170.51839	170.46378	170.40916	170.35454	170.29992	170.24530	170.19068	170.13607	170.08145	170.02683
40	169.97221	169.91386	169.85551	169.79716	169.73881	169.68046	169.62211	169.56375	169.50540	169.44705	169.38870	169.33035
41	169.27200	169.20976	169.14752	169.08528	169.02303	168.96079	168.89855	168.83631	168.77407	168.71183	168.64958	168.58734
42	168.52510	168.45861	168.39211	168.32562	168.25913	168.19263	168.12614	168.05965	167.99315	167.92666	167.86017	167.79367
43	167.72718	167.65625	167.58532	167.51439	167.44346	167.37253	167.30160	167.23067	167.15974	167.08881	167.01788	166.94695
44	166.87602	166.80032	166.72461	166.64891	166.57320	166.49750	166.42179	166.34609	166.27038	166.19468	166.11897	166.04327

**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)  
Actuarial Equivalency Factors Effective January 1, 2024**

**Table 20: Lump Sum Cash Out Factors - Beneficiaries (OPSRP only)**  
(Factor Multiplied by Survivor Benefit Payable to Spouse at Commencement Date)

<b>Age</b>	<b>Months of Attained Age at Date Cashed Out</b>											
	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>	<b>10</b>	<b>11</b>
<b>45</b>	165.96756	165.88684	165.80613	165.72541	165.64469	165.56398	165.48326	165.40254	165.32183	165.24111	165.16039	165.07968
<b>46</b>	164.99896	164.91292	164.82688	164.74084	164.65479	164.56875	164.48271	164.39667	164.31063	164.22459	164.13854	164.05250
<b>47</b>	163.96646	163.87474	163.78302	163.69130	163.59958	163.50786	163.41614	163.32441	163.23269	163.14097	163.04925	162.95753
<b>48</b>	162.86581	162.76798	162.67015	162.57233	162.47450	162.37667	162.27884	162.18101	162.08318	161.98536	161.88753	161.78970
<b>49</b>	161.69187	161.58766	161.48344	161.37923	161.27501	161.17080	161.06658	160.96237	160.85815	160.75394	160.64972	160.54551
<b>50</b>	160.44129	160.33806	160.23483	160.13160	160.02837	159.92514	159.82192	159.71869	159.61546	159.51223	159.40900	159.30577
<b>51</b>	159.20254	159.10199	159.00144	158.90088	158.80033	158.69978	158.59923	158.49867	158.39812	158.29757	158.19702	158.09646
<b>52</b>	157.99591	157.88980	157.78369	157.67758	157.57147	157.46536	157.35925	157.25313	157.14702	157.04091	156.93480	156.82869
<b>53</b>	156.72258	156.61068	156.49877	156.38687	156.27496	156.16306	156.05115	155.93925	155.82734	155.71544	155.60353	155.49163
<b>54</b>	155.37972	155.26167	155.14362	155.02557	154.90752	154.78947	154.67143	154.55338	154.43533	154.31728	154.19923	154.08118
<b>55</b>	153.96313	153.83867	153.71422	153.58976	153.46531	153.34085	153.21640	153.09194	152.96748	152.84303	152.71857	152.59412
<b>56</b>	152.46966	152.33837	152.20707	152.07578	151.94449	151.81319	151.68190	151.55061	151.41931	151.28802	151.15673	151.02543
<b>57</b>	150.89414	150.75563	150.61713	150.47862	150.34011	150.20160	150.06310	149.92459	149.78608	149.64757	149.50907	149.37056
<b>58</b>	149.23205	149.08585	148.93964	148.79344	148.64724	148.50103	148.35483	148.20863	148.06242	147.91622	147.77002	147.62381
<b>59</b>	147.47761	147.32330	147.16900	147.01469	146.86038	146.70608	146.55177	146.39746	146.24316	146.08885	145.93454	145.78024
<b>60</b>	145.62593	145.46326	145.30058	145.13791	144.97523	144.81256	144.64989	144.48721	144.32454	144.16186	143.99919	143.83651
<b>61</b>	143.67384	143.50248	143.33112	143.15976	142.98840	142.81704	142.64568	142.47431	142.30295	142.13159	141.96023	141.78887
<b>62</b>	141.61751	141.43718	141.25685	141.07651	140.89618	140.71585	140.53552	140.35518	140.17485	139.99452	139.81419	139.63385
<b>63</b>	139.45352	139.26403	139.07453	138.88504	138.69554	138.50605	138.31656	138.12706	137.93757	137.74807	137.55858	137.36908
<b>64</b>	137.17959	136.98053	136.78147	136.58240	136.38334	136.18428	135.98522	135.78615	135.58709	135.38803	135.18897	134.98990
<b>65</b>	134.79084	134.58215	134.37345	134.16476	133.95606	133.74737	133.53867	133.32998	133.12128	132.91259	132.70389	132.49520
<b>66</b>	132.28650	132.06822	131.84994	131.63165	131.41337	131.19509	130.97681	130.75852	130.54024	130.32196	130.10368	129.88539
<b>67</b>	129.66711	129.43934	129.21157	128.98380	128.75603	128.52826	128.30049	128.07271	127.84494	127.61717	127.38940	127.16163
<b>68</b>	126.93386	126.69685	126.45984	126.22283	125.98581	125.74880	125.51179	125.27478	125.03777	124.80076	124.56374	124.32673
<b>69</b>	124.08972	123.84380	123.59787	123.35195	123.10603	122.86010	122.61418	122.36826	122.12233	121.87641	121.63049	121.38456
<b>70</b>	121.13864	120.88407	120.62950	120.37493	120.12036	119.86579	119.61122	119.35664	119.10207	118.84750	118.59293	118.33836
<b>71</b>	118.08379	117.82095	117.55810	117.29526	117.03241	116.76957	116.50673	116.24388	115.98104	115.71819	115.45535	115.19250
<b>72</b>	114.92966	114.65877	114.38789	114.11700	113.84611	113.57522	113.30434	113.03345	112.76256	112.49167	112.22079	111.94990
<b>73</b>	111.67901	111.40048	111.12194	110.84341	110.56488	110.28634	110.00781	109.72928	109.45074	109.17221	108.89368	108.61514
<b>74</b>	108.33661	108.05076	107.76492	107.47907	107.19322	106.90737	106.62153	106.33568	106.04983	105.76398	105.47814	105.19229

**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)  
Actuarial Equivalency Factors Effective January 1, 2024**

**Table 20: Lump Sum Cash Out Factors - Beneficiaries (OPSRP only)**  
(Factor Multiplied by Survivor Benefit Payable to Spouse at Commencement Date)

Age	Months of Attained Age at Date Cashed Out											
	0	1	2	3	4	5	6	7	8	9	10	11
75	104.90644	104.61395	104.32146	104.02897	103.73648	103.44399	103.15151	102.85902	102.56653	102.27404	101.98155	101.68906
76	101.39657	101.09821	100.79985	100.50149	100.20313	99.90477	99.60642	99.30806	99.00970	98.71134	98.41298	98.11462
77	97.81626	97.51252	97.20879	96.90505	96.60131	96.29757	95.99384	95.69010	95.38636	95.08262	94.77889	94.47515
78	94.17141	93.86261	93.55381	93.24501	92.93620	92.62740	92.31860	92.00980	91.70100	91.39220	91.08339	90.77459
79	90.46579	90.15254	89.83930	89.52605	89.21280	88.89956	88.58631	88.27306	87.95982	87.64657	87.33332	87.02008
80	86.70683	86.39020	86.07356	85.75693	85.44029	85.12366	84.80702	84.49039	84.17375	83.85712	83.54048	83.22385
81	82.90721	82.58866	82.27011	81.95156	81.63301	81.31446	80.99591	80.67736	80.35881	80.04026	79.72171	79.40316
82	79.08461	78.76597	78.44732	78.12868	77.81003	77.49139	77.17274	76.85410	76.53545	76.21681	75.89816	75.57952
83	75.26087	74.94426	74.62765	74.31104	73.99443	73.67782	73.36121	73.04459	72.72798	72.41137	72.09476	71.77815
84	71.46154	71.14926	70.83699	70.52471	70.21244	69.90016	69.58789	69.27561	68.96333	68.65106	68.33878	68.02651
85	67.71423	67.40844	67.10265	66.79686	66.49107	66.18528	65.87950	65.57371	65.26792	64.96213	64.65634	64.35055
86	64.04476	63.74736	63.44995	63.15255	62.85514	62.55774	62.26033	61.96293	61.66552	61.36812	61.07071	60.77331
87	60.47590	60.18873	59.90155	59.61438	59.32720	59.04003	58.75286	58.46568	58.17851	57.89133	57.60416	57.31698
88	57.02981	56.75423	56.47865	56.20307	55.92749	55.65191	55.37633	55.10074	54.82516	54.54958	54.27400	53.99842
89	53.72284	53.46003	53.19722	52.93441	52.67160	52.40879	52.14598	51.88317	51.62036	51.35755	51.09474	50.83193
90	50.56912	50.31983	50.07054	49.82125	49.57196	49.32267	49.07338	48.82409	48.57480	48.32551	48.07622	47.82693
91	47.57764	47.34238	47.10712	46.87186	46.63660	46.40134	46.16609	45.93083	45.69557	45.46031	45.22505	44.98979
92	44.75453	44.53325	44.31198	44.09070	43.86942	43.64814	43.42687	43.20559	42.98431	42.76303	42.54176	42.32048
93	42.09920	41.89165	41.68411	41.47656	41.26901	41.06147	40.85392	40.64637	40.43883	40.23128	40.02373	39.81619
94	39.60864	39.41468	39.22071	39.02675	38.83279	38.63882	38.44486	38.25090	38.05693	37.86297	37.66901	37.47504
95	37.28108	37.10032	36.91956	36.73880	36.55804	36.37728	36.19653	36.01577	35.83501	35.65425	35.47349	35.29273
96	35.11197	34.94370	34.77543	34.60716	34.43889	34.27062	34.10235	33.93408	33.76581	33.59754	33.42927	33.26100
97	33.09273	32.93629	32.77985	32.62341	32.46697	32.31053	32.15409	31.99764	31.84120	31.68476	31.52832	31.37188
98	31.21544	31.07018	30.92491	30.77965	30.63438	30.48912	30.34385	30.19859	30.05332	29.90806	29.76279	29.61753
99	29.47226	29.33741	29.20256	29.06771	28.93286	28.79801	28.66316	28.52831	28.39346	28.25861	28.12376	27.98891
100	27.85406											

**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)  
Actuarial Equivalency Factors Effective January 1, 2024**

**Table 21: Conversion to Monthly Spouse Benefit at Later of Member's Death or Earliest Retirement Age - Healthy Members**  
(Factor Multiplied by 50% of Retirement Benefit)

Spouse Age*	Age of Member at Later of Death or Earliest Early Retirement Age										
	50	51	52	53	54	55	56	57	58	59	60
15	0.856	0.847	0.839	0.829	0.820	0.810	0.799	0.789	0.777	0.766	0.754
16	0.857	0.849	0.840	0.831	0.821	0.811	0.801	0.790	0.779	0.767	0.755
17	0.859	0.850	0.841	0.832	0.822	0.812	0.802	0.791	0.780	0.768	0.756
18	0.860	0.852	0.843	0.834	0.824	0.814	0.803	0.793	0.781	0.770	0.757
19	0.862	0.853	0.844	0.835	0.825	0.815	0.805	0.794	0.783	0.771	0.759
20	0.863	0.855	0.846	0.837	0.827	0.817	0.806	0.796	0.784	0.772	0.760
21	0.865	0.856	0.847	0.838	0.828	0.818	0.808	0.797	0.786	0.774	0.762
22	0.867	0.858	0.849	0.840	0.830	0.820	0.810	0.799	0.787	0.776	0.763
23	0.869	0.860	0.851	0.842	0.832	0.822	0.811	0.801	0.789	0.777	0.765
24	0.871	0.862	0.853	0.844	0.834	0.824	0.813	0.802	0.791	0.779	0.767
25	0.873	0.864	0.855	0.846	0.836	0.826	0.815	0.804	0.793	0.781	0.769
26	0.875	0.867	0.858	0.848	0.838	0.828	0.818	0.807	0.795	0.783	0.771
27	0.878	0.869	0.860	0.851	0.841	0.830	0.820	0.809	0.797	0.785	0.773
28	0.881	0.872	0.863	0.853	0.843	0.833	0.822	0.811	0.800	0.788	0.775
29	0.883	0.874	0.865	0.856	0.846	0.836	0.825	0.814	0.802	0.790	0.778
30	0.886	0.877	0.868	0.859	0.849	0.838	0.828	0.817	0.805	0.793	0.780
31	0.889	0.880	0.871	0.862	0.852	0.841	0.831	0.819	0.808	0.796	0.783
32	0.893	0.884	0.875	0.865	0.855	0.844	0.834	0.823	0.811	0.799	0.786
33	0.896	0.887	0.878	0.868	0.858	0.848	0.837	0.826	0.814	0.802	0.789
34	0.900	0.891	0.882	0.872	0.862	0.851	0.840	0.829	0.817	0.805	0.792
35	0.904	0.895	0.885	0.876	0.866	0.855	0.844	0.833	0.821	0.809	0.796
36	0.908	0.899	0.890	0.880	0.870	0.859	0.848	0.837	0.825	0.812	0.800
37	0.913	0.903	0.894	0.884	0.874	0.863	0.852	0.841	0.829	0.816	0.804
38	0.917	0.908	0.899	0.889	0.879	0.868	0.857	0.845	0.833	0.821	0.808
39	0.922	0.913	0.904	0.894	0.883	0.873	0.861	0.850	0.838	0.825	0.812
40	0.928	0.918	0.909	0.899	0.889	0.878	0.866	0.855	0.843	0.830	0.817
41	0.934	0.924	0.914	0.904	0.894	0.883	0.872	0.860	0.848	0.835	0.822
42	0.940	0.930	0.920	0.910	0.900	0.889	0.878	0.866	0.853	0.841	0.827
43	0.946	0.937	0.927	0.917	0.906	0.895	0.884	0.872	0.859	0.846	0.833
44	0.953	0.943	0.934	0.923	0.913	0.902	0.890	0.878	0.866	0.853	0.839
45	0.961	0.951	0.941	0.931	0.920	0.909	0.897	0.885	0.872	0.859	0.846
46	0.968	0.959	0.949	0.938	0.927	0.916	0.904	0.892	0.880	0.866	0.853
47	0.977	0.967	0.957	0.946	0.935	0.924	0.912	0.900	0.887	0.874	0.860
48	0.986	0.976	0.966	0.955	0.944	0.933	0.921	0.908	0.895	0.882	0.868
49	0.996	0.986	0.975	0.965	0.953	0.942	0.930	0.917	0.904	0.891	0.877

\*at later of member's death or early retirement age

**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)  
Actuarial Equivalency Factors Effective January 1, 2024**

**Table 21: Conversion to Monthly Spouse Benefit at Later of Member's Death or Earliest Retirement Age - Healthy Members**  
(Factor Multiplied by 50% of Retirement Benefit)

Spouse Age*	Age of Member at Later of Death or Earliest Early Retirement Age									
	61	62	63	64	65	66	67	68	69	70
15	0.741	0.728	0.714	0.700	0.685	0.670	0.654	0.638	0.621	0.604
16	0.742	0.729	0.715	0.701	0.686	0.671	0.655	0.639	0.622	0.605
17	0.743	0.730	0.717	0.702	0.688	0.672	0.656	0.640	0.623	0.606
18	0.745	0.732	0.718	0.704	0.689	0.673	0.658	0.641	0.624	0.607
19	0.746	0.733	0.719	0.705	0.690	0.675	0.659	0.642	0.626	0.608
20	0.747	0.734	0.720	0.706	0.691	0.676	0.660	0.644	0.627	0.609
21	0.749	0.736	0.722	0.707	0.693	0.677	0.661	0.645	0.628	0.611
22	0.751	0.737	0.723	0.709	0.694	0.679	0.663	0.646	0.629	0.612
23	0.752	0.739	0.725	0.711	0.696	0.680	0.664	0.648	0.631	0.613
24	0.754	0.741	0.727	0.712	0.697	0.682	0.666	0.649	0.632	0.615
25	0.756	0.742	0.728	0.714	0.699	0.683	0.667	0.651	0.634	0.616
26	0.758	0.744	0.730	0.716	0.701	0.685	0.669	0.653	0.635	0.618
27	0.760	0.747	0.733	0.718	0.703	0.687	0.671	0.654	0.637	0.620
28	0.762	0.749	0.735	0.720	0.705	0.689	0.673	0.656	0.639	0.621
29	0.765	0.751	0.737	0.722	0.707	0.691	0.675	0.658	0.641	0.623
30	0.767	0.754	0.739	0.725	0.710	0.694	0.677	0.661	0.643	0.625
31	0.770	0.756	0.742	0.727	0.712	0.696	0.680	0.663	0.646	0.628
32	0.773	0.759	0.745	0.730	0.715	0.699	0.682	0.665	0.648	0.630
33	0.776	0.762	0.748	0.733	0.718	0.702	0.685	0.668	0.650	0.632
34	0.779	0.765	0.751	0.736	0.720	0.704	0.688	0.671	0.653	0.635
35	0.783	0.769	0.754	0.739	0.724	0.708	0.691	0.674	0.656	0.638
36	0.786	0.772	0.758	0.743	0.727	0.711	0.694	0.677	0.659	0.641
37	0.790	0.776	0.761	0.746	0.731	0.714	0.698	0.680	0.662	0.644
38	0.794	0.780	0.765	0.750	0.734	0.718	0.701	0.684	0.666	0.647
39	0.799	0.784	0.770	0.754	0.738	0.722	0.705	0.688	0.669	0.651
40	0.803	0.789	0.774	0.759	0.743	0.726	0.709	0.692	0.673	0.655
41	0.808	0.794	0.779	0.763	0.747	0.731	0.714	0.696	0.678	0.659
42	0.813	0.799	0.784	0.768	0.752	0.736	0.718	0.700	0.682	0.663
43	0.819	0.805	0.789	0.774	0.757	0.741	0.723	0.705	0.687	0.668
44	0.825	0.810	0.795	0.779	0.763	0.746	0.729	0.710	0.692	0.673
45	0.831	0.817	0.801	0.785	0.769	0.752	0.734	0.716	0.697	0.678
46	0.838	0.823	0.808	0.792	0.775	0.758	0.740	0.722	0.703	0.683
47	0.846	0.831	0.815	0.799	0.782	0.765	0.747	0.728	0.709	0.689
48	0.853	0.838	0.823	0.806	0.789	0.772	0.754	0.735	0.716	0.696
49	0.862	0.847	0.831	0.814	0.797	0.779	0.761	0.742	0.723	0.703

\*at later of member's death or early retirement age

**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)  
Actuarial Equivalency Factors Effective January 1, 2024**

**Table 21: Conversion to Monthly Spouse Benefit at Later of Member's Death or Earliest Retirement Age - Healthy Members**  
(Factor Multiplied by 50% of Retirement Benefit)

Spouse Age*	Age of Member at Later of Death or Earliest Early Retirement Age									
	71	72	73	74	75	76	77	78	79	80
15	0.586	0.568	0.550	0.531	0.512	0.493	0.474	0.454	0.434	0.415
16	0.587	0.569	0.551	0.532	0.513	0.494	0.474	0.455	0.435	0.415
17	0.588	0.570	0.552	0.533	0.514	0.495	0.475	0.456	0.436	0.416
18	0.589	0.571	0.553	0.534	0.515	0.496	0.476	0.456	0.437	0.417
19	0.590	0.572	0.554	0.535	0.516	0.496	0.477	0.457	0.437	0.417
20	0.592	0.573	0.555	0.536	0.517	0.497	0.478	0.458	0.438	0.418
21	0.593	0.575	0.556	0.537	0.518	0.498	0.479	0.459	0.439	0.419
22	0.594	0.576	0.557	0.538	0.519	0.499	0.480	0.460	0.440	0.420
23	0.595	0.577	0.558	0.539	0.520	0.501	0.481	0.461	0.441	0.421
24	0.597	0.578	0.560	0.541	0.521	0.502	0.482	0.462	0.442	0.422
25	0.598	0.580	0.561	0.542	0.523	0.503	0.483	0.463	0.443	0.423
26	0.600	0.581	0.563	0.543	0.524	0.504	0.484	0.464	0.444	0.424
27	0.602	0.583	0.564	0.545	0.526	0.506	0.486	0.466	0.446	0.425
28	0.603	0.585	0.566	0.547	0.527	0.507	0.487	0.467	0.447	0.426
29	0.605	0.587	0.568	0.548	0.529	0.509	0.489	0.469	0.448	0.428
30	0.607	0.589	0.570	0.550	0.531	0.511	0.490	0.470	0.450	0.429
31	0.609	0.591	0.572	0.552	0.532	0.512	0.492	0.472	0.451	0.431
32	0.612	0.593	0.574	0.554	0.534	0.514	0.494	0.474	0.453	0.432
33	0.614	0.595	0.576	0.556	0.536	0.516	0.496	0.475	0.455	0.434
34	0.617	0.598	0.578	0.559	0.539	0.518	0.498	0.477	0.457	0.436
35	0.619	0.600	0.581	0.561	0.541	0.521	0.500	0.480	0.459	0.438
36	0.622	0.603	0.584	0.564	0.544	0.523	0.503	0.482	0.461	0.440
37	0.625	0.606	0.586	0.567	0.546	0.526	0.505	0.484	0.463	0.442
38	0.629	0.609	0.590	0.569	0.549	0.528	0.508	0.487	0.466	0.444
39	0.632	0.613	0.593	0.573	0.552	0.531	0.510	0.489	0.468	0.447
40	0.636	0.616	0.596	0.576	0.555	0.534	0.513	0.492	0.471	0.449
41	0.640	0.620	0.600	0.580	0.559	0.538	0.517	0.495	0.474	0.452
42	0.644	0.624	0.604	0.583	0.562	0.541	0.520	0.498	0.477	0.455
43	0.648	0.628	0.608	0.587	0.566	0.545	0.524	0.502	0.480	0.458
44	0.653	0.633	0.612	0.592	0.570	0.549	0.527	0.506	0.484	0.462
45	0.658	0.638	0.617	0.596	0.575	0.553	0.532	0.510	0.487	0.465
46	0.663	0.643	0.622	0.601	0.580	0.558	0.536	0.514	0.491	0.469
47	0.669	0.649	0.628	0.606	0.585	0.563	0.541	0.518	0.496	0.473
48	0.675	0.655	0.634	0.612	0.590	0.568	0.546	0.523	0.500	0.477
49	0.682	0.661	0.640	0.618	0.596	0.574	0.551	0.528	0.505	0.482

\*at later of member's death or early retirement age

**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)  
Actuarial Equivalency Factors Effective January 1, 2024**

**Table 21: Conversion to Monthly Spouse Benefit at Later of Member's Death or Earliest Retirement Age - Healthy Members**  
(Factor Multiplied by 50% of Retirement Benefit)

Spouse Age*	Age of Member at Later of Death or Earliest Early Retirement Age									
	81	82	83	84	85	86	87	88	89	90
15	0.395	0.375	0.355	0.336	0.317	0.299	0.281	0.264	0.248	0.232
16	0.395	0.376	0.356	0.337	0.318	0.299	0.282	0.264	0.248	0.233
17	0.396	0.376	0.357	0.337	0.318	0.300	0.282	0.265	0.248	0.233
18	0.397	0.377	0.357	0.338	0.319	0.300	0.283	0.265	0.249	0.233
19	0.397	0.378	0.358	0.338	0.319	0.301	0.283	0.266	0.249	0.234
20	0.398	0.378	0.359	0.339	0.320	0.301	0.284	0.266	0.250	0.234
21	0.399	0.379	0.359	0.340	0.321	0.302	0.284	0.267	0.250	0.235
22	0.400	0.380	0.360	0.340	0.321	0.303	0.285	0.267	0.251	0.235
23	0.401	0.381	0.361	0.341	0.322	0.303	0.285	0.268	0.251	0.236
24	0.402	0.382	0.362	0.342	0.323	0.304	0.286	0.269	0.252	0.236
25	0.403	0.383	0.363	0.343	0.324	0.305	0.287	0.269	0.253	0.237
26	0.404	0.384	0.364	0.344	0.324	0.306	0.287	0.270	0.253	0.237
27	0.405	0.385	0.365	0.345	0.325	0.307	0.288	0.271	0.254	0.238
28	0.406	0.386	0.366	0.346	0.326	0.307	0.289	0.272	0.255	0.239
29	0.407	0.387	0.367	0.347	0.327	0.308	0.290	0.272	0.256	0.240
30	0.409	0.388	0.368	0.348	0.328	0.309	0.291	0.273	0.256	0.240
31	0.410	0.390	0.369	0.349	0.330	0.311	0.292	0.274	0.257	0.241
32	0.412	0.391	0.371	0.351	0.331	0.312	0.293	0.275	0.258	0.242
33	0.413	0.393	0.372	0.352	0.332	0.313	0.294	0.276	0.259	0.243
34	0.415	0.394	0.374	0.353	0.334	0.314	0.296	0.278	0.260	0.244
35	0.417	0.396	0.375	0.355	0.335	0.316	0.297	0.279	0.262	0.245
36	0.419	0.398	0.377	0.357	0.337	0.317	0.298	0.280	0.263	0.246
37	0.421	0.400	0.379	0.358	0.338	0.319	0.300	0.281	0.264	0.248
38	0.423	0.402	0.381	0.360	0.340	0.320	0.301	0.283	0.265	0.249
39	0.425	0.404	0.383	0.362	0.342	0.322	0.303	0.285	0.267	0.250
40	0.428	0.406	0.385	0.364	0.344	0.324	0.305	0.286	0.268	0.252
41	0.431	0.409	0.388	0.367	0.346	0.326	0.307	0.288	0.270	0.253
42	0.433	0.412	0.390	0.369	0.348	0.328	0.309	0.290	0.272	0.255
43	0.436	0.415	0.393	0.372	0.351	0.330	0.311	0.292	0.274	0.257
44	0.440	0.418	0.396	0.374	0.353	0.333	0.313	0.294	0.276	0.259
45	0.443	0.421	0.399	0.377	0.356	0.335	0.315	0.296	0.278	0.261
46	0.447	0.424	0.402	0.380	0.359	0.338	0.318	0.299	0.280	0.263
47	0.451	0.428	0.406	0.384	0.362	0.341	0.321	0.301	0.283	0.265
48	0.455	0.432	0.409	0.387	0.365	0.344	0.324	0.304	0.285	0.267
49	0.459	0.436	0.413	0.391	0.369	0.348	0.327	0.307	0.288	0.270

\*at later of member's death or early retirement age



**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)  
Actuarial Equivalency Factors Effective January 1, 2024**

**Table 21: Conversion to Monthly Spouse Benefit at Later of Member's Death or Earliest Retirement Age - Healthy Members**  
(Factor Multiplied by 50% of Retirement Benefit)

Spouse Age*	Age of Member at Later of Death or Earliest Early Retirement Age									
	91	92	93	94	95	96	97	98	99	100
15	0.218	0.204	0.191	0.179	0.168	0.158	0.148	0.140	0.132	0.124
16	0.218	0.204	0.191	0.179	0.168	0.158	0.149	0.140	0.132	0.124
17	0.218	0.205	0.192	0.180	0.169	0.158	0.149	0.140	0.132	0.125
18	0.219	0.205	0.192	0.180	0.169	0.159	0.149	0.140	0.132	0.125
19	0.219	0.205	0.192	0.180	0.169	0.159	0.149	0.141	0.133	0.125
20	0.219	0.206	0.193	0.181	0.170	0.159	0.150	0.141	0.133	0.125
21	0.220	0.206	0.193	0.181	0.170	0.160	0.150	0.141	0.133	0.126
22	0.220	0.206	0.193	0.181	0.170	0.160	0.150	0.142	0.133	0.126
23	0.221	0.207	0.194	0.182	0.171	0.160	0.151	0.142	0.134	0.126
24	0.221	0.207	0.194	0.182	0.171	0.161	0.151	0.142	0.134	0.126
25	0.222	0.208	0.195	0.183	0.171	0.161	0.151	0.143	0.134	0.127
26	0.222	0.208	0.195	0.183	0.172	0.161	0.152	0.143	0.135	0.127
27	0.223	0.209	0.196	0.184	0.172	0.162	0.152	0.143	0.135	0.127
28	0.224	0.210	0.197	0.184	0.173	0.162	0.153	0.144	0.136	0.128
29	0.224	0.210	0.197	0.185	0.173	0.163	0.153	0.144	0.136	0.128
30	0.225	0.211	0.198	0.185	0.174	0.163	0.154	0.145	0.136	0.129
31	0.226	0.212	0.199	0.186	0.175	0.164	0.154	0.145	0.137	0.129
32	0.227	0.213	0.199	0.187	0.175	0.165	0.155	0.146	0.137	0.130
33	0.228	0.213	0.200	0.188	0.176	0.165	0.155	0.146	0.138	0.130
34	0.229	0.214	0.201	0.188	0.177	0.166	0.156	0.147	0.138	0.131
35	0.230	0.215	0.202	0.189	0.178	0.167	0.157	0.148	0.139	0.131
36	0.231	0.216	0.203	0.190	0.178	0.168	0.158	0.148	0.140	0.132
37	0.232	0.217	0.204	0.191	0.179	0.168	0.158	0.149	0.140	0.133
38	0.233	0.218	0.205	0.192	0.180	0.169	0.159	0.150	0.141	0.133
39	0.234	0.220	0.206	0.193	0.181	0.170	0.160	0.151	0.142	0.134
40	0.236	0.221	0.207	0.194	0.182	0.171	0.161	0.151	0.143	0.135
41	0.237	0.222	0.208	0.195	0.183	0.172	0.162	0.152	0.144	0.136
42	0.239	0.224	0.210	0.197	0.185	0.173	0.163	0.153	0.145	0.136
43	0.240	0.225	0.211	0.198	0.186	0.175	0.164	0.154	0.146	0.137
44	0.242	0.227	0.213	0.199	0.187	0.176	0.165	0.156	0.147	0.138
45	0.244	0.229	0.214	0.201	0.189	0.177	0.167	0.157	0.148	0.139
46	0.246	0.231	0.216	0.203	0.190	0.179	0.168	0.158	0.149	0.141
47	0.248	0.233	0.218	0.204	0.192	0.180	0.169	0.160	0.150	0.142
48	0.251	0.235	0.220	0.206	0.194	0.182	0.171	0.161	0.152	0.143
49	0.253	0.237	0.222	0.208	0.196	0.184	0.173	0.163	0.153	0.145

\*at later of member's death or early retirement age

**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)  
Actuarial Equivalency Factors Effective January 1, 2024**

**Table 21: Conversion to Monthly Spouse Benefit at Later of Member's Death or Earliest Retirement Age - Healthy Members**  
(Factor Multiplied by 50% of Retirement Benefit)

Spouse Age*	Age of Member at Later of Death or Earliest Early Retirement Age										
	50	51	52	53	54	55	56	57	58	59	60
50	1.006	0.996	0.985	0.975	0.963	0.952	0.939	0.927	0.914	0.900	0.886
51	1.016	1.006	0.996	0.985	0.973	0.962	0.949	0.937	0.923	0.909	0.895
52	1.027	1.017	1.006	0.995	0.984	0.971	0.959	0.946	0.933	0.919	0.904
53	1.038	1.028	1.017	1.006	0.994	0.982	0.970	0.957	0.943	0.929	0.914
54	1.050	1.040	1.029	1.018	1.006	0.993	0.981	0.968	0.954	0.940	0.925
55	1.063	1.052	1.041	1.030	1.018	1.006	0.993	0.979	0.966	0.951	0.936
56	1.077	1.066	1.055	1.043	1.031	1.018	1.006	0.992	0.978	0.963	0.948
57	1.091	1.080	1.069	1.057	1.045	1.032	1.019	1.005	0.991	0.976	0.961
58	1.107	1.096	1.084	1.073	1.060	1.047	1.034	1.020	1.005	0.990	0.975
59	1.124	1.112	1.101	1.089	1.076	1.063	1.049	1.035	1.021	1.005	0.989
60	1.142	1.130	1.119	1.106	1.093	1.080	1.066	1.052	1.037	1.022	1.005
61	1.161	1.150	1.138	1.125	1.112	1.098	1.085	1.070	1.055	1.039	1.022
62	1.182	1.170	1.158	1.145	1.132	1.118	1.104	1.089	1.074	1.058	1.041
63	1.205	1.193	1.180	1.167	1.154	1.140	1.125	1.110	1.094	1.078	1.061
64	1.229	1.217	1.204	1.191	1.177	1.163	1.148	1.132	1.116	1.100	1.082
65	1.256	1.243	1.230	1.216	1.202	1.188	1.172	1.157	1.140	1.123	1.105
66	1.284	1.271	1.258	1.244	1.230	1.215	1.199	1.183	1.166	1.149	1.131
67	1.315	1.302	1.288	1.274	1.259	1.244	1.228	1.211	1.194	1.176	1.158
68	1.348	1.335	1.321	1.306	1.291	1.275	1.259	1.242	1.225	1.206	1.187
69	1.385	1.370	1.356	1.341	1.326	1.310	1.293	1.276	1.258	1.239	1.219
70	1.424	1.409	1.395	1.379	1.363	1.347	1.330	1.312	1.293	1.274	1.254
71	1.466	1.451	1.436	1.421	1.404	1.387	1.369	1.351	1.332	1.312	1.291
72	1.513	1.497	1.482	1.465	1.448	1.431	1.413	1.394	1.374	1.353	1.332
73	1.563	1.547	1.531	1.514	1.497	1.478	1.459	1.440	1.419	1.398	1.376
74	1.617	1.601	1.584	1.567	1.549	1.530	1.510	1.490	1.469	1.447	1.424
75	1.677	1.660	1.643	1.625	1.606	1.586	1.566	1.545	1.523	1.500	1.477
76	1.742	1.724	1.706	1.688	1.668	1.648	1.627	1.605	1.582	1.559	1.534
77	1.813	1.795	1.776	1.757	1.736	1.715	1.693	1.670	1.647	1.622	1.596
78	1.891	1.872	1.852	1.832	1.811	1.789	1.766	1.742	1.717	1.692	1.665
79	1.976	1.956	1.936	1.915	1.892	1.869	1.845	1.821	1.795	1.768	1.740
80	2.070	2.049	2.028	2.005	1.982	1.958	1.933	1.907	1.880	1.852	1.822
81	2.173	2.151	2.129	2.106	2.081	2.056	2.030	2.002	1.974	1.944	1.914
82	2.287	2.264	2.241	2.216	2.190	2.164	2.136	2.107	2.077	2.046	2.014
83	2.413	2.388	2.363	2.337	2.310	2.282	2.253	2.223	2.191	2.158	2.124
84	2.550	2.525	2.498	2.471	2.442	2.412	2.382	2.350	2.316	2.282	2.245

\*at later of member's death or early retirement age

**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)  
Actuarial Equivalency Factors Effective January 1, 2024**

**Table 21: Conversion to Monthly Spouse Benefit at Later of Member's Death or Earliest Retirement Age - Healthy Members**  
(Factor Multiplied by 50% of Retirement Benefit)

Spouse Age*	Age of Member at Later of Death or Earliest Early Retirement Age									
	61	62	63	64	65	66	67	68	69	70
50	0.871	0.855	0.839	0.823	0.805	0.787	0.769	0.750	0.730	0.710
51	0.880	0.864	0.848	0.831	0.814	0.796	0.777	0.758	0.738	0.717
52	0.889	0.873	0.857	0.840	0.822	0.804	0.785	0.766	0.745	0.725
53	0.899	0.883	0.866	0.849	0.831	0.813	0.794	0.774	0.754	0.733
54	0.909	0.893	0.876	0.859	0.841	0.822	0.803	0.783	0.762	0.741
55	0.920	0.904	0.887	0.869	0.851	0.832	0.813	0.792	0.772	0.750
56	0.932	0.916	0.898	0.881	0.862	0.843	0.823	0.803	0.781	0.760
57	0.945	0.928	0.911	0.892	0.874	0.854	0.834	0.813	0.792	0.770
58	0.958	0.941	0.924	0.905	0.886	0.867	0.846	0.825	0.803	0.781
59	0.973	0.956	0.938	0.919	0.900	0.880	0.859	0.838	0.816	0.793
60	0.988	0.971	0.953	0.934	0.914	0.894	0.873	0.851	0.829	0.806
61	1.005	0.987	0.969	0.950	0.930	0.909	0.888	0.866	0.843	0.820
62	1.023	1.005	0.986	0.967	0.946	0.925	0.904	0.881	0.858	0.834
63	1.043	1.024	1.005	0.985	0.965	0.943	0.921	0.898	0.874	0.850
64	1.064	1.045	1.026	1.005	0.984	0.962	0.940	0.916	0.892	0.867
65	1.087	1.068	1.048	1.027	1.005	0.983	0.960	0.936	0.911	0.886
66	1.112	1.092	1.071	1.050	1.028	1.005	0.981	0.957	0.932	0.906
67	1.138	1.118	1.097	1.075	1.053	1.029	1.005	0.980	0.954	0.928
68	1.167	1.146	1.125	1.103	1.079	1.055	1.031	1.005	0.979	0.952
69	1.199	1.177	1.155	1.132	1.108	1.084	1.058	1.032	1.005	0.977
70	1.233	1.211	1.188	1.164	1.140	1.114	1.088	1.061	1.033	1.005
71	1.269	1.247	1.223	1.199	1.174	1.148	1.121	1.093	1.064	1.035
72	1.309	1.286	1.262	1.237	1.211	1.184	1.156	1.127	1.098	1.067
73	1.353	1.329	1.304	1.278	1.251	1.223	1.195	1.165	1.134	1.103
74	1.400	1.375	1.349	1.323	1.295	1.266	1.236	1.206	1.174	1.141
75	1.452	1.426	1.399	1.371	1.343	1.313	1.282	1.250	1.217	1.183
76	1.508	1.481	1.453	1.425	1.395	1.364	1.332	1.298	1.264	1.229
77	1.570	1.542	1.513	1.483	1.452	1.419	1.386	1.351	1.316	1.280
78	1.637	1.608	1.578	1.546	1.514	1.480	1.445	1.409	1.372	1.334
79	1.711	1.680	1.649	1.616	1.582	1.547	1.510	1.473	1.434	1.395
80	1.792	1.760	1.727	1.693	1.657	1.620	1.582	1.543	1.502	1.461
81	1.881	1.848	1.813	1.777	1.740	1.701	1.661	1.620	1.577	1.534
82	1.980	1.945	1.908	1.870	1.831	1.790	1.748	1.705	1.660	1.614
83	2.089	2.051	2.013	1.973	1.931	1.889	1.844	1.798	1.751	1.703
84	2.208	2.169	2.128	2.086	2.042	1.996	1.949	1.901	1.851	1.800

\*at later of member's death or early retirement age

Mortality Table: Blended Healthy Mortality, Blended Beneficiary Mortality  
Interest Rate: 6.90%, with 1.60% COLA

**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)  
Actuarial Equivalency Factors Effective January 1, 2024**

**Table 21: Conversion to Monthly Spouse Benefit at Later of Member's Death or Earliest Retirement Age - Healthy Members**  
(Factor Multiplied by 50% of Retirement Benefit)

Spouse Age*	Age of Member at Later of Death or Earliest Early Retirement Age									
	71	72	73	74	75	76	77	78	79	80
50	0.689	0.668	0.646	0.624	0.602	0.580	0.557	0.534	0.510	0.487
51	0.696	0.675	0.653	0.631	0.608	0.586	0.563	0.539	0.516	0.492
52	0.704	0.682	0.660	0.638	0.615	0.592	0.568	0.545	0.521	0.497
53	0.711	0.690	0.667	0.645	0.621	0.598	0.575	0.551	0.527	0.503
54	0.720	0.697	0.675	0.652	0.629	0.605	0.581	0.557	0.533	0.509
55	0.728	0.706	0.683	0.660	0.636	0.612	0.588	0.564	0.539	0.515
56	0.738	0.715	0.692	0.668	0.644	0.620	0.596	0.571	0.546	0.521
57	0.748	0.725	0.701	0.677	0.653	0.629	0.604	0.579	0.554	0.529
58	0.758	0.735	0.711	0.687	0.663	0.638	0.613	0.587	0.562	0.536
59	0.770	0.746	0.722	0.698	0.673	0.647	0.622	0.596	0.570	0.544
60	0.782	0.758	0.734	0.709	0.683	0.658	0.632	0.606	0.579	0.553
61	0.796	0.771	0.746	0.721	0.695	0.669	0.643	0.616	0.589	0.562
62	0.810	0.785	0.760	0.734	0.708	0.681	0.654	0.627	0.600	0.573
63	0.825	0.800	0.774	0.748	0.721	0.694	0.667	0.639	0.611	0.584
64	0.842	0.816	0.790	0.763	0.736	0.708	0.680	0.652	0.624	0.595
65	0.860	0.834	0.807	0.779	0.752	0.723	0.695	0.666	0.637	0.608
66	0.880	0.853	0.825	0.797	0.769	0.740	0.711	0.681	0.652	0.622
67	0.901	0.873	0.845	0.816	0.787	0.757	0.728	0.698	0.667	0.637
68	0.924	0.895	0.866	0.837	0.807	0.777	0.746	0.715	0.684	0.653
69	0.949	0.919	0.890	0.859	0.829	0.798	0.766	0.734	0.703	0.671
70	0.975	0.946	0.915	0.884	0.852	0.820	0.788	0.755	0.722	0.690
71	1.005	0.974	0.942	0.910	0.878	0.845	0.811	0.778	0.744	0.710
72	1.036	1.004	0.972	0.939	0.905	0.871	0.837	0.802	0.768	0.733
73	1.071	1.038	1.004	0.970	0.935	0.900	0.865	0.829	0.793	0.757
74	1.108	1.074	1.039	1.004	0.968	0.932	0.895	0.858	0.821	0.783
75	1.149	1.114	1.078	1.041	1.004	0.966	0.928	0.890	0.851	0.812
76	1.194	1.157	1.119	1.081	1.043	1.004	0.964	0.924	0.884	0.844
77	1.242	1.204	1.165	1.125	1.085	1.044	1.003	0.962	0.920	0.878
78	1.295	1.256	1.215	1.174	1.132	1.089	1.046	1.003	0.959	0.916
79	1.354	1.312	1.270	1.227	1.183	1.138	1.094	1.048	1.003	0.957
80	1.418	1.375	1.330	1.285	1.239	1.192	1.145	1.098	1.050	1.003
81	1.489	1.443	1.397	1.349	1.301	1.252	1.203	1.153	1.103	1.053
82	1.567	1.519	1.470	1.420	1.369	1.318	1.266	1.213	1.161	1.108
83	1.653	1.602	1.550	1.498	1.444	1.390	1.335	1.280	1.224	1.168
84	1.747	1.694	1.639	1.583	1.527	1.469	1.411	1.353	1.294	1.235

\*at later of member's death or early retirement age

**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)  
Actuarial Equivalency Factors Effective January 1, 2024**

**Table 21: Conversion to Monthly Spouse Benefit at Later of Member's Death or Earliest Retirement Age - Healthy Members**  
(Factor Multiplied by 50% of Retirement Benefit)

Spouse Age*	Age of Member at Later of Death or Earliest Early Retirement Age									
	81	82	83	84	85	86	87	88	89	90
50	0.464	0.441	0.418	0.395	0.373	0.351	0.330	0.310	0.291	0.273
51	0.469	0.445	0.422	0.399	0.377	0.355	0.334	0.314	0.294	0.276
52	0.474	0.450	0.426	0.403	0.381	0.359	0.337	0.317	0.297	0.279
53	0.479	0.455	0.431	0.408	0.385	0.363	0.341	0.320	0.300	0.282
54	0.484	0.460	0.436	0.412	0.389	0.367	0.345	0.324	0.304	0.285
55	0.490	0.466	0.441	0.417	0.394	0.371	0.349	0.328	0.308	0.288
56	0.497	0.472	0.447	0.423	0.399	0.376	0.354	0.332	0.312	0.292
57	0.503	0.478	0.453	0.429	0.404	0.381	0.358	0.337	0.316	0.296
58	0.511	0.485	0.460	0.435	0.410	0.387	0.364	0.341	0.320	0.300
59	0.518	0.492	0.467	0.441	0.417	0.392	0.369	0.347	0.325	0.305
60	0.527	0.500	0.474	0.448	0.423	0.399	0.375	0.352	0.330	0.310
61	0.536	0.509	0.482	0.456	0.430	0.405	0.381	0.358	0.336	0.315
62	0.545	0.518	0.491	0.464	0.438	0.413	0.388	0.365	0.342	0.321
63	0.556	0.528	0.500	0.473	0.447	0.421	0.396	0.372	0.349	0.327
64	0.567	0.538	0.510	0.483	0.456	0.429	0.404	0.379	0.356	0.333
65	0.579	0.550	0.521	0.493	0.465	0.438	0.412	0.387	0.363	0.341
66	0.592	0.563	0.533	0.504	0.476	0.448	0.422	0.396	0.372	0.348
67	0.606	0.576	0.546	0.516	0.487	0.459	0.432	0.406	0.380	0.357
68	0.622	0.591	0.560	0.529	0.500	0.471	0.443	0.416	0.390	0.366
69	0.638	0.607	0.575	0.544	0.513	0.483	0.455	0.427	0.401	0.376
70	0.657	0.624	0.591	0.559	0.528	0.497	0.468	0.439	0.412	0.386
71	0.676	0.642	0.609	0.576	0.543	0.512	0.482	0.452	0.424	0.398
72	0.698	0.663	0.628	0.594	0.561	0.528	0.497	0.467	0.438	0.410
73	0.721	0.685	0.649	0.614	0.579	0.546	0.513	0.482	0.452	0.424
74	0.746	0.709	0.672	0.635	0.599	0.565	0.531	0.499	0.468	0.439
75	0.773	0.735	0.696	0.659	0.622	0.586	0.551	0.517	0.485	0.455
76	0.803	0.763	0.723	0.684	0.646	0.608	0.572	0.537	0.504	0.472
77	0.836	0.794	0.753	0.712	0.672	0.633	0.595	0.559	0.525	0.492
78	0.872	0.828	0.785	0.742	0.701	0.660	0.621	0.583	0.547	0.513
79	0.911	0.866	0.821	0.776	0.732	0.690	0.649	0.609	0.572	0.536
80	0.955	0.907	0.859	0.813	0.767	0.723	0.680	0.638	0.599	0.561
81	1.002	0.952	0.902	0.853	0.805	0.759	0.714	0.670	0.629	0.589
82	1.055	1.002	0.950	0.898	0.848	0.799	0.751	0.705	0.662	0.620
83	1.113	1.057	1.002	0.947	0.894	0.842	0.792	0.744	0.698	0.654
84	1.176	1.117	1.059	1.001	0.945	0.890	0.838	0.787	0.738	0.692

\*at later of member's death or early retirement age

**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)  
Actuarial Equivalency Factors Effective January 1, 2024**

**Table 21: Conversion to Monthly Spouse Benefit at Later of Member's Death or Earliest Retirement Age - Healthy Members**  
(Factor Multiplied by 50% of Retirement Benefit)

Spouse Age*	Age of Member at Later of Death or Earliest Early Retirement Age									
	91	92	93	94	95	96	97	98	99	100
50	0.256	0.240	0.225	0.211	0.198	0.186	0.174	0.164	0.155	0.146
51	0.258	0.242	0.227	0.213	0.200	0.188	0.176	0.166	0.156	0.148
52	0.261	0.245	0.229	0.215	0.202	0.189	0.178	0.168	0.158	0.149
53	0.264	0.247	0.232	0.217	0.204	0.192	0.180	0.170	0.160	0.151
54	0.267	0.250	0.234	0.220	0.206	0.194	0.182	0.171	0.162	0.153
55	0.270	0.253	0.237	0.222	0.209	0.196	0.184	0.174	0.164	0.154
56	0.274	0.256	0.240	0.225	0.211	0.199	0.187	0.176	0.166	0.156
57	0.277	0.260	0.244	0.228	0.214	0.201	0.189	0.178	0.168	0.158
58	0.281	0.264	0.247	0.232	0.217	0.204	0.192	0.181	0.170	0.161
59	0.286	0.268	0.251	0.235	0.221	0.207	0.195	0.184	0.173	0.163
60	0.290	0.272	0.255	0.239	0.224	0.211	0.198	0.186	0.176	0.166
61	0.295	0.277	0.259	0.243	0.228	0.214	0.201	0.190	0.179	0.169
62	0.300	0.282	0.264	0.247	0.232	0.218	0.205	0.193	0.182	0.172
63	0.306	0.287	0.269	0.252	0.237	0.222	0.209	0.197	0.185	0.175
64	0.312	0.293	0.274	0.257	0.241	0.227	0.213	0.201	0.189	0.178
65	0.319	0.299	0.280	0.263	0.247	0.232	0.218	0.205	0.193	0.182
66	0.326	0.306	0.287	0.269	0.252	0.237	0.223	0.210	0.198	0.186
67	0.334	0.313	0.293	0.275	0.258	0.243	0.228	0.215	0.202	0.191
68	0.343	0.321	0.301	0.282	0.265	0.249	0.234	0.220	0.207	0.196
69	0.352	0.330	0.309	0.290	0.272	0.255	0.240	0.226	0.213	0.201
70	0.362	0.339	0.318	0.298	0.280	0.263	0.247	0.232	0.219	0.207
71	0.373	0.349	0.327	0.307	0.288	0.270	0.254	0.239	0.226	0.213
72	0.384	0.360	0.338	0.317	0.297	0.279	0.262	0.247	0.233	0.220
73	0.397	0.372	0.349	0.327	0.307	0.288	0.271	0.255	0.240	0.227
74	0.411	0.385	0.361	0.338	0.318	0.298	0.281	0.264	0.249	0.235
75	0.426	0.399	0.374	0.351	0.329	0.309	0.291	0.274	0.258	0.244
76	0.443	0.415	0.389	0.365	0.342	0.321	0.302	0.284	0.268	0.253
77	0.461	0.432	0.405	0.379	0.356	0.334	0.314	0.296	0.279	0.263
78	0.481	0.450	0.422	0.396	0.371	0.349	0.328	0.309	0.291	0.275
79	0.502	0.471	0.441	0.414	0.388	0.365	0.343	0.323	0.304	0.287
80	0.526	0.493	0.462	0.433	0.407	0.382	0.359	0.338	0.319	0.301
81	0.552	0.518	0.485	0.455	0.427	0.401	0.377	0.355	0.334	0.316
82	0.581	0.545	0.510	0.479	0.449	0.422	0.397	0.373	0.352	0.332
83	0.613	0.575	0.538	0.505	0.474	0.445	0.418	0.394	0.371	0.350
84	0.648	0.607	0.569	0.534	0.501	0.470	0.442	0.416	0.392	0.370

\*at later of member's death or early retirement age

**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)  
Actuarial Equivalency Factors Effective January 1, 2024**

**Table 21: Conversion to Monthly Spouse Benefit at Later of Member's Death or Earliest Retirement Age - Healthy Members**  
(Factor Multiplied by 50% of Retirement Benefit)

Spouse Age*	Age of Member at Later of Death or Earliest Early Retirement Age										
	50	51	52	53	54	55	56	57	58	59	60
85	2.701	2.674	2.646	2.617	2.587	2.555	2.523	2.489	2.454	2.417	2.378
86	2.866	2.837	2.808	2.777	2.745	2.711	2.677	2.641	2.603	2.564	2.524
87	3.046	3.015	2.984	2.951	2.917	2.881	2.844	2.806	2.766	2.725	2.682
88	3.240	3.208	3.174	3.140	3.103	3.065	3.026	2.986	2.943	2.899	2.853
89	3.451	3.416	3.380	3.343	3.305	3.264	3.223	3.179	3.134	3.087	3.038
90	3.677	3.640	3.602	3.563	3.522	3.478	3.434	3.388	3.340	3.290	3.238
91	3.920	3.880	3.840	3.798	3.754	3.708	3.661	3.612	3.560	3.507	3.451
92	4.179	4.136	4.093	4.049	4.002	3.953	3.902	3.850	3.795	3.738	3.679
93	4.454	4.409	4.363	4.315	4.265	4.213	4.159	4.104	4.045	3.985	3.922
94	4.746	4.698	4.649	4.598	4.545	4.489	4.432	4.373	4.311	4.246	4.179
95	5.054	5.003	4.951	4.897	4.840	4.781	4.720	4.657	4.590	4.522	4.450
96	5.378	5.324	5.269	5.211	5.150	5.087	5.023	4.955	4.885	4.812	4.735
97	5.718	5.661	5.602	5.540	5.476	5.409	5.340	5.269	5.194	5.116	5.035
98	6.074	6.013	5.950	5.885	5.817	5.746	5.673	5.597	5.517	5.434	5.348
99	6.446	6.380	6.314	6.245	6.173	6.097	6.019	5.939	5.854	5.766	5.675
100	6.832	6.763	6.692	6.619	6.542	6.462	6.380	6.294	6.205	6.112	6.015

\*at later of member's death or early retirement age

Mortality Table: Blended Healthy Mortality, Blended Beneficiary Mortality  
Interest Rate: 6.90%, with 1.60% COLA

**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)  
Actuarial Equivalency Factors Effective January 1, 2024**

**Table 21: Conversion to Monthly Spouse Benefit at Later of Member's Death or Earliest Retirement Age - Healthy Members**  
(Factor Multiplied by 50% of Retirement Benefit)

Spouse Age*	Age of Member at Later of Death or Earliest Early Retirement Age									
	61	62	63	64	65	66	67	68	69	70
<b>85</b>	2.338	2.297	2.254	2.209	2.163	2.114	2.065	2.013	1.961	1.906
<b>86</b>	2.481	2.437	2.391	2.344	2.295	2.244	2.191	2.136	2.080	2.023
<b>87</b>	2.637	2.590	2.541	2.491	2.438	2.384	2.328	2.270	2.211	2.149
<b>88</b>	2.805	2.755	2.704	2.650	2.594	2.537	2.477	2.415	2.352	2.287
<b>89</b>	2.987	2.934	2.879	2.822	2.763	2.701	2.638	2.572	2.505	2.435
<b>90</b>	3.183	3.127	3.068	3.007	2.944	2.878	2.811	2.741	2.669	2.595
<b>91</b>	3.393	3.333	3.271	3.206	3.138	3.068	2.996	2.922	2.845	2.766
<b>92</b>	3.617	3.553	3.487	3.417	3.345	3.271	3.194	3.115	3.033	2.949
<b>93</b>	3.856	3.787	3.716	3.642	3.566	3.486	3.404	3.320	3.233	3.143
<b>94</b>	4.108	4.035	3.960	3.881	3.799	3.715	3.628	3.537	3.445	3.349
<b>95</b>	4.375	4.298	4.217	4.133	4.046	3.956	3.863	3.767	3.668	3.567
<b>96</b>	4.656	4.573	4.487	4.398	4.306	4.210	4.111	4.009	3.904	3.796
<b>97</b>	4.950	4.862	4.771	4.676	4.578	4.476	4.371	4.262	4.150	4.036
<b>98</b>	5.258	5.165	5.068	4.967	4.863	4.755	4.643	4.528	4.409	4.287
<b>99</b>	5.580	5.481	5.378	5.271	5.160	5.045	4.927	4.804	4.678	4.549
<b>100</b>	5.914	5.809	5.700	5.587	5.469	5.348	5.222	5.092	4.959	4.821

\*at later of member's death or early retirement age

Mortality Table: Blended Healthy Mortality, Blended Beneficiary Mortality  
Interest Rate: 6.90%, with 1.60% COLA



**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)  
Actuarial Equivalency Factors Effective January 1, 2024**

**Table 21: Conversion to Monthly Spouse Benefit at Later of Member's Death or Earliest Retirement Age - Healthy Members**  
(Factor Multiplied by 50% of Retirement Benefit)

Spouse Age*	Age of Member at Later of Death or Earliest Early Retirement Age									
	71	72	73	74	75	76	77	78	79	80
85	1.851	1.794	1.736	1.677	1.617	1.556	1.495	1.433	1.371	1.308
86	1.964	1.903	1.842	1.779	1.716	1.651	1.586	1.521	1.454	1.388
87	2.087	2.023	1.957	1.891	1.823	1.755	1.685	1.616	1.546	1.475
88	2.220	2.152	2.082	2.012	1.940	1.867	1.793	1.719	1.644	1.569
89	2.364	2.292	2.218	2.142	2.066	1.988	1.910	1.831	1.751	1.671
90	2.519	2.442	2.363	2.283	2.201	2.118	2.035	1.951	1.866	1.781
91	2.686	2.603	2.519	2.433	2.346	2.258	2.169	2.079	1.989	1.898
92	2.863	2.775	2.685	2.594	2.501	2.407	2.312	2.217	2.121	2.024
93	3.052	2.958	2.862	2.765	2.666	2.566	2.465	2.363	2.260	2.157
94	3.252	3.152	3.050	2.946	2.841	2.734	2.626	2.518	2.408	2.299
95	3.463	3.356	3.248	3.137	3.025	2.912	2.797	2.681	2.565	2.448
96	3.685	3.572	3.456	3.339	3.219	3.098	2.976	2.853	2.729	2.605
97	3.918	3.798	3.675	3.550	3.423	3.294	3.165	3.034	2.902	2.770
98	4.162	4.034	3.904	3.771	3.636	3.499	3.361	3.222	3.082	2.942
99	4.416	4.280	4.142	4.001	3.858	3.713	3.567	3.419	3.271	3.122
100	4.681	4.537	4.390	4.241	4.089	3.936	3.781	3.624	3.467	3.309

\*at later of member's death or early retirement age

Mortality Table: Blended Healthy Mortality, Blended Beneficiary Mortality  
Interest Rate: 6.90%, with 1.60% COLA

**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)  
Actuarial Equivalency Factors Effective January 1, 2024**

**Table 21: Conversion to Monthly Spouse Benefit at Later of Member's Death or Earliest Retirement Age - Healthy Members**  
(Factor Multiplied by 50% of Retirement Benefit)

Spouse Age*	Age of Member at Later of Death or Earliest Early Retirement Age									
	81	82	83	84	85	86	87	88	89	90
85	1.246	1.183	1.122	1.061	1.001	0.943	0.887	0.833	0.782	0.733
86	1.322	1.256	1.190	1.126	1.062	1.001	0.941	0.884	0.829	0.777
87	1.405	1.334	1.265	1.196	1.129	1.063	1.000	0.939	0.881	0.826
88	1.494	1.420	1.346	1.272	1.201	1.131	1.064	0.999	0.938	0.879
89	1.591	1.512	1.433	1.355	1.279	1.205	1.133	1.064	0.999	0.936
90	1.696	1.611	1.527	1.444	1.363	1.284	1.208	1.134	1.064	0.997
91	1.808	1.717	1.628	1.539	1.453	1.369	1.287	1.209	1.134	1.063
92	1.927	1.831	1.735	1.641	1.549	1.459	1.372	1.289	1.209	1.133
93	2.054	1.951	1.849	1.749	1.651	1.555	1.463	1.374	1.289	1.208
94	2.189	2.079	1.971	1.864	1.759	1.657	1.559	1.464	1.373	1.287
95	2.331	2.214	2.099	1.985	1.873	1.765	1.660	1.559	1.462	1.371
96	2.480	2.356	2.233	2.112	1.993	1.878	1.766	1.659	1.556	1.459
97	2.637	2.505	2.374	2.246	2.119	1.997	1.878	1.764	1.655	1.551
98	2.801	2.661	2.522	2.385	2.251	2.121	1.995	1.873	1.758	1.648
99	2.972	2.824	2.676	2.531	2.389	2.250	2.117	1.988	1.865	1.748
100	3.151	2.993	2.837	2.683	2.532	2.385	2.244	2.107	1.977	1.853

\*at later of member's death or early retirement age

Mortality Table: Blended Healthy Mortality, Blended Beneficiary Mortality  
Interest Rate: 6.90%, with 1.60% COLA

**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)  
Actuarial Equivalency Factors Effective January 1, 2024**

**Table 21: Conversion to Monthly Spouse Benefit at Later of Member's Death or Earliest Retirement Age - Healthy Members**  
(Factor Multiplied by 50% of Retirement Benefit)

Spouse Age*	Age of Member at Later of Death or Earliest Early Retirement Age									
	91	92	93	94	95	96	97	98	99	100
85	0.687	0.643	0.603	0.565	0.531	0.498	0.469	0.441	0.416	0.392
86	0.728	0.683	0.640	0.600	0.563	0.529	0.497	0.468	0.441	0.416
87	0.774	0.725	0.680	0.637	0.598	0.562	0.528	0.497	0.469	0.442
88	0.824	0.772	0.723	0.678	0.636	0.598	0.562	0.529	0.499	0.471
89	0.877	0.822	0.770	0.722	0.678	0.637	0.599	0.563	0.531	0.501
90	0.935	0.876	0.821	0.770	0.722	0.678	0.638	0.600	0.566	0.534
91	0.996	0.933	0.875	0.820	0.770	0.723	0.680	0.640	0.603	0.569
92	1.062	0.995	0.933	0.874	0.821	0.771	0.725	0.682	0.643	0.607
93	1.132	1.061	0.994	0.932	0.875	0.822	0.773	0.727	0.685	0.647
94	1.206	1.130	1.059	0.993	0.932	0.875	0.823	0.775	0.730	0.689
95	1.284	1.204	1.128	1.058	0.993	0.932	0.877	0.825	0.778	0.734
96	1.367	1.281	1.200	1.126	1.056	0.992	0.933	0.878	0.828	0.781
97	1.453	1.362	1.276	1.197	1.123	1.055	0.992	0.934	0.880	0.830
98	1.544	1.446	1.356	1.271	1.193	1.121	1.054	0.992	0.935	0.882
99	1.638	1.535	1.439	1.349	1.266	1.189	1.118	1.052	0.992	0.936
100	1.736	1.627	1.525	1.430	1.342	1.260	1.185	1.116	1.051	0.992

\*at later of member's death or early retirement age

Mortality Table: Blended Healthy Mortality, Blended Beneficiary Mortality  
Interest Rate: 6.90%, with 1.60% COLA

**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)  
Actuarial Equivalency Factors Effective January 1, 2024**

**Table 22: Conversion to Monthly Spouse Benefit at Commencement Date**  
(Factor Multiplied by Benefit to Spouse at Later of Death or Early Retirement Age)

Spouse Age*	Age of Spouse at Later of Member's Date of Death or Earliest Early Retirement Age														
	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
15	1.000	0.934	0.872	0.815	0.761	0.710	0.663	0.619	0.578	0.539	0.503	0.470	0.438	0.409	0.381
16	1.071	1.000	0.934	0.872	0.814	0.760	0.710	0.663	0.619	0.577	0.539	0.503	0.469	0.437	0.408
17	1.146	1.071	1.000	0.934	0.872	0.814	0.760	0.709	0.662	0.618	0.577	0.538	0.502	0.468	0.437
18	1.228	1.147	1.071	1.000	0.934	0.872	0.814	0.760	0.709	0.662	0.618	0.576	0.538	0.501	0.468
19	1.315	1.228	1.147	1.071	1.000	0.934	0.872	0.814	0.759	0.709	0.661	0.617	0.576	0.537	0.501
20	1.408	1.315	1.228	1.147	1.071	1.000	0.934	0.871	0.813	0.759	0.708	0.661	0.617	0.575	0.536
21	1.509	1.409	1.316	1.229	1.147	1.071	1.000	0.933	0.871	0.813	0.759	0.708	0.660	0.616	0.575
22	1.616	1.510	1.410	1.316	1.229	1.148	1.071	1.000	0.933	0.871	0.813	0.758	0.707	0.660	0.615
23	1.732	1.617	1.510	1.410	1.317	1.230	1.148	1.071	1.000	0.933	0.871	0.812	0.758	0.707	0.659
24	1.856	1.733	1.619	1.511	1.411	1.318	1.230	1.148	1.072	1.000	0.933	0.871	0.812	0.758	0.706
25	1.989	1.858	1.735	1.620	1.512	1.412	1.318	1.230	1.148	1.072	1.000	0.933	0.870	0.812	0.757
26	2.132	1.991	1.860	1.736	1.621	1.514	1.413	1.319	1.231	1.149	1.072	1.000	0.933	0.870	0.811
27	2.286	2.135	1.994	1.862	1.738	1.623	1.515	1.414	1.320	1.231	1.149	1.072	1.000	0.933	0.870
28	2.451	2.289	2.138	1.996	1.864	1.740	1.624	1.516	1.415	1.320	1.232	1.149	1.072	1.000	0.933
29	2.629	2.455	2.293	2.141	1.999	1.866	1.742	1.626	1.517	1.416	1.321	1.233	1.150	1.072	1.000
30	2.820	2.633	2.459	2.296	2.144	2.001	1.868	1.744	1.627	1.519	1.417	1.322	1.233	1.150	1.073
31	3.025	2.825	2.638	2.464	2.300	2.147	2.004	1.871	1.746	1.629	1.520	1.418	1.323	1.234	1.151
32	3.247	3.032	2.831	2.644	2.468	2.304	2.151	2.007	1.874	1.748	1.631	1.522	1.419	1.324	1.235
33	3.485	3.254	3.039	2.838	2.649	2.473	2.309	2.155	2.011	1.876	1.751	1.633	1.523	1.421	1.325
34	3.741	3.494	3.263	3.046	2.844	2.655	2.478	2.313	2.159	2.014	1.879	1.753	1.635	1.525	1.422
35	4.018	3.752	3.504	3.271	3.054	2.851	2.661	2.484	2.318	2.163	2.018	1.883	1.756	1.638	1.527
36	4.316	4.031	3.764	3.514	3.281	3.063	2.859	2.668	2.490	2.323	2.168	2.022	1.886	1.759	1.640
37	4.638	4.331	4.044	3.776	3.525	3.291	3.072	2.867	2.675	2.496	2.329	2.173	2.026	1.890	1.762
38	4.985	4.655	4.347	4.058	3.789	3.537	3.301	3.081	2.875	2.683	2.503	2.335	2.178	2.031	1.894
39	5.360	5.005	4.673	4.363	4.074	3.803	3.549	3.313	3.091	2.884	2.691	2.510	2.341	2.183	2.036
40	5.765	5.383	5.026	4.693	4.381	4.090	3.817	3.563	3.325	3.102	2.894	2.700	2.518	2.348	2.189
41	6.203	5.792	5.408	5.049	4.714	4.400	4.107	3.833	3.577	3.337	3.114	2.904	2.709	2.526	2.355
42	6.676	6.234	5.821	5.435	5.074	4.736	4.421	4.126	3.850	3.592	3.351	3.126	2.915	2.719	2.535
43	7.189	6.713	6.268	5.852	5.463	5.100	4.760	4.442	4.145	3.868	3.608	3.366	3.139	2.927	2.729
44	7.745	7.233	6.753	6.305	5.886	5.494	5.128	4.786	4.466	4.166	3.887	3.626	3.381	3.153	2.940
45	8.348	7.796	7.279	6.796	6.344	5.921	5.527	5.158	4.813	4.490	4.189	3.907	3.644	3.398	3.168
46	9.003	8.407	7.849	7.328	6.841	6.385	5.960	5.562	5.190	4.842	4.517	4.213	3.929	3.664	3.416
47	9.714	9.071	8.469	7.907	7.381	6.890	6.430	6.001	5.599	5.224	4.873	4.546	4.239	3.953	3.685
48	10.488	9.793	9.143	8.536	7.968	7.438	6.942	6.478	6.045	5.640	5.261	4.907	4.576	4.267	3.978
49	11.330	10.579	9.877	9.221	8.608	8.035	7.499	6.998	6.530	6.092	5.683	5.300	4.943	4.609	4.297

\*age of spouse at date of benefit commencement

Mortality Table: Blended Beneficiary Mortality  
Interest Rate: 6.90%, with 1.60% COLA

**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)  
Actuarial Equivalency Factors Effective January 1, 2024**

**Table 22: Conversion to Monthly Spouse Benefit at Commencement Date**  
(Factor Multiplied by Benefit to Spouse at Later of Death or Early Retirement Age)

Spouse Age*	Age of Spouse at Later of Member's Date of Death or Earliest Early Retirement Age														
	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44
15	0.355	0.331	0.309	0.288	0.268	0.250	0.233	0.217	0.202	0.188	0.175	0.163	0.151	0.141	0.131
16	0.380	0.355	0.331	0.308	0.287	0.268	0.249	0.232	0.216	0.201	0.187	0.174	0.162	0.151	0.140
17	0.407	0.380	0.354	0.330	0.308	0.287	0.267	0.249	0.231	0.215	0.201	0.187	0.174	0.161	0.150
18	0.436	0.407	0.379	0.353	0.329	0.307	0.286	0.266	0.248	0.231	0.215	0.200	0.186	0.173	0.161
19	0.467	0.435	0.406	0.378	0.353	0.329	0.306	0.285	0.265	0.247	0.230	0.214	0.199	0.185	0.172
20	0.500	0.466	0.435	0.405	0.378	0.352	0.328	0.305	0.284	0.264	0.246	0.229	0.213	0.198	0.184
21	0.536	0.500	0.466	0.434	0.404	0.377	0.351	0.327	0.304	0.283	0.264	0.245	0.228	0.212	0.197
22	0.574	0.535	0.499	0.465	0.433	0.404	0.376	0.350	0.326	0.303	0.282	0.263	0.244	0.227	0.211
23	0.615	0.573	0.534	0.498	0.464	0.432	0.403	0.375	0.349	0.325	0.302	0.281	0.261	0.243	0.226
24	0.659	0.614	0.572	0.534	0.497	0.463	0.431	0.402	0.374	0.348	0.324	0.301	0.280	0.260	0.242
25	0.706	0.658	0.613	0.572	0.533	0.496	0.462	0.430	0.401	0.373	0.347	0.323	0.300	0.279	0.259
26	0.757	0.705	0.657	0.613	0.571	0.532	0.495	0.461	0.429	0.400	0.372	0.346	0.322	0.299	0.278
27	0.811	0.756	0.705	0.657	0.612	0.570	0.531	0.494	0.460	0.428	0.398	0.371	0.345	0.320	0.298
28	0.870	0.811	0.756	0.704	0.656	0.611	0.569	0.530	0.493	0.459	0.427	0.397	0.369	0.343	0.319
29	0.932	0.869	0.810	0.755	0.703	0.655	0.610	0.568	0.529	0.492	0.458	0.426	0.396	0.368	0.342
30	<b>1.000</b>	0.932	0.869	0.810	0.754	0.703	0.654	0.609	0.567	0.528	0.491	0.457	0.425	0.395	0.367
31	1.073	<b>1.000</b>	0.932	0.869	0.809	0.754	0.702	0.654	0.608	0.566	0.527	0.490	0.455	0.423	0.393
32	1.151	1.073	<b>1.000</b>	0.932	0.868	0.809	0.753	0.701	0.653	0.607	0.565	0.525	0.488	0.454	0.422
33	1.235	1.151	1.073	<b>1.000</b>	0.932	0.868	0.808	0.752	0.700	0.652	0.606	0.564	0.524	0.487	0.452
34	1.326	1.236	1.152	1.073	<b>1.000</b>	0.931	0.867	0.807	0.752	0.699	0.651	0.605	0.562	0.523	0.486
35	1.424	1.327	1.237	1.152	1.074	<b>1.000</b>	0.931	0.867	0.807	0.751	0.698	0.649	0.604	0.561	0.521
36	1.529	1.425	1.328	1.238	1.153	1.074	<b>1.000</b>	0.931	0.866	0.806	0.750	0.697	0.648	0.602	0.560
37	1.643	1.531	1.427	1.330	1.239	1.154	1.074	<b>1.000</b>	0.931	0.866	0.805	0.749	0.696	0.647	0.601
38	1.765	1.646	1.534	1.429	1.331	1.240	1.154	1.075	<b>1.000</b>	0.930	0.865	0.805	0.748	0.695	0.646
39	1.898	1.769	1.649	1.536	1.431	1.333	1.241	1.155	1.075	<b>1.000</b>	0.930	0.865	0.804	0.747	0.694
40	2.041	1.902	1.773	1.652	1.539	1.433	1.334	1.242	1.156	1.075	<b>1.000</b>	0.930	0.864	0.803	0.746
41	2.196	2.046	1.907	1.777	1.655	1.541	1.435	1.336	1.243	1.156	1.076	<b>1.000</b>	0.929	0.864	0.802
42	2.363	2.202	2.052	1.912	1.781	1.659	1.544	1.437	1.338	1.244	1.157	1.076	<b>1.000</b>	0.929	0.863
43	2.544	2.371	2.210	2.059	1.917	1.786	1.662	1.547	1.440	1.339	1.246	1.158	1.076	<b>1.000</b>	0.929
44	2.740	2.554	2.380	2.217	2.065	1.923	1.790	1.666	1.551	1.443	1.342	1.247	1.159	1.077	<b>1.000</b>
45	2.953	2.752	2.565	2.389	2.225	2.072	1.929	1.796	1.671	1.554	1.445	1.344	1.249	1.160	1.077
46	3.184	2.968	2.765	2.576	2.399	2.234	2.080	1.936	1.801	1.675	1.558	1.448	1.346	1.250	1.161
47	3.435	3.201	2.983	2.779	2.588	2.410	2.244	2.088	1.943	1.807	1.680	1.562	1.452	1.348	1.252
48	3.708	3.456	3.220	2.999	2.794	2.601	2.421	2.254	2.097	1.950	1.814	1.686	1.566	1.455	1.351
49	4.005	3.732	3.478	3.239	3.017	2.809	2.615	2.434	2.264	2.106	1.958	1.820	1.691	1.571	1.459

\*age of spouse at date of benefit commencement

Mortality Table: Blended Beneficiary Mortality  
Interest Rate: 6.90%, with 1.60% COLA

**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)  
Actuarial Equivalency Factors Effective January 1, 2024**

**Table 22: Conversion to Monthly Spouse Benefit at Commencement Date**  
(Factor Multiplied by Benefit to Spouse at Later of Death or Early Retirement Age)

Spouse Age*	Age of Spouse at Later of Member's Date of Death or Earliest Early Retirement Age														
	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59
15	0.122	0.113	0.105	0.097	0.090	0.084	0.078	0.072	0.067	0.062	0.057	0.053	0.049	0.045	0.041
16	0.130	0.121	0.112	0.104	0.097	0.090	0.083	0.077	0.071	0.066	0.061	0.056	0.052	0.048	0.044
17	0.139	0.129	0.120	0.112	0.103	0.096	0.089	0.082	0.076	0.071	0.065	0.060	0.056	0.051	0.047
18	0.149	0.139	0.129	0.119	0.111	0.103	0.095	0.088	0.082	0.075	0.070	0.064	0.060	0.055	0.051
19	0.160	0.148	0.138	0.128	0.118	0.110	0.102	0.094	0.087	0.081	0.075	0.069	0.064	0.059	0.054
20	0.171	0.159	0.147	0.137	0.127	0.118	0.109	0.101	0.093	0.086	0.080	0.074	0.068	0.063	0.058
21	0.183	0.170	0.158	0.146	0.136	0.126	0.117	0.108	0.100	0.092	0.086	0.079	0.073	0.067	0.062
22	0.196	0.182	0.169	0.157	0.145	0.135	0.125	0.116	0.107	0.099	0.092	0.085	0.078	0.072	0.066
23	0.210	0.195	0.181	0.168	0.156	0.144	0.134	0.124	0.115	0.106	0.098	0.091	0.084	0.077	0.071
24	0.225	0.209	0.194	0.180	0.167	0.155	0.143	0.133	0.123	0.113	0.105	0.097	0.089	0.083	0.076
25	0.241	0.224	0.208	0.193	0.179	0.166	0.153	0.142	0.131	0.122	0.112	0.104	0.096	0.088	0.081
26	0.258	0.240	0.222	0.206	0.191	0.177	0.164	0.152	0.141	0.130	0.120	0.111	0.103	0.095	0.087
27	0.276	0.257	0.238	0.221	0.205	0.190	0.176	0.163	0.151	0.139	0.129	0.119	0.110	0.101	0.093
28	0.296	0.275	0.255	0.237	0.220	0.204	0.189	0.175	0.161	0.149	0.138	0.127	0.118	0.109	0.100
29	0.318	0.295	0.274	0.254	0.235	0.218	0.202	0.187	0.173	0.160	0.148	0.137	0.126	0.116	0.107
30	0.341	0.316	0.293	0.272	0.252	0.234	0.217	0.200	0.185	0.171	0.158	0.146	0.135	0.125	0.115
31	0.365	0.339	0.315	0.292	0.271	0.251	0.232	0.215	0.199	0.184	0.170	0.157	0.145	0.133	0.123
32	0.392	0.364	0.337	0.313	0.290	0.269	0.249	0.230	0.213	0.197	0.182	0.168	0.155	0.143	0.132
33	0.420	0.390	0.362	0.336	0.311	0.288	0.267	0.247	0.229	0.211	0.195	0.180	0.166	0.153	0.141
34	0.451	0.419	0.388	0.360	0.334	0.309	0.286	0.265	0.245	0.227	0.209	0.193	0.178	0.164	0.151
35	0.484	0.449	0.417	0.387	0.358	0.332	0.307	0.284	0.263	0.243	0.225	0.207	0.191	0.176	0.162
36	0.520	0.482	0.447	0.415	0.385	0.356	0.330	0.305	0.282	0.261	0.241	0.223	0.205	0.189	0.174
37	0.558	0.518	0.480	0.446	0.413	0.383	0.354	0.328	0.303	0.280	0.259	0.239	0.220	0.203	0.187
38	0.599	0.556	0.516	0.479	0.444	0.411	0.380	0.352	0.326	0.301	0.278	0.257	0.237	0.218	0.201
39	0.644	0.598	0.555	0.514	0.477	0.441	0.409	0.378	0.350	0.323	0.298	0.275	0.254	0.234	0.216
40	0.692	0.643	0.596	0.553	0.512	0.474	0.439	0.406	0.376	0.347	0.321	0.296	0.273	0.252	0.232
41	0.745	0.691	0.641	0.594	0.551	0.510	0.472	0.437	0.404	0.373	0.345	0.318	0.293	0.270	0.249
42	0.801	0.743	0.690	0.639	0.592	0.549	0.508	0.470	0.434	0.401	0.371	0.342	0.315	0.291	0.267
43	0.862	0.800	0.742	0.688	0.637	0.590	0.546	0.505	0.467	0.432	0.399	0.368	0.339	0.312	0.288
44	0.928	0.861	0.799	0.741	0.686	0.635	0.588	0.544	0.503	0.465	0.429	0.396	0.365	0.336	0.309
45	<b>1.000</b>	0.928	0.861	0.798	0.739	0.684	0.633	0.586	0.542	0.500	0.462	0.426	0.393	0.362	0.333
46	1.078	<b>1.000</b>	0.927	0.860	0.796	0.737	0.682	0.631	0.583	0.539	0.498	0.459	0.423	0.390	0.359
47	1.162	1.078	<b>1.000</b>	0.927	0.859	0.795	0.736	0.680	0.629	0.581	0.536	0.495	0.456	0.420	0.386
48	1.254	1.163	1.079	<b>1.000</b>	0.926	0.858	0.794	0.734	0.678	0.627	0.578	0.533	0.492	0.453	0.417
49	1.354	1.256	1.165	1.080	<b>1.000</b>	0.926	0.857	0.792	0.732	0.676	0.624	0.576	0.531	0.489	0.449

\*age of spouse at date of benefit commencement

Mortality Table: Blended Beneficiary Mortality  
Interest Rate: 6.90%, with 1.60% COLA

**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)  
Actuarial Equivalency Factors Effective January 1, 2024**

**Table 22: Conversion to Monthly Spouse Benefit at Commencement Date**  
(Factor Multiplied by Benefit to Spouse at Later of Death or Early Retirement Age)

Spouse Age*	Age of Spouse at Later of Member's Date of Death or Earliest Early Retirement Age														
	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74
15	0.038	0.035	0.032	0.030	0.027	0.025	0.023	0.021	0.019	0.017	0.016	0.014	0.013	0.012	0.011
16	0.041	0.038	0.035	0.032	0.029	0.027	0.024	0.022	0.020	0.019	0.017	0.015	0.014	0.013	0.011
17	0.044	0.040	0.037	0.034	0.031	0.029	0.026	0.024	0.022	0.020	0.018	0.016	0.015	0.014	0.012
18	0.047	0.043	0.040	0.036	0.033	0.031	0.028	0.026	0.023	0.021	0.019	0.018	0.016	0.014	0.013
19	0.050	0.046	0.042	0.039	0.036	0.033	0.030	0.027	0.025	0.023	0.021	0.019	0.017	0.015	0.014
20	0.053	0.049	0.045	0.042	0.038	0.035	0.032	0.029	0.027	0.024	0.022	0.020	0.018	0.017	0.015
21	0.057	0.053	0.048	0.044	0.041	0.037	0.034	0.031	0.029	0.026	0.024	0.022	0.020	0.018	0.016
22	0.061	0.056	0.052	0.048	0.044	0.040	0.037	0.033	0.031	0.028	0.025	0.023	0.021	0.019	0.017
23	0.065	0.060	0.055	0.051	0.047	0.043	0.039	0.036	0.033	0.030	0.027	0.025	0.022	0.020	0.018
24	0.070	0.064	0.059	0.054	0.050	0.046	0.042	0.038	0.035	0.032	0.029	0.026	0.024	0.022	0.019
25	0.075	0.069	0.063	0.058	0.053	0.049	0.045	0.041	0.037	0.034	0.031	0.028	0.025	0.023	0.021
26	0.080	0.074	0.068	0.062	0.057	0.052	0.048	0.044	0.040	0.036	0.033	0.030	0.027	0.025	0.022
27	0.086	0.079	0.073	0.067	0.061	0.056	0.051	0.047	0.043	0.039	0.035	0.032	0.029	0.026	0.024
28	0.092	0.085	0.078	0.071	0.066	0.060	0.055	0.050	0.046	0.042	0.038	0.034	0.031	0.028	0.025
29	0.099	0.091	0.083	0.077	0.070	0.064	0.059	0.054	0.049	0.045	0.041	0.037	0.033	0.030	0.027
30	0.106	0.097	0.089	0.082	0.075	0.069	0.063	0.058	0.052	0.048	0.043	0.039	0.036	0.032	0.029
31	0.113	0.104	0.096	0.088	0.081	0.074	0.067	0.062	0.056	0.051	0.046	0.042	0.038	0.034	0.031
32	0.121	0.112	0.103	0.094	0.086	0.079	0.072	0.066	0.060	0.055	0.050	0.045	0.041	0.037	0.033
33	0.130	0.120	0.110	0.101	0.092	0.085	0.077	0.071	0.064	0.059	0.053	0.048	0.044	0.039	0.036
34	0.139	0.128	0.118	0.108	0.099	0.091	0.083	0.076	0.069	0.063	0.057	0.052	0.047	0.042	0.038
35	0.150	0.137	0.126	0.116	0.106	0.097	0.089	0.081	0.074	0.067	0.061	0.055	0.050	0.045	0.041
36	0.160	0.147	0.135	0.124	0.114	0.104	0.095	0.087	0.079	0.072	0.065	0.059	0.054	0.048	0.044
37	0.172	0.158	0.145	0.133	0.122	0.112	0.102	0.093	0.085	0.077	0.070	0.064	0.058	0.052	0.047
38	0.185	0.170	0.156	0.143	0.131	0.120	0.110	0.100	0.091	0.083	0.075	0.068	0.062	0.056	0.050
39	0.198	0.182	0.167	0.154	0.141	0.129	0.118	0.107	0.098	0.089	0.081	0.073	0.066	0.060	0.054
40	0.213	0.196	0.180	0.165	0.151	0.138	0.126	0.115	0.105	0.095	0.087	0.078	0.071	0.064	0.057
41	0.229	0.210	0.193	0.177	0.162	0.148	0.136	0.124	0.113	0.102	0.093	0.084	0.076	0.069	0.062
42	0.246	0.226	0.208	0.190	0.174	0.159	0.146	0.133	0.121	0.110	0.100	0.090	0.082	0.074	0.066
43	0.265	0.243	0.223	0.205	0.187	0.171	0.156	0.143	0.130	0.118	0.107	0.097	0.088	0.079	0.071
44	0.285	0.261	0.240	0.220	0.201	0.184	0.168	0.153	0.140	0.127	0.115	0.104	0.094	0.085	0.076
45	0.306	0.281	0.258	0.237	0.217	0.198	0.181	0.165	0.150	0.136	0.124	0.112	0.101	0.091	0.082
46	0.330	0.303	0.278	0.255	0.233	0.213	0.195	0.178	0.162	0.147	0.133	0.120	0.109	0.098	0.088
47	0.355	0.326	0.299	0.274	0.251	0.230	0.210	0.191	0.174	0.158	0.143	0.130	0.117	0.105	0.095
48	0.383	0.352	0.323	0.296	0.271	0.247	0.226	0.206	0.187	0.170	0.154	0.140	0.126	0.113	0.102
49	0.413	0.379	0.348	0.319	0.292	0.267	0.243	0.222	0.202	0.183	0.166	0.150	0.136	0.122	0.110

\*age of spouse at date of benefit commencement

**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)  
Actuarial Equivalency Factors Effective January 1, 2024**

**Table 22: Conversion to Monthly Spouse Benefit at Commencement Date**  
(Factor Multiplied by Benefit to Spouse at Later of Death or Early Retirement Age)

Spouse Age*	Age of Spouse at Later of Member's Date of Death or Earliest Early Retirement Age														
	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89
15	0.010	0.009	0.008	0.007	0.006	0.005	0.005	0.004	0.004	0.003	0.003	0.002	0.002	0.002	0.001
16	0.010	0.009	0.008	0.007	0.007	0.006	0.005	0.005	0.004	0.003	0.003	0.003	0.002	0.002	0.001
17	0.011	0.010	0.009	0.008	0.007	0.006	0.005	0.005	0.004	0.004	0.003	0.003	0.002	0.002	0.002
18	0.012	0.011	0.009	0.008	0.007	0.007	0.006	0.005	0.004	0.004	0.003	0.003	0.002	0.002	0.002
19	0.013	0.011	0.010	0.009	0.008	0.007	0.006	0.005	0.005	0.004	0.004	0.003	0.003	0.002	0.002
20	0.013	0.012	0.011	0.010	0.009	0.008	0.007	0.006	0.005	0.004	0.004	0.003	0.003	0.002	0.002
21	0.014	0.013	0.011	0.010	0.009	0.008	0.007	0.006	0.005	0.005	0.004	0.003	0.003	0.002	0.002
22	0.015	0.014	0.012	0.011	0.010	0.009	0.008	0.007	0.006	0.005	0.004	0.004	0.003	0.003	0.002
23	0.016	0.015	0.013	0.012	0.010	0.009	0.008	0.007	0.006	0.005	0.005	0.004	0.003	0.003	0.002
24	0.017	0.016	0.014	0.012	0.011	0.010	0.009	0.008	0.007	0.006	0.005	0.004	0.004	0.003	0.002
25	0.019	0.017	0.015	0.013	0.012	0.010	0.009	0.008	0.007	0.006	0.005	0.004	0.004	0.003	0.003
26	0.020	0.018	0.016	0.014	0.013	0.011	0.010	0.009	0.007	0.006	0.006	0.005	0.004	0.003	0.003
27	0.021	0.019	0.017	0.015	0.013	0.012	0.010	0.009	0.008	0.007	0.006	0.005	0.004	0.004	0.003
28	0.023	0.020	0.018	0.016	0.014	0.013	0.011	0.010	0.009	0.007	0.006	0.005	0.005	0.004	0.003
29	0.024	0.022	0.020	0.017	0.015	0.014	0.012	0.010	0.009	0.008	0.007	0.006	0.005	0.004	0.003
30	0.026	0.023	0.021	0.019	0.016	0.015	0.013	0.011	0.010	0.008	0.007	0.006	0.005	0.004	0.004
31	0.028	0.025	0.022	0.020	0.018	0.016	0.014	0.012	0.010	0.009	0.008	0.007	0.005	0.005	0.004
32	0.030	0.027	0.024	0.021	0.019	0.017	0.015	0.013	0.011	0.010	0.008	0.007	0.006	0.005	0.004
33	0.032	0.029	0.025	0.023	0.020	0.018	0.016	0.014	0.012	0.010	0.009	0.007	0.006	0.005	0.004
34	0.034	0.031	0.027	0.024	0.021	0.019	0.017	0.015	0.013	0.011	0.009	0.008	0.007	0.006	0.005
35	0.037	0.033	0.029	0.026	0.023	0.020	0.018	0.016	0.013	0.012	0.010	0.008	0.007	0.006	0.005
36	0.039	0.035	0.031	0.028	0.025	0.022	0.019	0.017	0.014	0.012	0.011	0.009	0.008	0.006	0.005
37	0.042	0.037	0.033	0.030	0.026	0.023	0.020	0.018	0.015	0.013	0.011	0.010	0.008	0.007	0.006
38	0.045	0.040	0.036	0.032	0.028	0.025	0.022	0.019	0.016	0.014	0.012	0.010	0.009	0.007	0.006
39	0.048	0.043	0.038	0.034	0.030	0.027	0.023	0.020	0.018	0.015	0.013	0.011	0.009	0.008	0.006
40	0.052	0.046	0.041	0.036	0.032	0.028	0.025	0.022	0.019	0.016	0.014	0.012	0.010	0.008	0.007
41	0.055	0.049	0.044	0.039	0.035	0.030	0.027	0.023	0.020	0.017	0.015	0.013	0.011	0.009	0.007
42	0.059	0.053	0.047	0.042	0.037	0.033	0.029	0.025	0.022	0.019	0.016	0.013	0.011	0.009	0.008
43	0.064	0.057	0.051	0.045	0.040	0.035	0.031	0.027	0.023	0.020	0.017	0.014	0.012	0.010	0.008
44	0.068	0.061	0.054	0.048	0.043	0.037	0.033	0.029	0.025	0.021	0.018	0.015	0.013	0.011	0.009
45	0.073	0.066	0.058	0.052	0.046	0.040	0.035	0.031	0.026	0.023	0.019	0.016	0.014	0.011	0.009
46	0.079	0.070	0.063	0.056	0.049	0.043	0.038	0.033	0.028	0.024	0.021	0.018	0.015	0.012	0.010
47	0.085	0.076	0.067	0.060	0.053	0.046	0.041	0.035	0.030	0.026	0.022	0.019	0.016	0.013	0.011
48	0.091	0.081	0.072	0.064	0.057	0.050	0.044	0.038	0.033	0.028	0.024	0.020	0.017	0.014	0.011
49	0.098	0.088	0.078	0.069	0.061	0.054	0.047	0.041	0.035	0.030	0.026	0.022	0.018	0.015	0.012

\*age of spouse at date of benefit commencement



**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)  
Actuarial Equivalency Factors Effective January 1, 2024**

**Table 22: Conversion to Monthly Spouse Benefit at Commencement Date**  
(Factor Multiplied by Benefit to Spouse at Later of Death or Early Retirement Age)

Spouse Age*	Age of Spouse at Later of Member's Date of Death or Earliest Early Retirement Age										
	90	91	92	93	94	95	96	97	98	99	100
15	0.001	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000
16	0.001	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000
17	0.001	0.001	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000
18	0.001	0.001	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000
19	0.001	0.001	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000
20	0.002	0.001	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000
21	0.002	0.001	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000
22	0.002	0.001	0.001	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000
23	0.002	0.002	0.001	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000
24	0.002	0.002	0.001	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000
25	0.002	0.002	0.001	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000
26	0.002	0.002	0.001	0.001	0.001	0.001	0.001	0.000	0.000	0.000	0.000
27	0.002	0.002	0.002	0.001	0.001	0.001	0.001	0.000	0.000	0.000	0.000
28	0.003	0.002	0.002	0.001	0.001	0.001	0.001	0.000	0.000	0.000	0.000
29	0.003	0.002	0.002	0.001	0.001	0.001	0.001	0.000	0.000	0.000	0.000
30	0.003	0.002	0.002	0.001	0.001	0.001	0.001	0.000	0.000	0.000	0.000
31	0.003	0.002	0.002	0.002	0.001	0.001	0.001	0.000	0.000	0.000	0.000
32	0.003	0.003	0.002	0.002	0.001	0.001	0.001	0.001	0.000	0.000	0.000
33	0.004	0.003	0.002	0.002	0.001	0.001	0.001	0.001	0.000	0.000	0.000
34	0.004	0.003	0.002	0.002	0.001	0.001	0.001	0.001	0.000	0.000	0.000
35	0.004	0.003	0.003	0.002	0.002	0.001	0.001	0.001	0.000	0.000	0.000
36	0.004	0.003	0.003	0.002	0.002	0.001	0.001	0.001	0.000	0.000	0.000
37	0.005	0.004	0.003	0.002	0.002	0.001	0.001	0.001	0.001	0.000	0.000
38	0.005	0.004	0.003	0.002	0.002	0.001	0.001	0.001	0.001	0.000	0.000
39	0.005	0.004	0.003	0.003	0.002	0.001	0.001	0.001	0.001	0.000	0.000
40	0.005	0.004	0.003	0.003	0.002	0.002	0.001	0.001	0.001	0.000	0.000
41	0.006	0.005	0.004	0.003	0.002	0.002	0.001	0.001	0.001	0.000	0.000
42	0.006	0.005	0.004	0.003	0.002	0.002	0.001	0.001	0.001	0.000	0.000
43	0.007	0.005	0.004	0.003	0.003	0.002	0.001	0.001	0.001	0.001	0.000
44	0.007	0.006	0.004	0.003	0.003	0.002	0.001	0.001	0.001	0.001	0.000
45	0.008	0.006	0.005	0.004	0.003	0.002	0.002	0.001	0.001	0.001	0.000
46	0.008	0.006	0.005	0.004	0.003	0.002	0.002	0.001	0.001	0.001	0.000
47	0.009	0.007	0.005	0.004	0.003	0.002	0.002	0.001	0.001	0.001	0.000
48	0.009	0.007	0.006	0.005	0.003	0.003	0.002	0.001	0.001	0.001	0.000
49	0.010	0.008	0.006	0.005	0.004	0.003	0.002	0.001	0.001	0.001	0.000

\*age of spouse at date of benefit commencement

Mortality Table: Blended Beneficiary Mortality  
Interest Rate: 6.90%, with 1.60% COLA

**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)  
Actuarial Equivalency Factors Effective January 1, 2024**

**Table 22: Conversion to Monthly Spouse Benefit at Commencement Date**  
(Factor Multiplied by Benefit to Spouse at Later of Death or Early Retirement Age)

Spouse Age*	Age of Spouse at Later of Member's Date of Death or Earliest Early Retirement Age														
	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
50	12.248	11.436	10.678	9.968	9.305	8.685	8.106	7.564	7.058	6.585	6.143	5.729	5.343	4.982	4.644
51	13.250	12.372	11.551	10.783	10.066	9.395	8.768	8.182	7.635	7.123	6.644	6.197	5.779	5.388	5.023
52	14.343	13.393	12.504	11.673	10.896	10.170	9.492	8.857	8.264	7.710	7.192	6.708	6.255	5.832	5.437
53	15.539	14.509	13.546	12.646	11.804	11.018	10.282	9.595	8.952	8.352	7.791	7.266	6.776	6.317	5.889
54	16.848	15.731	14.686	13.710	12.798	11.945	11.147	10.402	9.706	9.054	8.446	7.877	7.345	6.848	6.384
55	18.282	17.069	15.936	14.877	13.887	12.961	12.096	11.287	10.531	9.824	9.164	8.546	7.969	7.430	6.926
56	19.855	18.539	17.308	16.157	15.081	14.076	13.136	12.257	11.436	10.669	9.951	9.281	8.654	8.068	7.521
57	21.585	20.154	18.815	17.564	16.395	15.301	14.279	13.324	12.432	11.597	10.817	10.088	9.407	8.770	8.175
58	23.490	21.932	20.475	19.113	17.840	16.651	15.538	14.499	13.527	12.619	11.770	10.977	10.235	9.542	8.895
59	25.590	23.892	22.305	20.822	19.435	18.139	16.927	15.794	14.736	13.746	12.821	11.957	11.149	10.394	9.688
60	27.911	26.059	24.328	22.710	21.197	19.783	18.461	17.226	16.071	14.991	13.983	13.040	12.158	11.335	10.565
61	30.481	28.459	26.568	24.800	23.148	21.603	20.160	18.810	17.549	16.370	15.268	14.239	13.276	12.377	11.536
62	33.333	31.121	29.053	27.120	25.312	23.623	22.044	20.569	19.189	17.900	16.695	15.569	14.516	13.532	12.613
63	36.505	34.082	31.817	29.699	27.720	25.870	24.140	22.524	21.013	19.601	18.281	17.048	15.895	14.818	13.811
64	40.042	37.384	34.899	32.576	30.404	28.375	26.478	24.704	23.047	21.498	20.050	18.697	17.432	16.250	15.146
65	43.996	41.075	38.344	35.792	33.406	31.175	29.091	27.142	25.321	23.619	22.028	20.541	19.151	17.852	16.639
66	48.430	45.214	42.208	39.397	36.770	34.315	32.020	29.875	27.870	25.996	24.245	22.608	21.078	19.648	18.312
67	53.416	49.869	46.553	43.453	40.555	37.846	35.315	32.948	30.737	28.670	26.738	24.932	23.245	21.668	20.194
68	59.043	55.122	51.456	48.028	44.825	41.831	39.032	36.416	33.972	31.687	29.551	27.555	25.689	23.946	22.317
69	65.415	61.070	57.007	53.210	49.660	46.343	43.242	40.343	37.634	35.102	32.736	30.524	28.457	26.526	24.720
70	72.657	67.830	63.317	59.099	55.156	51.470	48.026	44.806	41.797	38.984	36.356	33.899	31.603	29.457	27.452
71	80.922	75.545	70.518	65.820	61.427	57.322	53.485	49.899	46.547	43.414	40.486	37.750	35.192	32.802	30.569
72	90.394	84.387	78.771	73.522	68.615	64.028	59.742	55.735	51.991	48.491	45.220	42.163	39.306	36.636	34.140
73	101.300	94.567	88.273	82.389	76.890	71.749	66.945	62.454	58.258	54.335	50.669	47.243	44.041	41.048	38.252
74	113.919	106.346	99.267	92.649	86.464	80.682	75.279	70.228	65.508	61.097	56.974	53.120	49.519	46.153	43.008
75	128.597	120.047	112.055	104.584	97.600	91.073	84.972	79.271	73.942	68.961	64.307	59.956	55.891	52.091	48.540
76	145.769	136.076	127.015	118.545	110.628	103.228	96.312	89.848	83.807	78.161	72.884	67.953	63.344	59.036	55.011
77	165.982	154.943	144.624	134.978	125.962	117.535	109.659	102.298	95.419	88.989	82.980	77.364	72.115	67.210	62.627
78	189.931	177.298	165.488	154.449	144.131	134.487	125.473	117.049	109.176	101.818	94.941	88.514	82.507	76.894	71.648
79	218.512	203.976	190.387	177.685	165.812	154.715	144.344	134.651	125.592	117.126	109.213	101.818	94.907	88.449	82.414
80	252.888	236.062	220.333	205.630	191.888	179.044	167.040	155.821	145.336	135.536	126.378	117.818	109.819	102.344	95.359
81	294.582	274.979	256.654	239.525	223.515	208.551	194.566	181.496	169.280	157.864	147.195	137.223	127.904	119.196	111.058
82	345.617	322.614	301.111	281.011	262.225	244.667	228.257	212.920	198.587	185.191	172.672	160.972	150.038	139.819	130.271
83	408.696	381.490	356.059	332.288	310.069	289.304	269.896	251.759	234.807	218.965	204.159	190.322	177.391	165.307	154.015
84	487.482	455.027	424.689	396.331	369.826	345.054	321.902	300.265	280.043	261.145	243.483	226.977	211.552	197.137	183.667

\*age of spouse at date of benefit commencement

Mortality Table: Blended Beneficiary Mortality  
Interest Rate: 6.90%, with 1.60% COLA

**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)  
Actuarial Equivalency Factors Effective January 1, 2024**

**Table 22: Conversion to Monthly Spouse Benefit at Commencement Date**  
(Factor Multiplied by Benefit to Spouse at Later of Death or Early Retirement Age)

Spouse Age*	Age of Spouse at Later of Member's Date of Death or Earliest Early Retirement Age														
	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44
50	4.329	4.034	3.759	3.501	3.261	3.036	2.826	2.630	2.447	2.276	2.116	1.967	1.828	1.698	1.576
51	4.682	4.363	4.065	3.787	3.526	3.283	3.056	2.844	2.646	2.461	2.288	2.127	1.976	1.835	1.704
52	5.067	4.722	4.400	4.098	3.817	3.553	3.308	3.078	2.864	2.663	2.476	2.301	2.138	1.986	1.844
53	5.489	5.115	4.765	4.439	4.134	3.849	3.582	3.333	3.101	2.884	2.681	2.492	2.315	2.150	1.996
54	5.950	5.544	5.165	4.811	4.480	4.171	3.883	3.613	3.361	3.126	2.906	2.701	2.509	2.330	2.163
55	6.455	6.015	5.604	5.220	4.861	4.525	4.212	3.919	3.646	3.390	3.152	2.929	2.721	2.527	2.346
56	7.010	6.531	6.085	5.667	5.278	4.913	4.573	4.255	3.958	3.681	3.422	3.180	2.954	2.743	2.546
57	7.619	7.099	6.613	6.160	5.736	5.340	4.970	4.624	4.301	4.000	3.718	3.455	3.210	2.981	2.767
58	8.289	7.724	7.195	6.701	6.240	5.809	5.406	5.030	4.679	4.351	4.044	3.758	3.491	3.242	3.009
59	9.029	8.413	7.837	7.299	6.796	6.327	5.888	5.478	5.095	4.738	4.404	4.092	3.801	3.530	3.276
60	9.846	9.174	8.546	7.959	7.411	6.898	6.420	5.973	5.555	5.166	4.801	4.461	4.144	3.848	3.571
61	10.750	10.016	9.330	8.689	8.091	7.531	7.009	6.521	6.065	5.639	5.241	4.870	4.523	4.200	3.898
62	11.754	10.951	10.201	9.500	8.845	8.233	7.662	7.128	6.629	6.164	5.729	5.323	4.944	4.590	4.260
63	12.870	11.990	11.169	10.401	9.684	9.014	8.388	7.803	7.257	6.747	6.271	5.827	5.411	5.024	4.662
64	14.114	13.149	12.248	11.406	10.619	9.884	9.198	8.556	7.957	7.398	6.876	6.388	5.933	5.507	5.111
65	15.504	14.444	13.454	12.529	11.664	10.857	10.102	9.398	8.740	8.125	7.551	7.015	6.515	6.048	5.612
66	17.063	15.897	14.806	13.788	12.836	11.947	11.117	10.341	9.617	8.940	8.308	7.718	7.168	6.653	6.173
67	18.816	17.529	16.327	15.203	14.154	13.173	12.257	11.402	10.602	9.856	9.159	8.509	7.901	7.334	6.805
68	20.794	19.372	18.042	16.800	15.640	14.556	13.544	12.598	11.715	10.890	10.119	9.400	8.729	8.102	7.517
69	23.033	21.457	19.984	18.608	17.323	16.122	15.000	13.952	12.973	12.059	11.206	10.409	9.665	8.971	8.323
70	25.578	23.827	22.191	20.663	19.235	17.901	16.655	15.491	14.404	13.389	12.441	11.556	10.729	9.958	9.238
71	28.482	26.531	24.709	23.007	21.416	19.930	18.543	17.246	16.035	14.905	13.849	12.863	11.943	11.084	10.282
72	31.809	29.630	27.594	25.693	23.916	22.256	20.706	19.257	17.905	16.642	15.463	14.361	13.334	12.374	11.478
73	35.639	33.197	30.916	28.784	26.793	24.933	23.195	21.572	20.057	18.641	17.320	16.086	14.934	13.858	12.855
74	40.070	37.323	34.758	32.361	30.121	28.029	26.075	24.250	22.545	20.954	19.467	18.080	16.784	15.575	14.446
75	45.223	42.122	39.226	36.520	33.992	31.630	29.424	27.364	25.439	23.642	21.965	20.398	18.936	17.571	16.297
76	51.250	47.736	44.452	41.384	38.518	35.841	33.341	31.005	28.824	26.787	24.885	23.109	21.452	19.905	18.461
77	58.344	54.342	50.602	47.109	43.846	40.797	37.950	35.290	32.806	30.487	28.321	26.299	24.412	22.650	21.006
78	66.747	62.167	57.888	53.891	50.156	46.667	43.409	40.366	37.523	34.869	32.391	30.077	27.918	25.902	24.020
79	76.774	71.505	66.582	61.982	57.685	53.671	49.922	46.421	43.151	40.097	37.246	34.584	32.100	29.780	27.616
80	88.832	82.733	77.035	71.711	66.738	62.093	57.754	53.701	49.917	46.383	43.083	40.002	37.127	34.443	31.938
81	103.454	96.349	89.711	83.510	77.716	72.305	67.250	62.529	58.121	54.004	50.160	46.572	43.222	40.095	37.178
82	121.349	113.013	105.224	97.948	91.150	84.801	78.870	73.331	68.159	63.329	58.819	54.609	50.679	47.011	43.588
83	143.464	133.605	124.394	115.789	107.751	100.242	93.229	86.678	80.562	74.850	69.517	64.538	59.891	55.554	51.506
84	171.080	159.320	148.333	138.068	128.480	119.523	111.157	103.344	96.048	89.235	82.874	76.935	71.392	66.219	61.391

\*age of spouse at date of benefit commencement

Mortality Table: Blended Beneficiary Mortality  
Interest Rate: 6.90%, with 1.60% COLA

**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)  
Actuarial Equivalency Factors Effective January 1, 2024**

**Table 22: Conversion to Monthly Spouse Benefit at Commencement Date**  
(Factor Multiplied by Benefit to Spouse at Later of Death or Early Retirement Age)

Spouse Age*	Age of Spouse at Later of Member's Date of Death or Earliest Early Retirement Age														
	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59
50	1.463	1.357	1.258	1.166	1.080	1.000	0.925	0.856	0.791	0.730	0.674	0.622	0.573	0.527	0.485
51	1.581	1.467	1.360	1.261	1.168	1.081	1.000	0.925	0.854	0.789	0.728	0.672	0.619	0.570	0.524
52	1.711	1.587	1.472	1.364	1.263	1.169	1.082	1.000	0.924	0.853	0.787	0.726	0.669	0.616	0.567
53	1.853	1.718	1.593	1.476	1.367	1.266	1.171	1.082	1.000	0.923	0.852	0.786	0.724	0.666	0.613
54	2.007	1.862	1.726	1.599	1.481	1.371	1.268	1.172	1.083	1.000	0.923	0.851	0.784	0.721	0.663
55	2.177	2.019	1.872	1.734	1.606	1.486	1.375	1.271	1.174	1.084	1.000	0.922	0.849	0.782	0.719
56	2.363	2.191	2.031	1.882	1.743	1.613	1.492	1.379	1.274	1.176	1.085	1.000	0.921	0.848	0.780
57	2.567	2.381	2.207	2.044	1.893	1.752	1.620	1.497	1.383	1.277	1.178	1.086	1.000	0.920	0.846
58	2.792	2.589	2.400	2.223	2.058	1.905	1.761	1.628	1.504	1.388	1.280	1.180	1.087	1.000	0.919
59	3.039	2.818	2.612	2.420	2.240	2.073	1.917	1.772	1.636	1.510	1.393	1.284	1.182	1.088	1.000
60	3.313	3.072	2.847	2.637	2.442	2.259	2.089	1.930	1.783	1.645	1.517	1.398	1.288	1.185	1.089
61	3.616	3.352	3.107	2.878	2.664	2.465	2.279	2.106	1.945	1.795	1.655	1.525	1.404	1.292	1.187
62	3.951	3.664	3.395	3.145	2.911	2.693	2.490	2.301	2.124	1.960	1.808	1.666	1.533	1.411	1.296
63	4.324	4.009	3.715	3.441	3.185	2.947	2.724	2.517	2.324	2.144	1.977	1.822	1.677	1.542	1.417
64	4.740	4.395	4.072	3.771	3.491	3.229	2.985	2.758	2.546	2.349	2.166	1.995	1.837	1.689	1.552
65	5.205	4.825	4.471	4.140	3.832	3.545	3.277	3.027	2.794	2.578	2.377	2.189	2.015	1.853	1.703
66	5.726	5.308	4.918	4.554	4.215	3.898	3.603	3.328	3.073	2.834	2.613	2.407	2.215	2.037	1.871
67	6.311	5.850	5.420	5.019	4.644	4.295	3.970	3.667	3.385	3.122	2.878	2.651	2.439	2.243	2.060
68	6.971	6.461	5.986	5.543	5.129	4.743	4.384	4.049	3.737	3.447	3.177	2.926	2.692	2.475	2.274
69	7.718	7.153	6.627	6.136	5.677	5.250	4.852	4.481	4.136	3.814	3.515	3.237	2.978	2.738	2.515
70	8.566	7.939	7.355	6.809	6.300	5.826	5.383	4.971	4.588	4.231	3.899	3.590	3.303	3.036	2.788
71	9.534	8.836	8.185	7.577	7.010	6.482	5.989	5.531	5.104	4.706	4.337	3.993	3.673	3.376	3.100
72	10.643	9.863	9.135	8.457	7.824	7.234	6.683	6.171	5.694	5.251	4.838	4.454	4.097	3.765	3.457
73	11.918	11.044	10.229	9.469	8.759	8.098	7.482	6.908	6.373	5.876	5.414	4.984	4.584	4.212	3.867
74	13.393	12.411	11.494	10.639	9.841	9.098	8.405	7.759	7.159	6.600	6.080	5.596	5.147	4.729	4.341
75	15.108	13.999	12.964	11.999	11.099	10.260	9.477	8.749	8.071	7.440	6.854	6.308	5.801	5.329	4.892
76	17.113	15.856	14.683	13.589	12.569	11.618	10.731	9.906	9.137	8.423	7.758	7.140	6.565	6.031	5.535
77	19.472	18.040	16.705	15.459	14.298	13.215	12.206	11.266	10.391	9.578	8.821	8.117	7.463	6.855	6.291
78	22.265	20.627	19.099	17.674	16.345	15.106	13.951	12.876	11.875	10.945	10.079	9.274	8.526	7.831	7.185
79	25.596	23.712	21.954	20.315	18.786	17.361	16.033	14.796	13.645	12.575	11.579	10.653	9.793	8.994	8.251
80	29.601	27.420	25.386	23.489	21.720	20.071	18.534	17.103	15.771	14.533	13.381	12.310	11.315	10.390	9.531
81	34.455	31.915	29.546	27.336	25.276	23.355	21.565	19.898	18.348	16.905	15.564	14.317	13.158	12.082	11.082
82	40.394	37.414	34.634	32.042	29.625	27.372	25.272	23.317	21.498	19.806	18.233	16.771	15.412	14.150	12.977
83	47.729	44.206	40.920	37.855	34.997	32.332	29.850	27.539	25.388	23.388	21.529	19.800	18.194	16.702	15.316
84	56.886	52.684	48.765	45.109	41.701	38.523	35.563	32.806	30.242	27.858	25.640	23.580	21.664	19.885	18.234

\*age of spouse at date of benefit commencement

Mortality Table: Blended Beneficiary Mortality  
Interest Rate: 6.90%, with 1.60% COLA

**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)  
Actuarial Equivalency Factors Effective January 1, 2024**

**Table 22: Conversion to Monthly Spouse Benefit at Commencement Date**  
(Factor Multiplied by Benefit to Spouse at Later of Death or Early Retirement Age)

Spouse Age*	Age of Spouse at Later of Member's Date of Death or Earliest Early Retirement Age														
	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74
50	0.446	0.410	0.376	0.344	0.315	0.288	0.263	0.239	0.218	0.198	0.179	0.162	0.146	0.132	0.118
51	0.482	0.442	0.406	0.372	0.340	0.311	0.283	0.258	0.235	0.213	0.193	0.175	0.158	0.142	0.127
52	0.521	0.478	0.438	0.402	0.367	0.336	0.306	0.279	0.254	0.230	0.209	0.189	0.170	0.153	0.137
53	0.563	0.517	0.474	0.434	0.397	0.363	0.331	0.301	0.274	0.249	0.225	0.204	0.184	0.165	0.148
54	0.610	0.560	0.513	0.470	0.430	0.393	0.358	0.326	0.296	0.269	0.244	0.220	0.199	0.179	0.160
55	0.660	0.606	0.556	0.509	0.465	0.425	0.388	0.353	0.321	0.291	0.264	0.238	0.215	0.193	0.173
56	0.716	0.657	0.602	0.552	0.504	0.461	0.420	0.382	0.348	0.315	0.285	0.258	0.232	0.209	0.187
57	0.777	0.713	0.654	0.598	0.547	0.500	0.456	0.415	0.377	0.342	0.309	0.279	0.252	0.226	0.203
58	0.844	0.775	0.710	0.650	0.594	0.543	0.495	0.450	0.409	0.371	0.336	0.303	0.273	0.245	0.220
59	0.918	0.843	0.772	0.707	0.646	0.590	0.538	0.489	0.444	0.403	0.365	0.329	0.297	0.266	0.239
60	<b>1.000</b>	0.917	0.841	0.769	0.703	0.642	0.585	0.532	0.483	0.438	0.397	0.358	0.322	0.290	0.259
61	1.090	<b>1.000</b>	0.916	0.838	0.766	0.699	0.637	0.580	0.526	0.477	0.432	0.390	0.351	0.315	0.282
62	1.190	1.092	<b>1.000</b>	0.915	0.836	0.763	0.695	0.632	0.574	0.520	0.471	0.425	0.382	0.343	0.307
63	1.301	1.193	1.093	<b>1.000</b>	0.914	0.834	0.759	0.691	0.627	0.568	0.514	0.464	0.417	0.375	0.335
64	1.425	1.306	1.197	1.095	<b>1.000</b>	0.912	0.831	0.756	0.686	0.621	0.562	0.507	0.456	0.409	0.366
65	1.563	1.433	1.312	1.200	1.096	<b>1.000</b>	0.911	0.828	0.752	0.681	0.615	0.555	0.499	0.448	0.401
66	1.717	1.574	1.442	1.318	1.204	1.098	<b>1.000</b>	0.909	0.825	0.747	0.675	0.609	0.548	0.491	0.440
67	1.891	1.733	1.587	1.451	1.325	1.208	1.100	<b>1.000</b>	0.907	0.822	0.742	0.669	0.602	0.540	0.483
68	2.086	1.912	1.750	1.600	1.461	1.332	1.213	1.102	<b>1.000</b>	0.905	0.818	0.737	0.663	0.595	0.532
69	2.307	2.114	1.935	1.769	1.615	1.473	1.340	1.218	1.105	<b>1.000</b>	0.903	0.814	0.732	0.656	0.587
70	2.558	2.344	2.145	1.961	1.790	1.632	1.485	1.349	1.223	1.107	<b>1.000</b>	0.901	0.810	0.726	0.649
71	2.844	2.605	2.384	2.179	1.989	1.813	1.649	1.498	1.359	1.229	1.110	<b>1.000</b>	0.899	0.805	0.720
72	3.170	2.905	2.658	2.429	2.217	2.020	1.838	1.669	1.513	1.369	1.236	1.113	<b>1.000</b>	0.896	0.800
73	3.546	3.249	2.972	2.716	2.478	2.258	2.054	1.865	1.691	1.529	1.380	1.243	1.116	<b>1.000</b>	0.893
74	3.981	3.646	3.335	3.047	2.780	2.533	2.304	2.091	1.895	1.714	1.547	1.393	1.251	1.120	<b>1.000</b>
75	4.485	4.107	3.757	3.432	3.131	2.852	2.593	2.354	2.133	1.929	1.740	1.566	1.406	1.259	1.124
76	5.074	4.646	4.250	3.881	3.540	3.224	2.932	2.661	2.410	2.179	1.966	1.769	1.588	1.421	1.268
77	5.766	5.280	4.828	4.409	4.021	3.662	3.329	3.021	2.736	2.473	2.230	2.007	1.801	1.612	1.438
78	6.586	6.029	5.513	5.034	4.590	4.179	3.798	3.446	3.121	2.820	2.543	2.288	2.053	1.836	1.638
79	7.562	6.922	6.328	5.778	5.268	4.795	4.358	3.953	3.579	3.234	2.915	2.622	2.352	2.104	1.876
80	8.734	7.994	7.307	6.671	6.081	5.535	5.029	4.561	4.129	3.730	3.362	3.023	2.711	2.424	2.161
81	10.154	9.292	8.493	7.752	7.066	6.430	5.841	5.297	4.794	4.330	3.902	3.508	3.145	2.812	2.506
82	11.889	10.879	9.942	9.073	8.268	7.523	6.834	6.196	5.607	5.063	4.561	4.099	3.674	3.284	2.926
83	14.030	12.836	11.729	10.703	9.752	8.872	8.057	7.304	6.608	5.966	5.374	4.829	4.327	3.866	3.444
84	16.700	15.278	13.958	12.735	11.602	10.553	9.582	8.685	7.856	7.091	6.386	5.737	5.139	4.591	4.088

\*age of spouse at date of benefit commencement

Mortality Table: Blended Beneficiary Mortality  
Interest Rate: 6.90%, with 1.60% COLA

**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)  
Actuarial Equivalency Factors Effective January 1, 2024**

**Table 22: Conversion to Monthly Spouse Benefit at Commencement Date**  
(Factor Multiplied by Benefit to Spouse at Later of Death or Early Retirement Age)

Spouse Age*	Age of Spouse at Later of Member's Date of Death or Earliest Early Retirement Age														
	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89
50	0.106	0.094	0.084	0.074	0.066	0.058	0.050	0.044	0.038	0.032	0.028	0.023	0.019	0.016	0.013
51	0.114	0.102	0.090	0.080	0.071	0.062	0.054	0.047	0.041	0.035	0.030	0.025	0.021	0.017	0.014
52	0.123	0.110	0.097	0.086	0.076	0.067	0.058	0.051	0.044	0.037	0.032	0.027	0.022	0.019	0.015
53	0.133	0.118	0.105	0.093	0.082	0.072	0.063	0.055	0.047	0.040	0.034	0.029	0.024	0.020	0.016
54	0.143	0.128	0.113	0.100	0.088	0.078	0.068	0.059	0.051	0.043	0.037	0.031	0.026	0.021	0.017
55	0.155	0.138	0.123	0.108	0.096	0.084	0.073	0.063	0.055	0.047	0.040	0.033	0.028	0.023	0.019
56	0.167	0.149	0.133	0.117	0.103	0.090	0.079	0.068	0.059	0.050	0.043	0.036	0.030	0.025	0.020
57	0.181	0.162	0.143	0.127	0.112	0.098	0.085	0.074	0.064	0.054	0.046	0.039	0.032	0.027	0.022
58	0.197	0.175	0.155	0.137	0.121	0.106	0.092	0.080	0.069	0.059	0.050	0.042	0.035	0.029	0.024
59	0.213	0.190	0.168	0.149	0.131	0.115	0.100	0.087	0.075	0.064	0.054	0.045	0.038	0.031	0.025
60	0.232	0.206	0.183	0.162	0.142	0.124	0.108	0.094	0.081	0.069	0.058	0.049	0.041	0.034	0.027
61	0.252	0.224	0.199	0.176	0.154	0.135	0.118	0.102	0.088	0.075	0.063	0.053	0.044	0.036	0.030
62	0.274	0.244	0.216	0.191	0.168	0.147	0.128	0.111	0.095	0.081	0.069	0.058	0.048	0.040	0.032
63	0.299	0.266	0.236	0.208	0.183	0.160	0.139	0.120	0.104	0.088	0.075	0.063	0.052	0.043	0.035
64	0.327	0.291	0.258	0.227	0.200	0.175	0.152	0.131	0.113	0.096	0.081	0.068	0.057	0.047	0.038
65	0.358	0.318	0.282	0.249	0.218	0.191	0.166	0.143	0.123	0.105	0.089	0.074	0.062	0.051	0.041
66	0.392	0.348	0.309	0.272	0.239	0.209	0.181	0.157	0.135	0.115	0.097	0.081	0.067	0.055	0.045
67	0.431	0.383	0.339	0.299	0.262	0.229	0.199	0.172	0.147	0.126	0.106	0.089	0.074	0.061	0.049
68	0.474	0.421	0.373	0.328	0.288	0.252	0.219	0.189	0.162	0.138	0.116	0.097	0.081	0.066	0.054
69	0.523	0.464	0.411	0.362	0.317	0.277	0.241	0.208	0.178	0.152	0.128	0.107	0.089	0.073	0.059
70	0.578	0.513	0.454	0.400	0.351	0.306	0.266	0.229	0.196	0.167	0.141	0.118	0.098	0.080	0.065
71	0.641	0.569	0.503	0.443	0.388	0.339	0.294	0.253	0.217	0.185	0.156	0.130	0.108	0.088	0.071
72	0.713	0.632	0.559	0.492	0.431	0.376	0.326	0.281	0.241	0.205	0.173	0.144	0.119	0.098	0.079
73	0.795	0.705	0.623	0.549	0.481	0.419	0.363	0.313	0.268	0.228	0.192	0.160	0.132	0.108	0.088
74	0.890	0.789	0.697	0.613	0.537	0.468	0.406	0.349	0.299	0.254	0.214	0.178	0.148	0.121	0.098
75	<b>1.000</b>	0.887	0.783	0.689	0.603	0.525	0.455	0.392	0.335	0.284	0.239	0.200	0.165	0.135	0.109
76	1.128	<b>1.000</b>	0.883	0.776	0.679	0.592	0.512	0.441	0.377	0.320	0.269	0.224	0.185	0.151	0.122
77	1.279	1.133	<b>1.000</b>	0.879	0.769	0.669	0.579	0.498	0.426	0.361	0.304	0.253	0.209	0.171	0.138
78	1.456	1.290	1.138	<b>1.000</b>	0.875	0.761	0.658	0.566	0.483	0.410	0.345	0.287	0.237	0.193	0.156
79	1.667	1.476	1.302	1.144	<b>1.000</b>	0.870	0.752	0.647	0.552	0.468	0.393	0.327	0.270	0.220	0.177
80	1.920	1.700	1.499	1.316	1.150	<b>1.000</b>	0.865	0.743	0.634	0.537	0.451	0.375	0.309	0.252	0.203
81	2.226	1.970	1.737	1.524	1.332	1.157	<b>1.000</b>	0.859	0.732	0.620	0.520	0.433	0.357	0.290	0.234
82	2.598	2.299	2.026	1.778	1.552	1.349	1.165	<b>1.000</b>	0.853	0.721	0.605	0.503	0.414	0.337	0.271
83	3.057	2.704	2.382	2.090	1.824	1.584	1.368	1.174	<b>1.000</b>	0.846	0.709	0.589	0.485	0.395	0.317
84	3.628	3.208	2.825	2.477	2.162	1.877	1.620	1.389	1.183	<b>1.000</b>	0.838	0.696	0.572	0.465	0.374

\*age of spouse at date of benefit commencement

Mortality Table: Blended Beneficiary Mortality  
Interest Rate: 6.90%, with 1.60% COLA

**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)  
Actuarial Equivalency Factors Effective January 1, 2024**

**Table 22: Conversion to Monthly Spouse Benefit at Commencement Date**  
(Factor Multiplied by Benefit to Spouse at Later of Death or Early Retirement Age)

Spouse Age*	Age of Spouse at Later of Member's Date of Death or Earliest Early Retirement Age										
	90	91	92	93	94	95	96	97	98	99	100
50	0.011	0.009	0.007	0.005	0.004	0.003	0.002	0.002	0.001	0.001	0.001
51	0.011	0.009	0.007	0.006	0.004	0.003	0.002	0.002	0.001	0.001	0.001
52	0.012	0.010	0.008	0.006	0.005	0.003	0.002	0.002	0.001	0.001	0.001
53	0.013	0.010	0.008	0.006	0.005	0.004	0.003	0.002	0.001	0.001	0.001
54	0.014	0.011	0.009	0.007	0.005	0.004	0.003	0.002	0.001	0.001	0.001
55	0.015	0.012	0.009	0.007	0.006	0.004	0.003	0.002	0.002	0.001	0.001
56	0.016	0.013	0.010	0.008	0.006	0.004	0.003	0.002	0.002	0.001	0.001
57	0.018	0.014	0.011	0.008	0.006	0.005	0.004	0.003	0.002	0.001	0.001
58	0.019	0.015	0.012	0.009	0.007	0.005	0.004	0.003	0.002	0.001	0.001
59	0.020	0.016	0.013	0.010	0.007	0.006	0.004	0.003	0.002	0.001	0.001
60	0.022	0.018	0.014	0.011	0.008	0.006	0.004	0.003	0.002	0.002	0.001
61	0.024	0.019	0.015	0.011	0.009	0.006	0.005	0.003	0.002	0.002	0.001
62	0.026	0.021	0.016	0.012	0.009	0.007	0.005	0.004	0.003	0.002	0.001
63	0.028	0.022	0.017	0.013	0.010	0.008	0.005	0.004	0.003	0.002	0.001
64	0.030	0.024	0.019	0.014	0.011	0.008	0.006	0.004	0.003	0.002	0.001
65	0.033	0.026	0.020	0.016	0.012	0.009	0.006	0.005	0.003	0.002	0.001
66	0.036	0.029	0.022	0.017	0.013	0.010	0.007	0.005	0.003	0.002	0.002
67	0.039	0.031	0.024	0.019	0.014	0.010	0.008	0.005	0.004	0.003	0.002
68	0.043	0.034	0.027	0.020	0.015	0.011	0.008	0.006	0.004	0.003	0.002
69	0.047	0.037	0.029	0.022	0.017	0.012	0.009	0.006	0.004	0.003	0.002
70	0.052	0.041	0.032	0.024	0.018	0.014	0.010	0.007	0.005	0.003	0.002
71	0.057	0.045	0.035	0.027	0.020	0.015	0.011	0.008	0.005	0.004	0.002
72	0.063	0.050	0.039	0.030	0.022	0.016	0.012	0.008	0.006	0.004	0.003
73	0.070	0.055	0.043	0.033	0.025	0.018	0.013	0.009	0.007	0.004	0.003
74	0.078	0.061	0.048	0.036	0.027	0.020	0.015	0.010	0.007	0.005	0.003
75	0.087	0.068	0.053	0.041	0.030	0.022	0.016	0.012	0.008	0.005	0.004
76	0.097	0.077	0.059	0.045	0.034	0.025	0.018	0.013	0.009	0.006	0.004
77	0.110	0.086	0.067	0.051	0.038	0.028	0.020	0.014	0.010	0.007	0.005
78	0.124	0.098	0.075	0.058	0.043	0.032	0.023	0.016	0.011	0.008	0.005
79	0.141	0.111	0.086	0.065	0.049	0.036	0.026	0.018	0.013	0.009	0.006
80	0.161	0.127	0.098	0.075	0.056	0.041	0.030	0.021	0.014	0.010	0.007
81	0.186	0.146	0.113	0.086	0.064	0.047	0.034	0.024	0.017	0.011	0.007
82	0.216	0.169	0.130	0.099	0.074	0.054	0.039	0.028	0.019	0.013	0.009
83	0.252	0.197	0.152	0.116	0.086	0.063	0.046	0.032	0.022	0.015	0.010
84	0.297	0.232	0.179	0.136	0.101	0.074	0.053	0.038	0.026	0.018	0.012

\*age of spouse at date of benefit commencement

Mortality Table: Blended Beneficiary Mortality  
Interest Rate: 6.90%, with 1.60% COLA

**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)  
Actuarial Equivalency Factors Effective January 1, 2024**

**Table 22: Conversion to Monthly Spouse Benefit at Commencement Date**  
(Factor Multiplied by Benefit to Spouse at Later of Death or Early Retirement Age)

Spouse Age*	Age of Spouse at Later of Member's Date of Death or Earliest Early Retirement Age														
	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
85	586.989	547.903	511.366	477.215	445.295	415.462	387.581	361.524	337.172	314.413	293.144	273.266	254.691	237.332	221.110
86	714.159	666.597	622.138	580.582	541.741	505.440	471.514	439.808	410.177	382.484	356.604	332.418	309.815	288.693	268.956
87	878.732	820.201	765.488	714.348	666.549	621.877	580.128	541.110	504.646	470.568	438.721	408.958	381.144	355.152	330.864
88	1094.554	1021.636	953.474	889.763	830.217	774.565	722.555	673.949	628.524	586.071	546.397	509.320	474.671	442.293	412.037
89	1381.576	1289.521	1203.472	1123.042	1047.870	977.615	911.958	850.599	793.255	739.664	689.581	642.776	599.037	558.164	519.971
90	1768.969	1651.083	1540.889	1437.891	1341.626	1251.660	1167.581	1089.006	1015.574	946.948	882.815	822.880	766.871	714.532	665.625
91	2300.041	2146.738	2003.439	1869.499	1744.316	1627.324	1517.989	1415.811	1320.322	1231.083	1147.686	1069.750	996.918	928.860	865.265
92	3040.102	2837.439	2648.001	2470.938	2305.451	2150.794	2006.260	1871.188	1744.959	1626.993	1516.749	1413.725	1317.449	1227.483	1143.418
93	4089.326	3816.672	3561.814	3323.604	3100.970	2892.906	2698.464	2516.751	2346.935	2188.237	2039.929	1901.332	1771.815	1650.788	1537.698
94	5604.145	5230.428	4881.105	4554.603	4249.453	3964.275	3697.769	3448.712	3215.961	2998.450	2795.180	2605.222	2427.709	2261.832	2106.836
95	7833.386	7310.922	6822.564	6366.113	5939.515	5540.840	5168.270	4820.096	4494.721	4190.650	3906.490	3640.940	3392.789	3160.906	2944.234
96	11180.502	10434.667	9737.524	9085.933	8476.963	7907.857	7376.019	6879.009	6414.545	5980.495	5574.870	5195.812	4841.591	4510.593	4201.311
97	16313.229	15224.810	14207.454	13256.581	12367.910	11537.419	10761.317	10036.045	9358.269	8724.879	8132.971	7579.835	7062.943	6579.941	6128.631
98	24360.842	22735.204	21215.716	19795.531	18468.258	17227.889	16068.761	14985.553	13973.288	13027.321	12143.309	11317.207	10545.240	9823.891	9149.875
99	37276.325	34788.382	32462.909	30289.428	28258.156	26359.897	24585.979	22928.260	21379.119	19931.445	18578.594	17314.371	16133.000	15029.097	13997.634
100	58517.299	54610.978	50959.775	47547.236	44357.999	41377.622	38592.488	35989.807	33557.613	31284.736	29160.744	27175.909	25321.161	23588.046	21968.671

\*age of spouse at date of benefit commencement

Mortality Table: Blended Beneficiary Mortality  
Interest Rate: 6.90%, with 1.60% COLA



**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)  
Actuarial Equivalency Factors Effective January 1, 2024**

**Table 22: Conversion to Monthly Spouse Benefit at Commencement Date**  
(Factor Multiplied by Benefit to Spouse at Later of Death or Early Retirement Age)

Spouse Age*	Age of Spouse at Later of Member's Date of Death or Earliest Early Retirement Age														
	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44
85	205.954	191.792	178.561	166.200	154.654	143.868	133.794	124.386	115.600	107.396	99.736	92.586	85.911	79.682	73.869
86	250.514	233.283	217.184	202.145	188.096	174.972	162.715	151.268	140.579	130.597	121.278	112.578	104.458	96.879	89.807
87	308.170	286.967	267.157	248.650	231.362	215.214	200.132	186.046	172.893	160.611	149.144	138.439	128.448	119.123	110.421
88	383.767	357.354	332.676	309.623	288.088	267.972	249.185	231.639	215.254	199.955	185.672	172.338	159.893	148.278	137.439
89	484.285	450.942	419.792	390.691	363.507	338.115	314.400	292.252	271.570	252.259	234.230	217.400	201.691	187.030	173.350
90	619.928	577.233	537.344	500.081	465.272	432.759	402.393	374.034	347.552	322.825	299.740	278.191	258.077	239.306	221.791
91	805.844	750.326	698.458	650.005	604.743	562.466	522.981	486.107	451.673	419.523	389.507	361.488	335.336	310.931	288.158
92	1064.870	991.483	922.922	858.873	799.044	743.161	690.969	642.227	596.713	554.217	514.543	477.508	442.942	410.684	380.586
93	1432.033	1333.310	1241.078	1154.918	1074.435	999.262	929.053	863.487	802.262	745.097	691.730	641.913	595.418	552.028	511.543
94	1962.016	1826.711	1700.304	1582.219	1471.916	1368.889	1272.668	1182.810	1098.903	1020.561	947.423	879.153	815.434	755.973	700.493
95	2741.788	2552.645	2375.942	2210.872	2056.682	1912.665	1778.161	1652.553	1535.265	1425.757	1323.525	1228.097	1139.033	1055.921	978.375
96	3912.336	3642.351	3390.124	3154.505	2934.416	2728.850	2536.865	2357.579	2190.169	2033.865	1887.948	1751.745	1624.626	1506.004	1395.328
97	5706.955	5312.992	4944.944	4601.132	4279.984	3980.029	3699.893	3438.289	3194.016	2965.951	2753.044	2554.311	2368.837	2195.762	2034.283
98	8520.121	7931.758	7382.102	6868.644	6389.035	5941.080	5522.725	5132.050	4767.260	4426.678	4108.734	3811.963	3534.993	3276.543	3035.412
99	13033.911	12133.535	11292.398	10506.659	9772.725	9087.235	8447.045	7849.218	7291.007	6769.843	6283.326	5829.212	5405.404	5009.940	4640.982
100	20455.654	19042.099	17721.553	16487.988	15335.762	14259.597	13254.559	12316.033	11439.708	10621.550	9857.792	9144.910	8479.613	7858.818	7279.641

\*age of spouse at date of benefit commencement

Mortality Table: Blended Beneficiary Mortality  
Interest Rate: 6.90%, with 1.60% COLA

**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)  
Actuarial Equivalency Factors Effective January 1, 2024**

**Table 22: Conversion to Monthly Spouse Benefit at Commencement Date**  
(Factor Multiplied by Benefit to Spouse at Later of Death or Early Retirement Age)

Spouse Age*	Age of Spouse at Later of Member's Date of Death or Earliest Early Retirement Age														
	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59
85	68.445	63.385	58.666	54.265	50.161	46.336	42.771	39.453	36.367	33.496	30.827	28.347	26.042	23.901	21.913
86	83.208	77.053	71.312	65.958	60.966	56.312	51.976	47.940	44.186	40.694	37.448	34.432	31.629	29.025	26.608
87	102.303	94.729	87.665	81.078	74.937	69.212	63.877	58.912	54.294	49.999	46.007	42.296	38.849	35.647	32.675
88	127.327	117.895	109.097	100.893	93.244	86.113	79.470	73.287	67.536	62.188	57.217	52.597	48.305	44.319	40.619
89	160.587	148.682	137.578	127.224	117.570	108.571	100.188	92.385	85.128	78.380	72.107	66.279	60.864	55.835	51.167
90	205.450	190.207	175.991	162.735	150.376	138.856	128.124	118.136	108.846	100.209	92.180	84.720	77.790	71.355	65.381
91	266.913	247.095	228.612	211.378	195.311	180.335	166.384	153.400	141.324	130.097	119.663	109.967	100.961	92.598	84.836
92	352.506	326.313	301.886	279.109	257.875	238.084	219.647	202.488	186.532	171.698	157.911	145.101	133.203	122.155	111.902
93	473.774	438.545	405.690	375.055	346.497	319.879	295.083	272.009	250.551	230.604	212.065	194.842	178.845	163.993	150.209
94	648.736	600.460	555.439	513.461	474.329	437.856	403.882	372.267	342.869	315.542	290.146	266.553	244.641	224.299	205.420
95	906.034	838.559	775.635	716.966	662.275	611.303	563.823	519.642	478.562	440.377	404.893	371.929	341.317	312.898	286.527
96	1292.081	1195.782	1105.980	1022.251	944.202	871.462	803.708	740.664	682.048	627.564	576.938	529.910	486.240	445.702	408.085
97	1883.646	1743.149	1612.132	1489.980	1376.116	1270.000	1171.160	1079.196	993.695	914.226	840.387	771.801	708.115	649.000	594.150
98	2810.476	2600.684	2405.053	2222.662	2052.651	1894.211	1746.642	1609.343	1481.698	1363.067	1252.846	1150.472	1055.417	967.191	885.334
99	4296.810	3975.816	3676.495	3397.438	3137.326	2894.927	2669.164	2459.123	2263.862	2082.399	1913.809	1757.230	1611.856	1476.932	1351.758
100	6739.382	6235.515	5765.678	5327.659	4919.387	4538.926	4184.589	3854.941	3548.506	3263.739	2999.190	2753.503	2525.409	2313.727	2117.354

\*age of spouse at date of benefit commencement

Mortality Table: Blended Beneficiary Mortality  
Interest Rate: 6.90%, with 1.60% COLA

**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)  
Actuarial Equivalency Factors Effective January 1, 2024**

**Table 22: Conversion to Monthly Spouse Benefit at Commencement Date**  
(Factor Multiplied by Benefit to Spouse at Later of Death or Early Retirement Age)

Spouse Age*	Age of Spouse at Later of Member's Date of Death or Earliest Early Retirement Age														
	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74
85	20.068	18.356	16.768	15.297	13.934	12.672	11.504	10.425	9.428	8.508	7.660	6.880	6.162	5.503	4.900
86	24.364	22.283	20.353	18.564	16.907	15.373	13.955	12.643	11.432	10.315	9.285	8.337	7.465	6.665	5.932
87	29.916	27.357	24.984	22.785	20.748	18.862	17.119	15.507	14.019	12.646	11.380	10.216	9.146	8.164	7.264
88	37.185	33.999	31.046	28.309	25.774	23.428	21.258	19.253	17.402	15.694	14.121	12.673	11.342	10.122	9.003
89	46.835	42.817	39.092	35.640	32.444	29.486	26.750	24.223	21.889	19.737	17.754	15.930	14.254	12.716	11.308
90	59.838	54.698	49.932	45.516	41.427	37.644	34.145	30.913	27.929	25.177	22.643	20.311	18.170	16.205	14.406
91	77.634	0.000	64.763	59.027	53.716	48.801	44.257	40.060	36.186	32.613	29.324	26.298	23.519	20.970	18.636
92	102.389	93.567	85.390	77.814	70.801	64.312	58.314	52.772	47.659	42.945	38.604	34.611	30.945	27.584	24.507
93	137.422	125.564	114.574	104.393	94.969	86.250	78.190	70.746	63.877	57.546	51.717	46.357	41.436	36.924	32.796
94	187.908	171.670	156.621	142.682	129.779	117.843	106.811	96.623	87.223	78.560	70.585	63.254	56.523	50.355	44.711
95	262.065	239.384	218.367	198.901	180.884	164.219	148.817	134.594	121.475	109.385	98.257	88.029	78.641	70.038	62.169
96	373.195	340.849	310.876	283.118	257.428	233.668	211.712	191.440	172.741	155.513	139.659	125.088	111.717	99.467	88.264
97	543.278	496.119	452.423	411.960	374.514	339.886	307.889	278.350	251.108	226.011	202.919	181.700	162.233	144.401	128.097
98	809.420	739.051	673.855	613.487	557.626	505.974	458.251	414.200	373.579	336.163	301.741	270.118	241.109	214.543	190.260
99	1235.680	1128.087	1028.412	936.127	850.739	771.791	698.859	631.545	569.481	512.322	459.747	411.454	367.162	326.609	289.548
100	1935.262	1766.494	1610.159	1465.426	1331.522	1207.731	1093.384	987.860	890.578	800.998	718.615	642.955	573.579	510.071	452.047

\*age of spouse at date of benefit commencement

Mortality Table: Blended Beneficiary Mortality  
Interest Rate: 6.90%, with 1.60% COLA

**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)  
Actuarial Equivalency Factors Effective January 1, 2024**

**Table 22: Conversion to Monthly Spouse Benefit at Commencement Date**  
(Factor Multiplied by Benefit to Spouse at Later of Death or Early Retirement Age)

Spouse Age*	Age of Spouse at Later of Member's Date of Death or Earliest Early Retirement Age														
	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89
<b>85</b>	4.347	3.842	3.383	2.965	2.586	2.244	1.936	1.660	1.413	1.194	<b>1.000</b>	0.830	0.682	0.554	0.445
<b>86</b>	5.262	4.649	4.092	3.585	3.126	2.712	2.338	2.004	1.705	1.440	1.205	<b>1.000</b>	0.821	0.667	0.536
<b>87</b>	6.441	5.690	5.005	4.384	3.821	3.313	2.856	2.446	2.080	1.756	1.469	1.218	<b>1.000</b>	0.812	0.651
<b>88</b>	7.981	7.048	6.198	5.427	4.728	4.098	3.531	3.023	2.569	2.167	1.813	1.502	1.232	<b>1.000</b>	0.802
<b>89</b>	10.020	8.846	7.777	6.807	5.928	5.136	4.423	3.785	3.216	2.711	2.266	1.877	1.539	1.248	<b>1.000</b>
<b>90</b>	12.762	11.263	9.898	8.660	7.539	6.528	5.620	4.807	4.082	3.440	2.874	2.379	1.949	1.580	1.265
<b>91</b>	16.504	14.560	12.792	11.187	9.736	8.427	7.251	6.199	5.262	4.432	3.701	3.062	2.507	2.031	1.625
<b>92</b>	21.697	19.135	16.805	14.691	12.780	11.057	9.510	8.126	6.894	5.803	4.844	4.005	3.278	2.653	2.122
<b>93</b>	29.025	25.589	22.465	19.632	17.071	14.763	12.691	10.839	9.192	7.733	6.451	5.331	4.360	3.527	2.819
<b>94</b>	39.558	34.863	30.595	26.727	23.230	20.081	17.255	14.730	12.484	10.498	8.752	7.228	5.909	4.777	3.815
<b>95</b>	54.986	48.443	42.497	37.109	32.241	27.858	23.927	20.415	17.294	14.535	12.111	9.996	8.167	6.598	5.266
<b>96</b>	78.040	68.729	60.272	52.609	45.689	39.460	33.875	28.889	24.459	20.546	17.110	14.114	11.524	9.304	7.422
<b>97</b>	113.221	99.678	87.379	76.240	66.183	57.134	49.024	41.787	35.361	29.687	24.708	20.371	16.622	13.412	10.691
<b>98</b>	168.108	147.946	129.642	113.070	98.112	84.659	72.607	61.858	52.318	43.899	36.515	30.087	24.535	19.784	15.760
<b>99</b>	255.749	224.995	197.082	171.819	149.025	128.532	110.181	93.821	79.309	66.509	55.291	45.529	37.105	29.901	23.804
<b>100</b>	399.142	351.017	307.350	267.841	232.207	200.182	171.517	145.975	123.329	103.366	85.881	70.676	57.562	46.356	36.879

\*age of spouse at date of benefit commencement

Mortality Table: Blended Beneficiary Mortality  
Interest Rate: 6.90%, with 1.60% COLA

**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)  
Actuarial Equivalency Factors Effective January 1, 2024**

**Table 22: Conversion to Monthly Spouse Benefit at Commencement Date**  
(Factor Multiplied by Benefit to Spouse at Later of Death or Early Retirement Age)

Spouse Age*	Age of Spouse at Later of Member's Date of Death or Earliest Early Retirement Age										
	90	91	92	93	94	95	96	97	98	99	100
85	0.353	0.276	0.213	0.161	0.120	0.088	0.063	0.045	0.031	0.021	0.014
86	0.424	0.332	0.255	0.194	0.144	0.106	0.076	0.053	0.037	0.025	0.016
87	0.516	0.403	0.310	0.235	0.175	0.128	0.092	0.065	0.044	0.030	0.020
88	0.635	0.495	0.381	0.288	0.215	0.157	0.112	0.079	0.054	0.037	0.024
89	0.791	0.617	0.474	0.359	0.267	0.195	0.140	0.098	0.067	0.045	0.030
90	<b>1.000</b>	0.780	0.599	0.452	0.336	0.245	0.176	0.123	0.085	0.057	0.037
91	1.284	<b>1.000</b>	0.767	0.580	0.430	0.314	0.224	0.157	0.108	0.073	0.048
92	1.675	1.304	<b>1.000</b>	0.755	0.560	0.408	0.292	0.204	0.140	0.094	0.062
93	2.224	1.730	1.326	<b>1.000</b>	0.741	0.540	0.386	0.270	0.185	0.124	0.081
94	3.008	2.338	1.791	1.350	<b>1.000</b>	0.728	0.519	0.363	0.249	0.167	0.109
95	4.149	3.223	2.467	1.858	1.375	<b>1.000</b>	0.713	0.498	0.341	0.228	0.149
96	5.843	4.536	3.469	2.611	1.932	1.403	<b>1.000</b>	0.698	0.477	0.319	0.208
97	8.412	6.526	4.987	3.751	2.773	2.013	1.433	<b>1.000</b>	0.683	0.456	0.298
98	12.392	9.607	7.336	5.513	4.073	2.954	2.102	1.465	<b>1.000</b>	0.667	0.435
99	18.703	14.489	11.057	8.303	6.129	4.443	3.158	2.200	1.500	<b>1.000</b>	0.651
100	28.956	22.417	17.094	12.827	9.462	6.853	4.868	3.388	2.308	1.537	<b>1.000</b>

\*age of spouse at date of benefit commencement

Mortality Table: Blended Beneficiary Mortality  
Interest Rate: 6.90%, with 1.60% COLA

**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)  
Actuarial Equivalency Factors Effective January 1, 2024**

**Table 23: Present Value of Member's Immediate Benefit - Healthy Members (OPSRP only)**  
(Factor Multiplied by Member's Monthly Retirement Benefit at or after Early Retirement Age)

Age	Months of Member's Attained Age at Retirement											
	0	1	2	3	4	5	6	7	8	9	10	11
50	196.53641	196.37062	196.20484	196.03905	195.87327	195.70748	195.54170	195.37591	195.21012	195.04434	194.87855	194.71277
51	194.54698	194.37865	194.21031	194.04198	193.87365	193.70531	193.53698	193.36865	193.20031	193.03198	192.86365	192.69531
52	192.52698	192.35107	192.17515	191.99924	191.82332	191.64741	191.47150	191.29558	191.11967	190.94375	190.76784	190.59192
53	190.41601	190.23227	190.04852	189.86478	189.68104	189.49729	189.31355	189.12981	188.94606	188.76232	188.57858	188.39483
54	188.21109	188.01917	187.82725	187.63533	187.44341	187.25149	187.05958	186.86766	186.67574	186.48382	186.29190	186.09998
55	185.90806	185.71095	185.51385	185.31674	185.11964	184.92253	184.72543	184.52832	184.33121	184.13411	183.93700	183.73990
56	183.54279	183.33733	183.13187	182.92641	182.72094	182.51548	182.31002	182.10456	181.89910	181.69364	181.48817	181.28271
57	181.07725	180.86318	180.64911	180.43504	180.22097	180.00690	179.79283	179.57876	179.36469	179.15062	178.93655	178.72248
58	178.50841	178.28528	178.06214	177.83901	177.61587	177.39274	177.16960	176.94647	176.72333	176.50020	176.27706	176.05393
59	175.83079	175.59834	175.36588	175.13343	174.90097	174.66852	174.43607	174.20361	173.97116	173.73870	173.50625	173.27379
60	173.04134	172.79941	172.55748	172.31555	172.07362	171.83169	171.58976	171.34783	171.10590	170.86397	170.62204	170.38011
61	170.13818	169.88658	169.63498	169.38337	169.13177	168.88017	168.62857	168.37696	168.12536	167.87376	167.62216	167.37055
62	167.11895	166.85745	166.59594	166.33444	166.07293	165.81143	165.54992	165.28842	165.02691	164.76541	164.50390	164.24240
63	163.98089	163.70944	163.43800	163.16655	162.89511	162.62366	162.35222	162.08077	161.80932	161.53788	161.26643	160.99499
64	160.72354	160.44189	160.16023	159.87858	159.59692	159.31527	159.03361	158.75196	158.47030	158.18865	157.90699	157.62534
65	157.34368	157.05199	156.76031	156.46862	156.17693	155.88525	155.59356	155.30187	155.01019	154.71850	154.42681	154.13513
66	153.84344	153.54186	153.24029	152.93871	152.63713	152.33556	152.03398	151.73240	151.43083	151.12925	150.82767	150.52610
67	150.22452	149.91337	149.60221	149.29106	148.97990	148.66875	148.35760	148.04644	147.73529	147.42413	147.11298	146.80182
68	146.49067	146.17033	145.84998	145.52964	145.20930	144.88895	144.56861	144.24827	143.92792	143.60758	143.28724	142.96689
69	142.64655	142.31759	141.98863	141.65967	141.33070	141.00174	140.67278	140.34382	140.01486	139.68590	139.35693	139.02797
70	138.69901	138.36192	138.02482	137.68773	137.35064	137.01354	136.67645	136.33936	136.00226	135.66517	135.32808	134.99098
71	134.65389	134.30930	133.96472	133.62013	133.27555	132.93096	132.58638	132.24179	131.89720	131.55262	131.20803	130.86345
72	130.51886	130.16727	129.81567	129.46408	129.11248	128.76089	128.40929	128.05770	127.70610	127.35451	127.00291	126.65132
73	126.29972	125.94178	125.58384	125.22590	124.86796	124.51002	124.15209	123.79415	123.43621	123.07827	122.72033	122.36239
74	122.00445	121.64085	121.27724	120.91364	120.55003	120.18643	119.82283	119.45922	119.09562	118.73201	118.36841	118.00480
75	117.64120	117.27297	116.90475	116.53652	116.16830	115.80007	115.43185	115.06362	114.69539	114.32717	113.95894	113.59072
76	113.22249	112.85069	112.47890	112.10710	111.73531	111.36351	110.99172	110.61992	110.24812	109.87633	109.50453	109.13274
77	108.76094	108.38607	108.01121	107.63634	107.26147	106.88660	106.51174	106.13687	105.76200	105.38713	105.01227	104.63740
78	104.26253	103.88519	103.50784	103.13050	102.75316	102.37581	101.99847	101.62113	101.24378	100.86644	100.48910	100.11175
79	99.73441	99.35546	98.97651	98.59757	98.21862	97.83967	97.46072	97.08177	96.70282	96.32388	95.94493	95.56598

**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)  
Actuarial Equivalency Factors Effective January 1, 2024**

**Table 23: Present Value of Member's Immediate Benefit - Healthy Members (OPSRP only)**  
(Factor Multiplied by Member's Monthly Retirement Benefit at or after Early Retirement Age)

<b>Age</b>	<b>Months of Member's Attained Age at Retirement</b>											
	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>	<b>10</b>	<b>11</b>
<b>80</b>	95.18703	94.80780	94.42857	94.04935	93.67012	93.29089	92.91166	92.53243	92.15320	91.77398	91.39475	91.01552
<b>81</b>	90.63629	90.25837	89.88044	89.50252	89.12460	88.74667	88.36875	87.99083	87.61290	87.23498	86.85706	86.47913
<b>82</b>	86.10121	85.72664	85.35208	84.97751	84.60294	84.22837	83.85381	83.47924	83.10467	82.73010	82.35554	81.98097
<b>83</b>	81.60640	81.23725	80.86810	80.49894	80.12979	79.76064	79.39149	79.02233	78.65318	78.28403	77.91488	77.54572
<b>84</b>	77.17657	76.81533	76.45408	76.09284	75.73160	75.37035	75.00911	74.64787	74.28662	73.92538	73.56414	73.20289
<b>85</b>	72.84165	72.48999	72.13833	71.78667	71.43501	71.08335	70.73169	70.38002	70.02836	69.67670	69.32504	68.97338
<b>86</b>	68.62172	68.28167	67.94162	67.60157	67.26152	66.92147	66.58142	66.24137	65.90132	65.56127	65.22122	64.88117
<b>87</b>	64.54112	64.21414	63.88716	63.56018	63.23320	62.90622	62.57925	62.25227	61.92529	61.59831	61.27133	60.94435
<b>88</b>	60.61737	60.30494	59.99251	59.68008	59.36765	59.05522	58.74279	58.43035	58.11792	57.80549	57.49306	57.18063
<b>89</b>	56.86820	56.57142	56.27464	55.97785	55.68107	55.38429	55.08751	54.79072	54.49394	54.19716	53.90038	53.60359
<b>90</b>	53.30681	53.02697	52.74714	52.46730	52.18746	51.90763	51.62779	51.34795	51.06812	50.78828	50.50844	50.22861
<b>91</b>	49.94877	49.68649	49.42422	49.16194	48.89966	48.63738	48.37511	48.11283	47.85055	47.58827	47.32600	47.06372
<b>92</b>	46.80144	46.55661	46.31177	46.06694	45.82210	45.57727	45.33244	45.08760	44.84277	44.59793	44.35310	44.10826
<b>93</b>	43.86343	43.63567	43.40791	43.18014	42.95238	42.72462	42.49686	42.26909	42.04133	41.81357	41.58581	41.35804
<b>94</b>	41.13028	40.91926	40.70824	40.49721	40.28619	40.07517	39.86415	39.65312	39.44210	39.23108	39.02006	38.80903
<b>95</b>	38.59801	38.40283	38.20765	38.01247	37.81729	37.62211	37.42693	37.23175	37.03657	36.84139	36.64621	36.45103
<b>96</b>	36.25585	36.07546	35.89508	35.71469	35.53431	35.35392	35.17354	34.99315	34.81276	34.63238	34.45199	34.27161
<b>97</b>	34.09122	33.92461	33.75799	33.59138	33.42476	33.25815	33.09153	32.92492	32.75830	32.59169	32.42507	32.25846
<b>98</b>	32.09184	31.93796	31.78407	31.63019	31.47630	31.32242	31.16853	31.01465	30.86076	30.70688	30.55299	30.39911
<b>99</b>	30.24522	30.10290	29.96057	29.81825	29.67592	29.53360	29.39128	29.24895	29.10663	28.96430	28.82198	28.67965
<b>100</b>	28.53733											

**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)  
Actuarial Equivalency Factors Effective January 1, 2024**

**Table 24: Present Value of Alternate Payee Immediate Benefit (OPSRP only)**  
(Factor Multiplied by Alternate Payee Monthly Benefit at Alternate Payee's Commencement Date)

Age	Months of Alternate Payee's Attained Age at Date Benefit Payments Begin											
	0	1	2	3	4	5	6	7	8	9	10	11
15	229.59965	229.56906	229.53846	229.50787	229.47727	229.44668	229.41609	229.38549	229.35490	229.32430	229.29371	229.26311
16	229.23252	229.20064	229.16877	229.13689	229.10501	229.07313	229.04126	229.00938	228.97750	228.94562	228.91375	228.88187
17	228.84999	228.81695	228.78391	228.75087	228.71783	228.68479	228.65175	228.61870	228.58566	228.55262	228.51958	228.48654
18	228.45350	228.41943	228.38535	228.35128	228.31721	228.28313	228.24906	228.21499	228.18091	228.14684	228.11277	228.07869
19	228.04462	228.00914	227.97367	227.93819	227.90272	227.86724	227.83177	227.79629	227.76081	227.72534	227.68986	227.65439
20	227.61891	227.58169	227.54447	227.50725	227.47003	227.43281	227.39559	227.35837	227.32115	227.28393	227.24671	227.20949
21	227.17227	227.13284	227.09342	227.05399	227.01456	226.97513	226.93571	226.89628	226.85685	226.81742	226.77800	226.73857
22	226.69914	226.65735	226.61557	226.57378	226.53200	226.49021	226.44843	226.40664	226.36485	226.32307	226.28128	226.23950
23	226.19771	226.15324	226.10876	226.06429	226.01981	225.97534	225.93086	225.88639	225.84191	225.79744	225.75296	225.70849
24	225.66401	225.61678	225.56954	225.52231	225.47507	225.42784	225.38061	225.33337	225.28614	225.23890	225.19167	225.14443
25	225.09720	225.04712	224.99705	224.94697	224.89690	224.84682	224.79675	224.74667	224.69659	224.64652	224.59644	224.54637
26	224.49629	224.44339	224.39049	224.33758	224.28468	224.23178	224.17888	224.12597	224.07307	224.02017	223.96727	223.91436
27	223.86146	223.80585	223.75024	223.69463	223.63902	223.58341	223.52780	223.47219	223.41657	223.36096	223.30535	223.24974
28	223.19413	223.13555	223.07697	223.01839	222.95981	222.90123	222.84266	222.78408	222.72550	222.66692	222.60834	222.54976
29	222.49118	222.42954	222.36791	222.30627	222.24464	222.18300	222.12137	222.05973	221.99809	221.93646	221.87482	221.81319
30	221.75155	221.68666	221.62177	221.55689	221.49200	221.42711	221.36222	221.29733	221.23244	221.16756	221.10267	221.03778
31	220.97289	220.90456	220.83623	220.76790	220.69957	220.63124	220.56291	220.49458	220.42625	220.35792	220.28959	220.22126
32	220.15293	220.08104	220.00915	219.93726	219.86537	219.79348	219.72159	219.64969	219.57780	219.50591	219.43402	219.36213
33	219.29024	219.21450	219.13876	219.06301	218.98727	218.91153	218.83579	218.76004	218.68430	218.60856	218.53282	218.45707
34	218.38133	218.30159	218.22185	218.14211	218.06236	217.98262	217.90288	217.82314	217.74340	217.66366	217.58391	217.50417
35	217.42443	217.34045	217.25647	217.17250	217.08852	217.00454	216.92056	216.83658	216.75260	216.66863	216.58465	216.50067
36	216.41669	216.32832	216.23995	216.15158	216.06320	215.97483	215.88646	215.79809	215.70972	215.62135	215.53297	215.44460
37	215.35623	215.26327	215.17031	215.07736	214.98440	214.89144	214.79848	214.70552	214.61256	214.51961	214.42665	214.33369
38	214.24073	214.14281	214.04490	213.94698	213.84906	213.75114	213.65323	213.55531	213.45739	213.35947	213.26156	213.16364
39	213.06572	212.96271	212.85971	212.75670	212.65369	212.55068	212.44768	212.34467	212.24166	212.13865	212.03565	211.93264
40	211.82963	211.72122	211.61281	211.50440	211.39598	211.28757	211.17916	211.07075	210.96234	210.85393	210.74551	210.63710
41	210.52869	210.41472	210.30074	210.18677	210.07280	209.95882	209.84485	209.73088	209.61690	209.50293	209.38896	209.27498
42	209.16101	209.04107	208.92114	208.80120	208.68126	208.56132	208.44139	208.32145	208.20151	208.08157	207.96164	207.84170
43	207.72176	207.59568	207.46960	207.34353	207.21745	207.09137	206.96529	206.83921	206.71313	206.58706	206.46098	206.33490
44	206.20882	206.07624	205.94367	205.81109	205.67851	205.54594	205.41336	205.28078	205.14821	205.01563	204.88305	204.75048



**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)  
Actuarial Equivalency Factors Effective January 1, 2024**

**Table 24: Present Value of Alternate Payee Immediate Benefit (OPSRP only)**  
(Factor Multiplied by Alternate Payee Monthly Benefit at Alternate Payee's Commencement Date)

Age	Months of Alternate Payee's Attained Age at Date Benefit Payments Begin											
	0	1	2	3	4	5	6	7	8	9	10	11
45	204.61790	204.47860	204.33930	204.20000	204.06070	203.92140	203.78210	203.64280	203.50350	203.36420	203.22490	203.08560
46	202.94630	202.79997	202.65364	202.50731	202.36098	202.21465	202.06832	201.92199	201.77566	201.62933	201.48300	201.33667
47	201.19034	201.03663	200.88292	200.72922	200.57551	200.42180	200.26809	200.11438	199.96067	199.80697	199.65326	199.49955
48	199.34584	199.18433	199.02281	198.86130	198.69979	198.53827	198.37676	198.21525	198.05373	197.89222	197.73071	197.56919
49	197.40768	197.23813	197.06858	196.89903	196.72948	196.55993	196.39038	196.22083	196.05128	195.88173	195.71218	195.54263
50	195.37308	195.20451	195.03594	194.86737	194.69880	194.53023	194.36166	194.19308	194.02451	193.85594	193.68737	193.51880
51	193.35023	193.18459	193.01896	192.85332	192.68768	192.52205	192.35641	192.19077	192.02514	191.85950	191.69386	191.52823
52	191.36259	191.18987	191.01715	190.84442	190.67170	190.49898	190.32626	190.15353	189.98081	189.80809	189.63537	189.46264
53	189.28992	189.10991	188.92990	188.74990	188.56989	188.38988	188.20987	188.02986	187.84985	187.66985	187.48984	187.30983
54	187.12982	186.94220	186.75458	186.56696	186.37933	186.19171	186.00409	185.81647	185.62885	185.44123	185.25360	185.06598
55	184.87836	184.68291	184.48747	184.29202	184.09657	183.90112	183.70568	183.51023	183.31478	183.11933	182.92389	182.72844
56	182.53299	182.32931	182.12563	181.92195	181.71827	181.51459	181.31091	181.10723	180.90355	180.69987	180.49619	180.29251
57	180.08883	179.87659	179.66435	179.45212	179.23988	179.02764	178.81540	178.60316	178.39092	178.17869	177.96645	177.75421
58	177.54197	177.32074	177.09951	176.87828	176.65704	176.43581	176.21458	175.99335	175.77212	175.55089	175.32965	175.10842
59	174.88719	174.65663	174.42607	174.19551	173.96494	173.73438	173.50382	173.27326	173.04270	172.81214	172.58157	172.35101
60	172.12045	171.88041	171.64037	171.40033	171.16028	170.92024	170.68020	170.44016	170.20012	169.96008	169.72003	169.47999
61	169.23995	168.99022	168.74050	168.49077	168.24104	167.99131	167.74159	167.49186	167.24213	166.99240	166.74268	166.49295
62	166.24322	165.98365	165.72408	165.46451	165.20494	164.94537	164.68581	164.42624	164.16667	163.90710	163.64753	163.38796
63	163.12839	162.85895	162.58951	162.32006	162.05062	161.78118	161.51174	161.24229	160.97285	160.70341	160.43397	160.16452
64	159.89508	159.61549	159.33590	159.05630	158.77671	158.49712	158.21753	157.93793	157.65834	157.37875	157.09916	156.81956
65	156.53997	156.25036	155.96075	155.67114	155.38153	155.09192	154.80231	154.51270	154.22309	153.93348	153.64387	153.35426
66	153.06465	152.76529	152.46592	152.16656	151.86720	151.56783	151.26847	150.96911	150.66974	150.37038	150.07102	149.77165
67	149.47229	149.16350	148.85470	148.54591	148.23712	147.92832	147.61953	147.31074	147.00194	146.69315	146.38436	146.07556
68	145.76677	145.44904	145.13131	144.81358	144.49585	144.17812	143.86039	143.54266	143.22493	142.90720	142.58947	142.27174
69	141.95401	141.62792	141.30184	140.97575	140.64966	140.32357	139.99749	139.67140	139.34531	139.01922	138.69314	138.36705
70	138.04096	137.70701	137.37306	137.03911	136.70516	136.37121	136.03727	135.70332	135.36937	135.03542	134.70147	134.36752
71	134.03357	133.69237	133.35118	133.00998	132.66878	132.32759	131.98639	131.64519	131.30400	130.96280	130.62160	130.28041
72	129.93921	129.59121	129.24320	128.89520	128.54720	128.19919	127.85119	127.50319	127.15518	126.80718	126.45918	126.11117
73	125.76317	125.40898	125.05480	124.70061	124.34643	123.99224	123.63806	123.28387	122.92968	122.57550	122.22131	121.86713
74	121.51294	121.15311	120.79328	120.43345	120.07362	119.71379	119.35397	118.99414	118.63431	118.27448	117.91465	117.55482

**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)  
Actuarial Equivalency Factors Effective January 1, 2024**

**Table 24: Present Value of Alternate Payee Immediate Benefit (OPSRP only)**  
(Factor Multiplied by Alternate Payee Monthly Benefit at Alternate Payee's Commencement Date)

<b>Age</b>	<b>Months of Alternate Payee's Attained Age at Date Benefit Payments Begin</b>											
	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>	<b>10</b>	<b>11</b>
<b>75</b>	117.19499	116.83043	116.46586	116.10130	115.73674	115.37217	115.00761	114.64305	114.27848	113.91392	113.54936	113.18479
<b>76</b>	112.82023	112.45193	112.08363	111.71533	111.34703	110.97873	110.61043	110.24212	109.87382	109.50552	109.13722	108.76892
<b>77</b>	108.40062	108.02925	107.65789	107.28652	106.91515	106.54379	106.17242	105.80105	105.42969	105.05832	104.68695	104.31559
<b>78</b>	103.94422	103.57025	103.19629	102.82232	102.44835	102.07438	101.70042	101.32645	100.95248	100.57851	100.20455	99.83058
<b>79</b>	99.45661	99.08083	98.70505	98.32927	97.95349	97.57771	97.20193	96.82614	96.45036	96.07458	95.69880	95.32302
<b>80</b>	94.94724	94.57090	94.19456	93.81822	93.44188	93.06554	92.68920	92.31285	91.93651	91.56017	91.18383	90.80749
<b>81</b>	90.43115	90.05592	89.68069	89.30547	88.93024	88.55501	88.17978	87.80455	87.42932	87.05410	86.67887	86.30364
<b>82</b>	85.92841	85.55630	85.18420	84.81209	84.43998	84.06787	83.69577	83.32366	82.95155	82.57944	82.20734	81.83523
<b>83</b>	81.46312	81.09643	80.72974	80.36305	79.99636	79.62967	79.26298	78.89628	78.52959	78.16290	77.79621	77.42952
<b>84</b>	77.06283	76.70398	76.34512	75.98627	75.62742	75.26856	74.90971	74.55086	74.19200	73.83315	73.47430	73.11544
<b>85</b>	72.75659	72.40778	72.05897	71.71016	71.36135	71.01254	70.66374	70.31493	69.96612	69.61731	69.26850	68.91969
<b>86</b>	68.57088	68.23401	67.89713	67.56026	67.22338	66.88651	66.54964	66.21276	65.87589	65.53901	65.20214	64.86526
<b>87</b>	64.52839	64.20524	63.88209	63.55894	63.23579	62.91264	62.58949	62.26633	61.94318	61.62003	61.29688	60.97373
<b>88</b>	60.65058	60.34240	60.03422	59.72603	59.41785	59.10967	58.80149	58.49330	58.18512	57.87694	57.56876	57.26057
<b>89</b>	56.95239	56.66020	56.36801	56.07583	55.78364	55.49145	55.19926	54.90707	54.61488	54.32270	54.03051	53.73832
<b>90</b>	53.44613	53.17049	52.89485	52.61921	52.34357	52.06793	51.79229	51.51665	51.24101	50.96537	50.68973	50.41409
<b>91</b>	50.13845	49.87966	49.62087	49.36208	49.10329	48.84450	48.58571	48.32691	48.06812	47.80933	47.55054	47.29175
<b>92</b>	47.03296	46.79073	46.54850	46.30626	46.06403	45.82180	45.57957	45.33733	45.09510	44.85287	44.61064	44.36840
<b>93</b>	44.12617	43.90001	43.67386	43.44770	43.22154	42.99538	42.76923	42.54307	42.31691	42.09075	41.86460	41.63844
<b>94</b>	41.41228	41.20183	40.99138	40.78093	40.57048	40.36003	40.14959	39.93914	39.72869	39.51824	39.30779	39.09734
<b>95</b>	38.88689	38.69155	38.49622	38.30088	38.10554	37.91021	37.71487	37.51953	37.32420	37.12886	36.93352	36.73819
<b>96</b>	36.54285	36.36170	36.18055	35.99940	35.81825	35.63710	35.45596	35.27481	35.09366	34.91251	34.73136	34.55021
<b>97</b>	34.36906	34.20125	34.03344	33.86563	33.69782	33.53001	33.36220	33.19439	33.02658	32.85877	32.69096	32.52315
<b>98</b>	32.35534	32.20005	32.04476	31.88947	31.73417	31.57888	31.42359	31.26830	31.11301	30.95772	30.80242	30.64713
<b>99</b>	30.49184	30.34815	30.20447	30.06078	29.91709	29.77341	29.62972	29.48603	29.34235	29.19866	29.05497	28.91129
<b>100</b>	28.76760											

**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)**  
**Actuarial Equivalency Factors Effective January 1, 2024**

**Table 25a: Present Value of Single Life Immediate Annuity with COLA - Healthy Members**  
(Present value of amount of \$1 monthly overpayment)

Age	Months of Attained Age at Retirement											
	0	1	2	3	4	5	6	7	8	9	10	11
15	229.76	229.73	229.70	229.67	229.64	229.61	229.59	229.56	229.53	229.50	229.47	229.44
16	229.41	229.38	229.35	229.31	229.28	229.25	229.22	229.19	229.16	229.13	229.10	229.07
17	229.04	229.01	228.97	228.94	228.91	228.88	228.85	228.82	228.78	228.75	228.72	228.69
18	228.66	228.62	228.59	228.56	228.52	228.49	228.46	228.43	228.39	228.36	228.33	228.29
19	228.26	228.23	228.19	228.16	228.12	228.09	228.05	228.02	227.99	227.95	227.92	227.88
20	227.85	227.81	227.78	227.74	227.70	227.67	227.63	227.59	227.56	227.52	227.49	227.45
21	227.41	227.37	227.34	227.30	227.26	227.22	227.18	227.15	227.11	227.07	227.03	226.99
22	226.95	226.91	226.87	226.83	226.79	226.75	226.71	226.67	226.63	226.59	226.55	226.50
23	226.46	226.42	226.38	226.33	226.29	226.25	226.20	226.16	226.12	226.07	226.03	225.99
24	225.94	225.90	225.85	225.81	225.76	225.71	225.67	225.62	225.58	225.53	225.48	225.44
25	225.39	225.34	225.30	225.25	225.20	225.15	225.10	225.05	225.00	224.95	224.91	224.86
26	224.81	224.76	224.71	224.65	224.60	224.55	224.50	224.45	224.40	224.35	224.30	224.24
27	224.19	224.14	224.08	224.03	223.98	223.92	223.87	223.81	223.76	223.71	223.65	223.60
28	223.54	223.49	223.43	223.37	223.32	223.26	223.20	223.15	223.09	223.03	222.98	222.92
29	222.86	222.80	222.74	222.68	222.62	222.56	222.50	222.44	222.38	222.32	222.26	222.20
30	222.14	222.08	222.02	221.95	221.89	221.83	221.77	221.70	221.64	221.58	221.51	221.45
31	221.39	221.32	221.26	221.19	221.12	221.06	220.99	220.92	220.86	220.79	220.72	220.66
32	220.59	220.52	220.45	220.38	220.31	220.24	220.17	220.10	220.03	219.96	219.89	219.82
33	219.75	219.68	219.61	219.53	219.46	219.39	219.31	219.24	219.16	219.09	219.02	218.94
34	218.87	218.79	218.71	218.64	218.56	218.48	218.40	218.33	218.25	218.17	218.09	218.02
35	217.94	217.86	217.78	217.69	217.61	217.53	217.45	217.37	217.29	217.20	217.12	217.04
36	216.96	216.87	216.79	216.70	216.62	216.53	216.44	216.36	216.27	216.19	216.10	216.01
37	215.93	215.84	215.75	215.66	215.57	215.48	215.39	215.29	215.20	215.11	215.02	214.93
38	214.84	214.75	214.65	214.56	214.46	214.37	214.27	214.18	214.08	213.98	213.89	213.79
39	213.70	213.60	213.50	213.40	213.30	213.20	213.10	213.00	212.90	212.80	212.70	212.60
40	212.50	212.39	212.28	212.18	212.07	211.97	211.86	211.76	211.65	211.55	211.44	211.33
41	211.23	211.12	211.01	210.90	210.79	210.67	210.56	210.45	210.34	210.23	210.12	210.01
42	209.90	209.78	209.66	209.55	209.43	209.31	209.20	209.08	208.96	208.85	208.73	208.61
43	208.50	208.37	208.25	208.13	208.00	207.88	207.76	207.64	207.51	207.39	207.27	207.15
44	207.02	206.89	206.76	206.63	206.51	206.38	206.25	206.12	205.99	205.86	205.73	205.60

**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)**  
**Actuarial Equivalency Factors Effective January 1, 2024**

**Table 25a: Present Value of Single Life Immediate Annuity with COLA - Healthy Members**  
(Present value of amount of \$1 monthly overpayment)

Age	Months of Attained Age at Retirement											
	0	1	2	3	4	5	6	7	8	9	10	11
45	205.47	205.34	205.20	205.07	204.93	204.80	204.66	204.53	204.39	204.26	204.12	203.99
46	203.85	203.71	203.57	203.43	203.29	203.15	203.00	202.86	202.72	202.58	202.44	202.30
47	202.15	202.01	201.86	201.71	201.56	201.41	201.26	201.11	200.97	200.82	200.67	200.52
48	200.37	200.22	200.06	199.90	199.75	199.59	199.44	199.28	199.12	198.97	198.81	198.66
49	198.50	198.34	198.17	198.01	197.85	197.68	197.52	197.35	197.19	197.03	196.86	196.70
50	196.54	196.37	196.20	196.04	195.87	195.71	195.54	195.38	195.21	195.04	194.88	194.71
51	194.55	194.38	194.21	194.04	193.87	193.71	193.54	193.37	193.20	193.03	192.86	192.70
52	192.53	192.35	192.18	192.00	191.82	191.65	191.47	191.30	191.12	190.94	190.77	190.59
53	190.42	190.23	190.05	189.86	189.68	189.50	189.31	189.13	188.95	188.76	188.58	188.39
54	188.21	188.02	187.83	187.64	187.44	187.25	187.06	186.87	186.68	186.48	186.29	186.10
55	185.91	185.71	185.51	185.32	185.12	184.92	184.73	184.53	184.33	184.13	183.94	183.74
56	183.54	183.34	183.13	182.93	182.72	182.52	182.31	182.10	181.90	181.69	181.49	181.28
57	181.08	180.86	180.65	180.44	180.22	180.01	179.79	179.58	179.36	179.15	178.94	178.72
58	178.51	178.29	178.06	177.84	177.62	177.39	177.17	176.95	176.72	176.50	176.28	176.05
59	175.83	175.60	175.37	175.13	174.90	174.67	174.44	174.20	173.97	173.74	173.51	173.27
60	173.04	172.80	172.56	172.32	172.07	171.83	171.59	171.35	171.11	170.86	170.62	170.38
61	170.14	169.89	169.63	169.38	169.13	168.88	168.63	168.38	168.13	167.87	167.62	167.37
62	167.12	166.86	166.60	166.33	166.07	165.81	165.55	165.29	165.03	164.77	164.50	164.24
63	163.98	163.71	163.44	163.17	162.90	162.62	162.35	162.08	161.81	161.54	161.27	160.99
64	160.72	160.44	160.16	159.88	159.60	159.32	159.03	158.75	158.47	158.19	157.91	157.63
65	157.34	157.05	156.76	156.47	156.18	155.89	155.59	155.30	155.01	154.72	154.43	154.14
66	153.84	153.54	153.24	152.94	152.64	152.34	152.03	151.73	151.43	151.13	150.83	150.53
67	150.22	149.91	149.60	149.29	148.98	148.67	148.36	148.05	147.74	147.42	147.11	146.80
68	146.49	146.17	145.85	145.53	145.21	144.89	144.57	144.25	143.93	143.61	143.29	142.97
69	142.65	142.32	141.99	141.66	141.33	141.00	140.67	140.34	140.01	139.69	139.36	139.03
70	138.70	138.36	138.02	137.69	137.35	137.01	136.68	136.34	136.00	135.67	135.33	134.99
71	134.65	134.31	133.96	133.62	133.28	132.93	132.59	132.24	131.90	131.55	131.21	130.86
72	130.52	130.17	129.82	129.46	129.11	128.76	128.41	128.06	127.71	127.35	127.00	126.65
73	126.30	125.94	125.58	125.23	124.87	124.51	124.15	123.79	123.44	123.08	122.72	122.36
74	122.00	121.64	121.28	120.91	120.55	120.19	119.82	119.46	119.10	118.73	118.37	118.00

**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)**  
**Actuarial Equivalency Factors Effective January 1, 2024**

**Table 25a: Present Value of Single Life Immediate Annuity with COLA - Healthy Members**  
(Present value of amount of \$1 monthly overpayment)

Age	Months of Attained Age at Retirement											
	0	1	2	3	4	5	6	7	8	9	10	11
75	117.64	117.27	116.90	116.54	116.17	115.80	115.43	115.06	114.70	114.33	113.96	113.59
76	113.22	112.85	112.48	112.11	111.74	111.36	110.99	110.62	110.25	109.88	109.50	109.13
77	108.76	108.39	108.01	107.64	107.26	106.89	106.51	106.14	105.76	105.39	105.01	104.64
78	104.26	103.89	103.51	103.13	102.75	102.38	102.00	101.62	101.24	100.87	100.49	100.11
79	99.73	99.36	98.98	98.60	98.22	97.84	97.46	97.08	96.70	96.32	95.94	95.57
80	95.19	94.81	94.43	94.05	93.67	93.29	92.91	92.53	92.15	91.77	91.39	91.02
81	90.64	90.26	89.88	89.50	89.12	88.75	88.37	87.99	87.61	87.23	86.86	86.48
82	86.10	85.73	85.35	84.98	84.60	84.23	83.85	83.48	83.10	82.73	82.36	81.98
83	81.61	81.24	80.87	80.50	80.13	79.76	79.39	79.02	78.65	78.28	77.91	77.55
84	77.18	76.82	76.45	76.09	75.73	75.37	75.01	74.65	74.29	73.93	73.56	73.20
85	72.84	72.49	72.14	71.79	71.44	71.08	70.73	70.38	70.03	69.68	69.33	68.97
86	68.62	68.28	67.94	67.60	67.26	66.92	66.58	66.24	65.90	65.56	65.22	64.88
87	64.54	64.21	63.89	63.56	63.23	62.91	62.58	62.25	61.93	61.60	61.27	60.94
88	60.62	60.30	59.99	59.68	59.37	59.06	58.74	58.43	58.12	57.81	57.49	57.18
89	56.87	56.57	56.27	55.98	55.68	55.38	55.09	54.79	54.49	54.20	53.90	53.60
90	53.31	53.03	52.75	52.47	52.19	51.91	51.63	51.35	51.07	50.79	50.51	50.23
91	49.95	49.69	49.42	49.16	48.90	48.64	48.38	48.11	47.85	47.59	47.33	47.06
92	46.80	46.56	46.31	46.07	45.82	45.58	45.33	45.09	44.84	44.60	44.35	44.11
93	43.86	43.64	43.41	43.18	42.95	42.72	42.50	42.27	42.04	41.81	41.59	41.36
94	41.13	40.92	40.71	40.50	40.29	40.08	39.86	39.65	39.44	39.23	39.02	38.81
95	38.60	38.40	38.21	38.01	37.82	37.62	37.43	37.23	37.04	36.84	36.65	36.45
96	36.26	36.08	35.90	35.71	35.53	35.35	35.17	34.99	34.81	34.63	34.45	34.27
97	34.09	33.92	33.76	33.59	33.42	33.26	33.09	32.92	32.76	32.59	32.43	32.26
98	32.09	31.94	31.78	31.63	31.48	31.32	31.17	31.01	30.86	30.71	30.55	30.40
99	30.25	30.10	29.96	29.82	29.68	29.53	29.39	29.25	29.11	28.96	28.82	28.68
100	28.54											

**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)**  
**Actuarial Equivalency Factors Effective January 1, 2024**

**Table 25b: Present Value of Single Life Immediate Annuity with COLA - Disabled Members**  
(Present value of amount of \$1 monthly overpayment)

Age	Months of Attained Age at Retirement											
	0	1	2	3	4	5	6	7	8	9	10	11
15	216.76	216.67	216.58	216.49	216.39	216.30	216.21	216.12	216.02	215.93	215.84	215.75
16	215.66	215.58	215.50	215.43	215.35	215.27	215.20	215.12	215.04	214.97	214.89	214.81
17	214.74	214.68	214.62	214.56	214.50	214.44	214.38	214.31	214.25	214.19	214.13	214.07
18	214.01	213.95	213.89	213.84	213.78	213.72	213.66	213.60	213.54	213.48	213.42	213.36
19	213.31	213.24	213.18	213.11	213.05	212.99	212.92	212.86	212.79	212.73	212.67	212.60
20	212.54	212.47	212.40	212.33	212.26	212.19	212.12	212.05	211.97	211.90	211.83	211.76
21	211.69	211.61	211.53	211.46	211.38	211.30	211.22	211.14	211.06	210.99	210.91	210.83
22	210.75	210.66	210.58	210.49	210.40	210.32	210.23	210.14	210.06	209.97	209.89	209.80
23	209.71	209.62	209.53	209.43	209.34	209.25	209.15	209.06	208.97	208.87	208.78	208.69
24	208.59	208.49	208.40	208.30	208.20	208.10	208.00	207.91	207.81	207.71	207.61	207.51
25	207.41	207.31	207.21	207.11	207.01	206.90	206.80	206.70	206.60	206.50	206.39	206.29
26	206.19	206.09	205.98	205.87	205.77	205.66	205.56	205.45	205.35	205.24	205.14	205.03
27	204.93	204.82	204.71	204.60	204.49	204.38	204.27	204.16	204.05	203.94	203.84	203.73
28	203.62	203.50	203.39	203.28	203.17	203.05	202.94	202.83	202.71	202.60	202.49	202.38
29	202.26	202.15	202.03	201.91	201.80	201.68	201.56	201.45	201.33	201.21	201.09	200.98
30	200.86	200.74	200.62	200.50	200.38	200.26	200.14	200.01	199.89	199.77	199.65	199.53
31	199.41	199.28	199.16	199.03	198.91	198.78	198.66	198.53	198.41	198.28	198.16	198.03
32	197.91	197.78	197.65	197.52	197.39	197.26	197.13	197.00	196.88	196.75	196.62	196.49
33	196.36	196.22	196.09	195.96	195.82	195.69	195.56	195.42	195.29	195.16	195.02	194.89
34	194.76	194.62	194.48	194.34	194.21	194.07	193.93	193.79	193.66	193.52	193.38	193.24
35	193.11	192.96	192.82	192.68	192.54	192.40	192.25	192.11	191.97	191.83	191.69	191.54
36	191.40	191.26	191.11	190.97	190.82	190.67	190.53	190.38	190.24	190.09	189.94	189.80
37	189.65	189.50	189.35	189.20	189.05	188.90	188.75	188.60	188.45	188.30	188.15	188.00
38	187.85	187.70	187.54	187.39	187.24	187.08	186.93	186.77	186.62	186.47	186.31	186.16
39	186.00	185.85	185.69	185.53	185.37	185.22	185.06	184.90	184.74	184.59	184.43	184.27
40	184.12	183.96	183.79	183.63	183.47	183.31	183.15	182.99	182.83	182.67	182.51	182.35
41	182.19	182.03	181.87	181.70	181.54	181.38	181.21	181.05	180.89	180.73	180.56	180.40
42	180.24	180.07	179.91	179.74	179.58	179.42	179.25	179.09	178.92	178.76	178.59	178.43
43	178.26	178.10	177.93	177.77	177.60	177.44	177.27	177.11	176.94	176.78	176.61	176.44
44	176.28	176.11	175.95	175.78	175.62	175.45	175.29	175.12	174.95	174.79	174.62	174.46

**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)**  
**Actuarial Equivalency Factors Effective January 1, 2024**

**Table 25b: Present Value of Single Life Immediate Annuity with COLA - Disabled Members**  
(Present value of amount of \$1 monthly overpayment)

Age	Months of Attained Age at Retirement											
	0	1	2	3	4	5	6	7	8	9	10	11
45	174.29	174.13	173.96	173.80	173.63	173.47	173.30	173.14	172.97	172.81	172.64	172.47
46	172.31	172.15	171.98	171.82	171.65	171.49	171.33	171.16	171.00	170.83	170.67	170.51
47	170.34	170.18	170.02	169.86	169.69	169.53	169.37	169.21	169.05	168.88	168.72	168.56
48	168.40	168.24	168.08	167.92	167.76	167.60	167.44	167.28	167.12	166.96	166.80	166.64
49	166.49	166.33	166.17	166.01	165.85	165.70	165.54	165.38	165.22	165.07	164.91	164.75
50	164.59	164.43	164.27	164.11	163.96	163.80	163.64	163.48	163.32	163.16	163.00	162.84
51	162.68	162.52	162.36	162.19	162.03	161.87	161.71	161.55	161.39	161.22	161.06	160.90
52	160.74	160.58	160.41	160.25	160.08	159.92	159.76	159.59	159.43	159.27	159.10	158.94
53	158.77	158.61	158.44	158.27	158.11	157.94	157.77	157.61	157.44	157.28	157.11	156.94
54	156.78	156.61	156.44	156.27	156.09	155.92	155.75	155.58	155.41	155.24	155.07	154.90
55	154.73	154.56	154.38	154.21	154.03	153.86	153.68	153.51	153.33	153.16	152.99	152.81
56	152.64	152.45	152.27	152.09	151.91	151.73	151.55	151.37	151.19	151.01	150.83	150.65
57	150.47	150.28	150.09	149.90	149.72	149.53	149.34	149.15	148.96	148.78	148.59	148.40
58	148.21	148.02	147.82	147.63	147.43	147.24	147.04	146.84	146.65	146.45	146.26	146.06
59	145.87	145.66	145.46	145.26	145.05	144.85	144.65	144.44	144.24	144.04	143.83	143.63
60	143.43	143.21	143.00	142.79	142.58	142.37	142.15	141.94	141.73	141.52	141.31	141.09
61	140.88	140.66	140.44	140.22	140.00	139.78	139.56	139.34	139.12	138.90	138.68	138.46
62	138.24	138.01	137.78	137.55	137.32	137.09	136.87	136.64	136.41	136.18	135.95	135.72
63	135.49	135.26	135.02	134.78	134.54	134.31	134.07	133.83	133.59	133.36	133.12	132.88
64	132.65	132.40	132.16	131.91	131.66	131.42	131.17	130.93	130.68	130.44	130.19	129.95
65	129.70	129.45	129.20	128.94	128.69	128.44	128.18	127.93	127.68	127.42	127.17	126.92
66	126.67	126.41	126.15	125.88	125.62	125.36	125.10	124.84	124.58	124.32	124.06	123.80
67	123.54	123.28	123.01	122.74	122.47	122.21	121.94	121.67	121.41	121.14	120.87	120.60
68	120.34	120.06	119.79	119.52	119.24	118.97	118.70	118.42	118.15	117.87	117.60	117.33
69	117.05	116.77	116.49	116.22	115.94	115.66	115.38	115.10	114.82	114.54	114.26	113.98
70	113.70	113.41	113.13	112.84	112.56	112.27	111.99	111.70	111.42	111.13	110.85	110.56
71	110.28	109.99	109.70	109.41	109.12	108.83	108.54	108.25	107.96	107.67	107.38	107.09
72	106.80	106.51	106.21	105.92	105.62	105.33	105.03	104.74	104.44	104.15	103.85	103.56
73	103.27	102.97	102.67	102.37	102.07	101.78	101.48	101.18	100.88	100.59	100.29	99.99
74	99.69	99.39	99.09	98.79	98.49	98.19	97.89	97.59	97.29	96.99	96.69	96.39

**Oregon Public Employees Retirement System (Tier One / Tier Two) and Oregon Public Service Retirement Plan (OPSRP)**  
**Actuarial Equivalency Factors Effective January 1, 2024**

**Table 25b: Present Value of Single Life Immediate Annuity with COLA - Disabled Members**  
(Present value of amount of \$1 monthly overpayment)

Age	Months of Attained Age at Retirement											
	0	1	2	3	4	5	6	7	8	9	10	11
75	96.09	95.79	95.49	95.19	94.89	94.58	94.28	93.98	93.68	93.38	93.08	92.77
76	92.47	92.17	91.87	91.56	91.26	90.96	90.66	90.35	90.05	89.75	89.44	89.14
77	88.84	88.53	88.23	87.93	87.62	87.32	87.02	86.71	86.41	86.11	85.80	85.50
78	85.19	84.89	84.59	84.28	83.98	83.68	83.37	83.07	82.77	82.46	82.16	81.86
79	81.55	81.25	80.95	80.65	80.35	80.05	79.74	79.44	79.14	78.84	78.54	78.23
80	77.93	77.63	77.33	77.04	76.74	76.44	76.14	75.84	75.54	75.24	74.95	74.65
81	74.35	74.05	73.76	73.47	73.17	72.88	72.58	72.29	72.00	71.70	71.41	71.11
82	70.82	70.53	70.25	69.96	69.67	69.38	69.10	68.81	68.52	68.24	67.95	67.66
83	67.37	67.09	66.81	66.53	66.26	65.98	65.70	65.42	65.14	64.86	64.58	64.30
84	64.02	63.75	63.48	63.21	62.94	62.67	62.40	62.13	61.86	61.59	61.32	61.05
85	60.78	60.52	60.25	59.99	59.73	59.47	59.21	58.95	58.69	58.43	58.17	57.91
86	57.64	57.39	57.14	56.89	56.64	56.38	56.13	55.88	55.63	55.37	55.12	54.87
87	54.62	54.38	54.13	53.89	53.65	53.41	53.17	52.93	52.69	52.45	52.20	51.96
88	51.72	51.49	51.26	51.03	50.80	50.57	50.34	50.11	49.88	49.65	49.42	49.19
89	48.96	48.75	48.53	48.31	48.09	47.87	47.65	47.43	47.21	46.99	46.78	46.56
90	46.34	46.13	45.92	45.71	45.50	45.30	45.09	44.88	44.67	44.46	44.25	44.05
91	43.84	43.64	43.44	43.24	43.04	42.85	42.65	42.45	42.25	42.05	41.85	41.65
92	41.46	41.27	41.08	40.89	40.70	40.51	40.32	40.13	39.94	39.75	39.56	39.37
93	39.18	39.00	38.82	38.64	38.46	38.28	38.10	37.92	37.74	37.56	37.38	37.20
94	37.02	36.85	36.68	36.51	36.34	36.16	35.99	35.82	35.65	35.48	35.31	35.13
95	34.96	34.80	34.64	34.47	34.31	34.15	33.98	33.82	33.66	33.50	33.33	33.17
96	33.01	32.85	32.70	32.54	32.39	32.24	32.08	31.93	31.77	31.62	31.47	31.31
97	31.16	31.01	30.87	30.72	30.58	30.43	30.29	30.15	30.00	29.86	29.71	29.57
98	29.42	29.28	29.15	29.01	28.88	28.74	28.61	28.47	28.34	28.20	28.06	27.93
99	27.79	27.67	27.54	27.42	27.29	27.17	27.04	26.92	26.79	26.67	26.54	26.42
100	26.29											



**Oregon Public Employees Retirement System (Tier One / Tier Two)**  
**Actuarial Equivalency Factors Effective January 1, 2024**

**Early Retirement Factors for Telecommunicators**

Age at Retirement		Telecommunicators with 25 - 30 years of service	
Years	Months	Tier One	Tier Two
45	0	0.403	0.343
	1	0.405	0.345
	2	0.408	0.347
	3	0.410	0.349
	4	0.412	0.351
	5	0.415	0.353
	6	0.417	0.355
	7	0.419	0.356
	8	0.422	0.358
	9	0.424	0.360
	10	0.426	0.362
	11	0.429	0.364
46	0	0.431	0.366
	1	0.433	0.368
	2	0.436	0.370
	3	0.438	0.372
	4	0.441	0.374
	5	0.443	0.376
	6	0.445	0.379
	7	0.448	0.381
	8	0.450	0.383
	9	0.453	0.385
	10	0.455	0.387
	11	0.458	0.389
47	0	0.460	0.391
	1	0.463	0.393
	2	0.465	0.395
	3	0.468	0.398
	4	0.470	0.400
	5	0.473	0.402
	6	0.475	0.404
	7	0.478	0.406
	8	0.481	0.408
	9	0.483	0.411
	10	0.486	0.413
	11	0.488	0.415
48	0	0.491	0.417
	1	0.494	0.419
	2	0.496	0.422
	3	0.499	0.424
	4	0.502	0.426
	5	0.505	0.429
	6	0.507	0.431
	7	0.510	0.433
	8	0.513	0.436
	9	0.516	0.438
	10	0.518	0.440
	11	0.521	0.443

**Oregon Public Employees Retirement System (Tier One / Tier Two)**  
**Actuarial Equivalency Factors Effective January 1, 2024**

**Early Retirement Factors for Telecommunicators**

Age at Retirement		Telecommunicators with 25 - 30 years of service	
Years	Months	Tier One	Tier Two
49	0	0.524	0.445
	1	0.527	0.448
	2	0.530	0.450
	3	0.533	0.453
	4	0.536	0.455
	5	0.539	0.458
	6	0.542	0.460
	7	0.545	0.463
	8	0.548	0.465
	9	0.551	0.468
	10	0.554	0.470
	11	0.557	0.473
50	0	0.560	0.475
	1	0.563	0.478
	2	0.566	0.480
	3	0.569	0.483
	4	0.573	0.486
	5	0.576	0.488
	6	0.579	0.491
	7	0.582	0.494
	8	0.585	0.496
	9	0.588	0.499
	10	0.592	0.502
	11	0.595	0.504
51	0	0.598	0.507
	1	0.601	0.510
	2	0.605	0.513
	3	0.608	0.516
	4	0.612	0.518
	5	0.615	0.521
	6	0.618	0.524
	7	0.622	0.527
	8	0.625	0.530
	9	0.629	0.533
	10	0.632	0.535
	11	0.636	0.538
52	0	0.639	0.541
	1	0.643	0.544
	2	0.646	0.547
	3	0.650	0.550
	4	0.653	0.553
	5	0.657	0.556
	6	0.660	0.560
	7	0.664	0.563
	8	0.668	0.566
	9	0.671	0.569
	10	0.675	0.572
	11	0.678	0.575

**Oregon Public Employees Retirement System (Tier One / Tier Two)**  
**Actuarial Equivalency Factors Effective January 1, 2024**

**Early Retirement Factors for Telecommunicators**

Age at Retirement		Telecommunicators with 25 - 30 years of service	
Years	Months	Tier One	Tier Two
53	0	0.682	0.578
	1	0.686	0.581
	2	0.690	0.585
	3	0.693	0.588
	4	0.697	0.591
	5	0.701	0.594
	6	0.705	0.598
	7	0.709	0.601
	8	0.713	0.604
	9	0.716	0.607
	10	0.720	0.611
	11	0.724	0.614
54	0	0.728	0.617
	1	0.732	0.620
	2	0.736	0.624
	3	0.740	0.627
	4	0.744	0.631
	5	0.748	0.634
	6	0.752	0.638
	7	0.757	0.641
	8	0.761	0.645
	9	0.765	0.648
	10	0.769	0.652
	11	0.773	0.655
55	0	0.777	0.659
	1	0.783	0.664
	2	0.788	0.668
	3	0.794	0.673
	4	0.799	0.678
	5	0.805	0.682
	6	0.811	0.687
	7	0.816	0.692
	8	0.822	0.696
	9	0.827	0.701
	10	0.833	0.706
	11	0.838	0.710
56	0	0.844	0.715
	1	0.850	0.720
	2	0.856	0.725
	3	0.863	0.730
	4	0.869	0.736
	5	0.875	0.741
	6	0.881	0.746
	7	0.887	0.751
	8	0.893	0.756
	9	0.900	0.761
	10	0.906	0.767
	11	0.912	0.772

**Oregon Public Employees Retirement System (Tier One / Tier Two)**  
**Actuarial Equivalency Factors Effective January 1, 2024**

**Early Retirement Factors for Telecommunicators**

Age at Retirement		Telecommunicators with 25 - 30 years of service	
Years	Months	Tier One	Tier Two
57	0	0.918	0.777
	1	0.925	0.783
	2	0.932	0.788
	3	0.939	0.794
	4	0.945	0.799
	5	0.952	0.805
	6	0.959	0.811
	7	0.966	0.816
	8	0.973	0.822
	9	0.980	0.827
	10	0.986	0.833
	11	0.993	0.838
58	0	1.000	0.844
	1		0.850
	2		0.856
	3		0.863
	4		0.869
	5		0.875
	6		0.881
	7		0.887
	8		0.893
	9		0.900
	10		0.906
	11		0.912
59	0		0.918
	1		0.925
	2		0.932
	3		0.939
	4		0.945
	5		0.952
	6		0.959
	7		0.966
	8		0.973
	9		0.980
	10		0.986
	11		0.993
60	0		1.000

**Oregon Public Employees Retirement System (Tier One/Tier Two)**

Actuarial Reduction Method Adjustment Factors effective January 1, 2024

Table 1a - Single Life Annuity - Healthy Members (Retiree Mortality)

Member Age	Factor	Member Age	Factor	Member Age	Factor
15	1,773.3	45	773.6	75	206.4
16	1,731.2	46	748.3	76	194.0
17	1,689.8	47	723.4	77	182.1
18	1,649.1	48	699.0	78	170.6
19	1,609.2	49	675.1	79	159.5
20	1,570.0	50	651.5	80	148.9
21	1,531.4	51	628.7	81	138.7
22	1,493.4	52	606.4	82	129.0
23	1,456.0	53	584.5	83	119.8
24	1,419.2	54	563.1	84	111.0
25	1,383.0	55	542.1	85	102.8
26	1,347.4	56	521.5	86	95.1
27	1,312.4	57	501.4	87	87.8
28	1,277.9	58	481.7	88	81.1
29	1,244.1	59	462.3	89	74.8
30	1,210.8	60	443.4	90	69.0
31	1,178.0	61	424.8	91	63.7
32	1,145.8	62	406.6	92	58.9
33	1,114.2	63	388.8	93	54.5
34	1,083.0	64	371.4	94	50.5
35	1,052.4	65	354.4	95	46.8
36	1,022.4	66	337.7	96	43.5
37	992.8	67	321.5	97	40.5
38	963.7	68	305.6	98	37.7
39	935.1	69	290.2	99	35.3
40	907.0	70	275.1	100	33.0
41	879.4	71	260.5		
42	852.2	72	246.3		
43	825.5	73	232.6		
44	799.3	74	219.3		

Mortality Weighting: Blended Healthy Mortality  
 Interest: 0%  
 COLA: 1.60%

**Oregon Public Employees Retirement System (Tier One/Tier Two)**  
**Actuarial Reduction Method Adjustment Factors effective January 1, 2024**  
**Table 1b - Single Life Annuity - Disabled Members (Retiree Mortality)**

<b>Member Age</b>	<b>Factor</b>	<b>Member Age</b>	<b>Factor</b>	<b>Member Age</b>	<b>Factor</b>
15	1,354.3	45	546.4	75	155.5
16	1,317.1	46	528.2	76	146.7
17	1,282.0	47	510.6	77	138.2
18	1,248.9	48	493.6	78	130.0
19	1,216.6	49	477.3	79	122.2
20	1,184.7	50	461.4	80	114.6
21	1,153.2	51	446.0	81	107.4
22	1,121.8	52	431.0	82	100.6
23	1,090.8	53	416.3	83	94.1
24	1,060.1	54	402.0	84	88.0
25	1,030.0	55	388.0	85	82.2
26	1,000.4	56	374.2	86	76.8
27	971.5	57	360.7	87	71.7
28	943.1	58	347.4	88	67.0
29	915.4	59	334.3	89	62.6
30	888.2	60	321.4	90	58.5
31	861.5	61	308.7	91	54.6
32	835.4	62	296.2	92	51.1
33	809.9	63	283.9	93	47.7
34	784.9	64	271.8	94	44.6
35	760.4	65	259.9	95	41.7
36	736.5	66	248.3	96	39.0
37	713.2	67	236.9	97	36.5
38	690.3	68	225.7	98	34.2
39	668.1	69	214.9	99	32.0
40	646.3	70	204.3	100	30.1
41	625.2	71	193.9		
42	604.6	72	183.9		
43	584.6	73	174.1		
44	565.2	74	164.7		

Mortality Weighting: Blended Disabled Mortality  
Interest: 0%  
COLA: 1.60%

**Oregon Public Employees Retirement System (Tier One/Tier Two)**  
**Actuarial Reduction Method Adjustment Factors effective January 1, 2024**  
**Table 2 - Single Life Annuity (Beneficiary Mortality)**

Beneficiary		Beneficiary		Beneficiary	
Age	Factor	Age	Factor	Age	Factor
15	1,766.2	45	767.4	75	205.6
16	1,724.1	46	742.1	76	193.3
17	1,682.7	47	717.3	77	181.5
18	1,642.0	48	693.0	78	170.1
19	1,602.1	49	669.0	79	159.1
20	1,562.8	50	645.5	80	148.6
21	1,524.3	51	622.8	81	138.5
22	1,486.3	52	600.9	82	128.8
23	1,449.0	53	579.4	83	119.6
24	1,412.2	54	558.3	84	111.0
25	1,376.0	55	537.6	85	102.8
26	1,340.5	56	517.3	86	95.1
27	1,305.4	57	497.4	87	87.9
28	1,271.0	58	478.0	88	81.2
29	1,237.2	59	458.8	89	75.0
30	1,203.9	60	440.1	90	69.3
31	1,171.2	61	421.7	91	64.1
32	1,139.0	62	403.7	92	59.3
33	1,107.4	63	386.1	93	54.9
34	1,076.3	64	368.9	94	50.9
35	1,045.8	65	352.0	95	47.2
36	1,015.7	66	335.5	96	43.9
37	986.2	67	319.4	97	40.9
38	957.2	68	303.7	98	38.1
39	928.6	69	288.4	99	35.6
40	900.6	70	273.6	100	33.3
41	873.0	71	259.1		
42	845.9	72	245.1		
43	819.3	73	231.5		
44	793.1	74	218.3		

Mortality Weighting: Blended Beneficiary Mortality  
Interest: 0%  
COLA: 1.60%

**Oregon Public Employees Retirement System (Tier One/Tier Two)**  
**Actuarial Reduction Method Adjustment Factors effective January 1, 2024**  
**Table 3a - Certain & Life Annuity - Healthy Members**

Member Age	Years Certain Remaining														
	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1
15	1,773.6	1,773.6	1,773.5	1,773.5	1,773.5	1,773.4	1,773.4	1,773.4	1,773.4	1,773.4	1,773.3	1,773.3	1,773.3	1,773.3	1,773.3
16	1,731.5	1,731.4	1,731.4	1,731.4	1,731.3	1,731.3	1,731.3	1,731.3	1,731.3	1,731.2	1,731.2	1,731.2	1,731.2	1,731.2	1,731.2
17	1,690.1	1,690.1	1,690.0	1,690.0	1,690.0	1,689.9	1,689.9	1,689.9	1,689.9	1,689.8	1,689.8	1,689.8	1,689.8	1,689.8	1,689.8
18	1,649.5	1,649.4	1,649.4	1,649.3	1,649.3	1,649.3	1,649.3	1,649.2	1,649.2	1,649.2	1,649.2	1,649.2	1,649.2	1,649.2	1,649.2
19	1,609.5	1,609.5	1,609.4	1,609.4	1,609.4	1,609.4	1,609.3	1,609.3	1,609.3	1,609.3	1,609.3	1,609.2	1,609.2	1,609.2	1,609.2
20	1,570.3	1,570.2	1,570.2	1,570.2	1,570.1	1,570.1	1,570.1	1,570.0	1,570.0	1,570.0	1,570.0	1,570.0	1,570.0	1,570.0	1,570.0
21	1,531.7	1,531.6	1,531.6	1,531.6	1,531.5	1,531.5	1,531.5	1,531.4	1,531.4	1,531.4	1,531.4	1,531.4	1,531.4	1,531.4	1,531.4
22	1,493.7	1,493.7	1,493.6	1,493.6	1,493.5	1,493.5	1,493.5	1,493.5	1,493.4	1,493.4	1,493.4	1,493.4	1,493.4	1,493.4	1,493.4
23	1,456.3	1,456.3	1,456.2	1,456.2	1,456.2	1,456.1	1,456.1	1,456.1	1,456.1	1,456.0	1,456.0	1,456.0	1,456.0	1,456.0	1,456.0
24	1,419.6	1,419.5	1,419.5	1,419.4	1,419.4	1,419.3	1,419.3	1,419.3	1,419.3	1,419.3	1,419.2	1,419.2	1,419.2	1,419.2	1,419.2
25	1,383.4	1,383.3	1,383.3	1,383.2	1,383.2	1,383.1	1,383.1	1,383.1	1,383.1	1,383.1	1,383.0	1,383.0	1,383.0	1,383.0	1,383.0
26	1,347.8	1,347.7	1,347.7	1,347.6	1,347.6	1,347.5	1,347.5	1,347.5	1,347.5	1,347.4	1,347.4	1,347.4	1,347.4	1,347.4	1,347.4
27	1,312.8	1,312.7	1,312.6	1,312.6	1,312.6	1,312.5	1,312.5	1,312.5	1,312.4	1,312.4	1,312.4	1,312.4	1,312.4	1,312.4	1,312.4
28	1,278.3	1,278.3	1,278.2	1,278.2	1,278.1	1,278.1	1,278.0	1,278.0	1,278.0	1,278.0	1,278.0	1,277.9	1,277.9	1,277.9	1,277.9
29	1,244.5	1,244.4	1,244.4	1,244.3	1,244.3	1,244.2	1,244.2	1,244.2	1,244.1	1,244.1	1,244.1	1,244.1	1,244.1	1,244.1	1,244.1
30	1,211.2	1,211.1	1,211.1	1,211.0	1,211.0	1,210.9	1,210.9	1,210.9	1,210.8	1,210.8	1,210.8	1,210.8	1,210.8	1,210.8	1,210.8
31	1,178.5	1,178.4	1,178.4	1,178.3	1,178.2	1,178.2	1,178.2	1,178.1	1,178.1	1,178.1	1,178.1	1,178.0	1,178.0	1,178.0	1,178.0
32	1,146.3	1,146.3	1,146.2	1,146.1	1,146.1	1,146.0	1,146.0	1,145.9	1,145.9	1,145.9	1,145.9	1,145.8	1,145.8	1,145.8	1,145.8
33	1,114.7	1,114.6	1,114.6	1,114.5	1,114.4	1,114.4	1,114.3	1,114.3	1,114.3	1,114.2	1,114.2	1,114.2	1,114.2	1,114.2	1,114.2
34	1,083.6	1,083.6	1,083.5	1,083.4	1,083.3	1,083.3	1,083.2	1,083.2	1,083.1	1,083.1	1,083.1	1,083.1	1,083.1	1,083.1	1,083.0
35	1,053.1	1,053.0	1,052.9	1,052.8	1,052.7	1,052.7	1,052.6	1,052.6	1,052.5	1,052.5	1,052.5	1,052.5	1,052.5	1,052.4	1,052.4
36	1,023.0	1,022.9	1,022.8	1,022.7	1,022.7	1,022.6	1,022.6	1,022.5	1,022.5	1,022.4	1,022.4	1,022.4	1,022.4	1,022.4	1,022.4
37	993.5	993.4	993.3	993.2	993.1	993.0	993.0	992.9	992.9	992.9	992.8	992.8	992.8	992.8	992.8
38	964.5	964.4	964.3	964.2	964.1	964.0	963.9	963.9	963.8	963.8	963.8	963.7	963.7	963.7	963.7
39	936.0	935.9	935.7	935.6	935.5	935.4	935.4	935.3	935.2	935.2	935.2	935.1	935.1	935.1	935.1
40	908.0	907.8	907.7	907.6	907.4	907.3	907.3	907.2	907.2	907.1	907.1	907.1	907.0	907.0	907.0
41	880.5	880.3	880.1	880.0	879.9	879.8	879.7	879.6	879.5	879.5	879.5	879.4	879.4	879.4	879.4
42	853.6	853.3	853.1	852.9	852.8	852.6	852.5	852.5	852.4	852.4	852.3	852.3	852.3	852.2	852.2
43	827.0	826.8	826.5	826.3	826.2	826.0	825.9	825.8	825.7	825.7	825.6	825.6	825.6	825.6	825.5
44	801.0	800.7	800.4	800.2	800.0	799.9	799.7	799.6	799.5	799.5	799.4	799.4	799.4	799.3	799.3

Mortality Weighting: Blended Healthy Mortality  
Interest: 0%  
COLA: 1.60%



**Oregon Public Employees Retirement System (Tier One/Tier Two)**  
**Actuarial Reduction Method Adjustment Factors effective January 1, 2024**  
**Table 3a - Certain & Life Annuity - Healthy Members**

Member Age	Years Certain Remaining														
	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1
45	775.5	775.1	774.8	774.6	774.4	774.2	774.0	773.9	773.8	773.7	773.7	773.6	773.6	773.6	773.6
46	750.5	750.1	749.7	749.4	749.2	749.0	748.8	748.7	748.5	748.5	748.4	748.3	748.3	748.3	748.3
47	725.9	725.5	725.1	724.8	724.5	724.3	724.1	723.9	723.8	723.6	723.6	723.5	723.5	723.4	723.4
48	701.8	701.4	700.9	700.6	700.3	700.0	699.8	699.6	699.4	699.3	699.2	699.1	699.1	699.1	699.0
49	678.2	677.7	677.2	676.8	676.5	676.2	675.9	675.7	675.5	675.4	675.3	675.2	675.1	675.1	675.1
50	655.1	654.5	654.0	653.6	653.2	652.8	652.5	652.3	652.1	651.9	651.8	651.7	651.6	651.6	651.5
51	632.6	631.9	631.4	630.9	630.5	630.1	629.8	629.5	629.3	629.1	628.9	628.8	628.8	628.7	628.7
52	610.6	610.0	609.3	608.8	608.3	607.9	607.6	607.3	607.1	606.9	606.7	606.6	606.5	606.4	606.4
53	589.2	588.4	587.8	587.2	586.7	586.2	585.9	585.5	585.3	585.1	584.9	584.7	584.6	584.6	584.5
54	568.1	567.3	566.6	566.0	565.4	564.9	564.5	564.2	563.9	563.7	563.5	563.3	563.2	563.1	563.1
55	547.6	546.7	545.9	545.2	544.6	544.1	543.6	543.3	543.0	542.7	542.5	542.3	542.2	542.1	542.1
56	527.5	526.5	525.7	524.9	524.3	523.7	523.2	522.8	522.5	522.2	522.0	521.8	521.7	521.6	521.6
57	507.9	506.8	505.9	505.1	504.4	503.8	503.3	502.8	502.5	502.1	501.9	501.7	501.6	501.5	501.4
58	488.8	487.6	486.6	485.7	484.9	484.3	483.7	483.2	482.8	482.5	482.2	482.0	481.9	481.8	481.7
59	470.1	468.8	467.7	466.7	465.9	465.1	464.5	464.0	463.6	463.2	462.9	462.7	462.5	462.4	462.4
60	451.9	450.5	449.2	448.2	447.2	446.4	445.8	445.2	444.7	444.3	444.0	443.8	443.6	443.5	443.4
61	434.2	432.6	431.2	430.1	429.0	428.1	427.4	426.8	426.3	425.8	425.5	425.2	425.0	424.9	424.8
62	417.0	415.3	413.7	412.4	411.3	410.3	409.5	408.8	408.2	407.7	407.4	407.1	406.9	406.7	406.7
63	400.4	398.4	396.7	395.2	393.9	392.9	391.9	391.2	390.6	390.0	389.6	389.3	389.1	388.9	388.9
64	384.2	382.0	380.1	378.5	377.1	375.9	374.9	374.0	373.3	372.8	372.3	372.0	371.7	371.5	371.4
65	368.6	366.2	364.0	362.2	360.6	359.3	358.2	357.2	356.5	355.9	355.4	355.0	354.7	354.5	354.4
66	353.6	350.9	348.5	346.5	344.7	343.2	342.0	340.9	340.1	339.4	338.8	338.4	338.1	337.9	337.8
67	339.2	336.2	333.5	331.2	329.3	327.6	326.2	325.0	324.1	323.3	322.7	322.2	321.9	321.6	321.5
68	325.4	322.0	319.1	316.5	314.3	312.5	310.9	309.6	308.5	307.6	307.0	306.4	306.0	305.8	305.6
69	312.3	308.5	305.2	302.4	299.9	297.9	296.1	294.6	293.4	292.4	291.7	291.1	290.6	290.4	290.2
70	299.9	295.7	292.0	288.8	286.1	283.8	281.8	280.1	278.8	277.7	276.8	276.2	275.7	275.4	275.2
71	288.2	283.5	279.4	275.8	272.8	270.2	268.0	266.1	264.6	263.4	262.4	261.7	261.1	260.8	260.6
72	277.3	272.0	267.5	263.5	260.1	257.2	254.7	252.7	251.0	249.6	248.5	247.7	247.0	246.6	246.4
73	267.1	261.3	256.2	251.8	248.0	244.8	242.0	239.7	237.8	236.2	235.0	234.1	233.4	232.9	232.7
74	257.8	251.4	245.7	240.8	236.6	232.9	229.9	227.3	225.1	223.4	222.0	221.0	220.2	219.7	219.4

Mortality Weighting: Blended Healthy Mortality  
Interest: 0%  
COLA: 1.60%

**Oregon Public Employees Retirement System (Tier One/Tier Two)**  
**Actuarial Reduction Method Adjustment Factors effective January 1, 2024**  
**Table 3a - Certain & Life Annuity - Healthy Members**

Member Age	Years Certain Remaining														
	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1
75	249.3	242.2	235.9	230.5	225.8	221.7	218.3	215.4	213.0	211.0	209.5	208.3	207.4	206.9	206.5
76	241.7	233.9	227.0	220.9	215.7	211.1	207.3	204.1	201.4	199.2	197.5	196.1	195.2	194.5	194.1
77	234.9	226.4	218.8	212.1	206.3	201.2	197.0	193.3	190.3	187.9	185.9	184.4	183.4	182.6	182.2
78	228.9	219.7	211.4	204.0	197.6	192.0	187.2	183.2	179.8	177.1	174.9	173.2	172.0	171.2	170.7
79	223.8	213.8	204.8	196.8	189.7	183.5	178.2	173.7	169.9	166.9	164.4	162.5	161.1	160.2	159.7
80	219.4	208.7	199.0	190.3	182.5	175.7	169.8	164.8	160.6	157.2	154.4	152.3	150.7	149.7	149.1
81	215.8	204.4	194.0	184.6	176.1	168.7	162.2	156.6	151.9	148.1	145.0	142.6	140.8	139.6	138.9
82	212.8	200.8	189.7	179.6	170.5	162.3	155.2	149.1	143.9	139.5	136.1	133.3	131.4	130.0	129.3
83	210.4	197.8	186.1	175.4	165.6	156.8	149.0	142.2	136.4	131.6	127.7	124.7	122.4	120.9	120.1
84	208.5	195.4	183.2	171.8	161.3	151.9	143.4	136.0	129.7	124.4	120.0	116.6	114.0	112.3	111.3
85	207.0	193.5	180.8	168.8	157.8	147.7	138.6	130.6	123.6	117.7	112.9	109.1	106.2	104.2	103.1
86	205.9	192.1	178.9	166.4	154.8	144.1	134.4	125.8	118.2	111.7	106.4	102.1	98.9	96.7	95.4
87	205.1	190.9	177.4	164.5	152.4	141.2	130.9	121.6	113.4	106.4	100.5	95.7	92.2	89.7	88.2
88	204.5	190.1	176.2	163.0	150.4	138.7	127.9	118.0	109.2	101.6	95.2	89.9	86.0	83.2	81.6
89	204.0	189.5	175.4	161.8	148.9	136.7	125.4	115.0	105.6	97.4	90.4	84.7	80.3	77.2	75.4
90	203.7	189.0	174.7	160.9	147.7	135.1	123.3	112.4	102.6	93.8	86.2	80.0	75.2	71.7	69.7
91	203.5	188.7	174.2	160.2	146.8	133.9	121.7	110.4	100.0	90.7	82.6	75.8	70.5	66.7	64.5
92	203.4	188.5	173.9	159.7	146.0	132.9	120.4	108.6	97.8	88.0	79.4	72.2	66.4	62.2	59.7
93	203.3	188.3	173.7	159.4	145.5	132.1	119.3	107.3	96.0	85.8	76.7	68.9	62.7	58.1	55.4
94	203.2	188.2	173.5	159.1	145.1	131.6	118.5	106.1	94.5	83.9	74.3	66.1	59.4	54.5	51.4
95	203.2	188.1	173.4	158.9	144.8	131.1	117.9	105.3	93.3	82.3	72.3	63.7	56.5	51.2	47.9
96	203.1	188.1	173.3	158.8	144.6	130.8	117.4	104.6	92.4	81.0	70.6	61.5	54.0	48.3	44.7
97	203.1	188.1	173.3	158.7	144.5	130.6	117.1	104.0	91.6	79.9	69.2	59.7	51.7	45.6	41.8
98	203.1	188.0	173.2	158.7	144.4	130.4	116.8	103.6	91.0	79.0	68.0	58.1	49.8	43.3	39.1
99	203.1	188.0	173.2	158.6	144.3	130.3	116.6	103.3	90.5	78.3	67.0	56.8	48.1	41.2	36.7
100	203.1	188.0	173.2	158.6	144.3	130.2	116.4	103.0	90.1	77.8	66.2	55.7	46.5	39.3	34.6

Mortality Weighting: Blended Healthy Mortality  
Interest: 0%  
COLA: 1.60%

**Oregon Public Employees Retirement System (Tier One/Tier Two)**  
**Actuarial Reduction Method Adjustment Factors effective January 1, 2024**  
**Table 3b - Certain & Life Annuity - Disabled Members**

Member Age	Years Certain Remaining														
	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1
15	1,357.3	1,356.8	1,356.4	1,356.1	1,355.8	1,355.5	1,355.2	1,355.0	1,354.8	1,354.7	1,354.5	1,354.4	1,354.4	1,354.3	1,354.3
16	1,320.5	1,320.0	1,319.6	1,319.2	1,318.8	1,318.5	1,318.2	1,318.0	1,317.8	1,317.6	1,317.4	1,317.3	1,317.2	1,317.1	1,317.1
17	1,285.6	1,285.1	1,284.7	1,284.2	1,283.9	1,283.5	1,283.3	1,283.0	1,282.8	1,282.6	1,282.4	1,282.3	1,282.1	1,282.1	1,282.0
18	1,252.5	1,252.0	1,251.5	1,251.1	1,250.7	1,250.4	1,250.1	1,249.9	1,249.6	1,249.4	1,249.3	1,249.1	1,249.0	1,248.9	1,248.9
19	1,220.2	1,219.7	1,219.2	1,218.8	1,218.4	1,218.1	1,217.8	1,217.5	1,217.3	1,217.1	1,217.0	1,216.9	1,216.8	1,216.7	1,216.6
20	1,188.4	1,187.8	1,187.3	1,186.9	1,186.5	1,186.2	1,185.9	1,185.6	1,185.4	1,185.2	1,185.1	1,185.0	1,184.9	1,184.8	1,184.8
21	1,156.9	1,156.3	1,155.8	1,155.3	1,154.9	1,154.6	1,154.3	1,154.0	1,153.8	1,153.6	1,153.5	1,153.4	1,153.3	1,153.2	1,153.2
22	1,125.7	1,125.1	1,124.5	1,124.1	1,123.6	1,123.3	1,123.0	1,122.7	1,122.5	1,122.3	1,122.2	1,122.0	1,121.9	1,121.9	1,121.8
23	1,094.8	1,094.2	1,093.6	1,093.1	1,092.7	1,092.3	1,092.0	1,091.7	1,091.5	1,091.3	1,091.1	1,091.0	1,090.9	1,090.8	1,090.8
24	1,064.4	1,063.7	1,063.1	1,062.6	1,062.1	1,061.7	1,061.4	1,061.1	1,060.8	1,060.6	1,060.5	1,060.3	1,060.2	1,060.2	1,060.1
25	1,034.6	1,033.8	1,033.2	1,032.6	1,032.1	1,031.7	1,031.3	1,031.0	1,030.7	1,030.5	1,030.4	1,030.2	1,030.1	1,030.0	1,030.0
26	1,005.3	1,004.5	1,003.9	1,003.3	1,002.7	1,002.3	1,001.9	1,001.5	1,001.3	1,001.0	1,000.8	1,000.7	1,000.6	1,000.5	1,000.5
27	976.7	975.9	975.1	974.5	973.9	973.4	973.0	972.7	972.4	972.1	971.9	971.7	971.6	971.6	971.5
28	948.7	947.8	947.0	946.3	945.7	945.2	944.8	944.4	944.1	943.8	943.6	943.4	943.3	943.2	943.2
29	921.3	920.3	919.5	918.8	918.1	917.6	917.1	916.7	916.3	916.1	915.8	915.7	915.5	915.4	915.4
30	894.5	893.5	892.6	891.8	891.1	890.5	890.0	889.6	889.2	888.9	888.7	888.5	888.3	888.2	888.2
31	868.3	867.2	866.2	865.4	864.7	864.0	863.5	863.0	862.6	862.3	862.0	861.8	861.7	861.6	861.5
32	842.6	841.5	840.5	839.6	838.8	838.1	837.5	837.0	836.6	836.3	836.0	835.8	835.6	835.5	835.4
33	817.6	816.4	815.3	814.3	813.5	812.8	812.1	811.6	811.2	810.8	810.5	810.3	810.1	810.0	809.9
34	793.2	791.9	790.7	789.7	788.8	788.0	787.3	786.7	786.3	785.9	785.5	785.3	785.1	785.0	784.9
35	769.4	768.0	766.7	765.6	764.6	763.8	763.0	762.4	761.9	761.5	761.1	760.9	760.7	760.5	760.5
36	746.2	744.6	743.3	742.1	741.0	740.1	739.3	738.7	738.1	737.7	737.3	737.0	736.8	736.6	736.6
37	723.6	721.9	720.4	719.1	718.0	717.0	716.2	715.5	714.9	714.4	714.0	713.7	713.4	713.3	713.2
38	701.5	699.8	698.2	696.8	695.6	694.5	693.6	692.8	692.2	691.6	691.2	690.9	690.6	690.5	690.4
39	680.1	678.2	676.5	675.0	673.7	672.6	671.6	670.7	670.0	669.5	669.0	668.6	668.4	668.2	668.1
40	659.3	657.3	655.5	653.9	652.5	651.2	650.2	649.2	648.5	647.9	647.4	647.0	646.7	646.5	646.4
41	639.1	636.9	635.0	633.3	631.8	630.5	629.3	628.3	627.5	626.8	626.3	625.8	625.5	625.3	625.2
42	619.4	617.2	615.2	613.3	611.7	610.3	609.1	608.0	607.1	606.4	605.8	605.3	605.0	604.7	604.6
43	600.4	598.0	595.9	594.0	592.3	590.7	589.4	588.3	587.3	586.5	585.9	585.4	585.0	584.8	584.6
44	582.0	579.5	577.3	575.2	573.4	571.8	570.4	569.2	568.1	567.3	566.6	566.0	565.6	565.4	565.2

Mortality Weighting: Blended Disabled Mortality  
Interest: 0%  
COLA: 1.60%

**Oregon Public Employees Retirement System (Tier One/Tier Two)**  
**Actuarial Reduction Method Adjustment Factors effective January 1, 2024**  
**Table 3b - Certain & Life Annuity - Disabled Members**

Member Age	Years Certain Remaining														
	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1
45	564.2	561.6	559.2	557.1	555.2	553.5	552.0	550.7	549.6	548.7	547.9	547.3	546.9	546.6	546.4
46	547.0	544.3	541.8	539.6	537.5	535.8	534.2	532.8	531.6	530.7	529.8	529.2	528.7	528.4	528.2
47	530.3	527.5	524.9	522.6	520.5	518.6	517.0	515.5	514.3	513.2	512.4	511.7	511.2	510.9	510.7
48	514.2	511.3	508.6	506.2	504.0	502.1	500.4	498.8	497.5	496.4	495.5	494.8	494.3	493.9	493.7
49	498.6	495.6	492.9	490.4	488.1	486.1	484.3	482.7	481.4	480.2	479.3	478.5	478.0	477.6	477.3
50	483.6	480.5	477.6	475.0	472.7	470.6	468.8	467.1	465.7	464.5	463.5	462.8	462.2	461.7	461.5
51	468.9	465.7	462.8	460.1	457.7	455.5	453.6	451.9	450.5	449.2	448.2	447.4	446.8	446.3	446.1
52	454.6	451.3	448.3	445.5	443.1	440.8	438.9	437.1	435.6	434.3	433.3	432.4	431.8	431.3	431.1
53	440.6	437.2	434.1	431.3	428.8	426.5	424.5	422.7	421.1	419.8	418.7	417.8	417.1	416.7	416.4
54	427.0	423.5	420.3	417.4	414.8	412.5	410.4	408.5	406.9	405.6	404.4	403.5	402.8	402.4	402.1
55	413.7	410.1	406.8	403.9	401.2	398.7	396.6	394.7	393.1	391.7	390.5	389.6	388.9	388.4	388.1
56	400.8	397.0	393.6	390.6	387.8	385.3	383.1	381.1	379.5	378.0	376.8	375.9	375.1	374.6	374.3
57	388.1	384.2	380.7	377.5	374.7	372.1	369.8	367.8	366.1	364.6	363.4	362.4	361.7	361.1	360.8
58	375.7	371.7	368.1	364.8	361.8	359.1	356.8	354.7	353.0	351.4	350.2	349.2	348.4	347.9	347.5
59	363.7	359.5	355.7	352.3	349.2	346.4	344.0	341.9	340.0	338.5	337.2	336.1	335.3	334.8	334.4
60	351.9	347.5	343.6	340.0	336.8	333.9	331.4	329.2	327.3	325.7	324.3	323.3	322.4	321.9	321.5
61	340.5	335.9	331.8	328.0	324.7	321.7	319.1	316.8	314.8	313.1	311.7	310.6	309.8	309.2	308.8
62	329.4	324.6	320.2	316.3	312.8	309.7	307.0	304.6	302.5	300.8	299.3	298.2	297.3	296.7	296.3
63	318.7	313.6	309.1	304.9	301.3	298.0	295.1	292.6	290.5	288.6	287.1	285.9	285.0	284.4	284.0
64	308.4	303.0	298.2	293.9	290.0	286.6	283.5	280.9	278.7	276.7	275.2	273.9	273.0	272.3	271.9
65	298.5	292.8	287.7	283.2	279.1	275.4	272.3	269.5	267.1	265.1	263.5	262.1	261.1	260.4	260.0
66	289.0	283.0	277.6	272.8	268.5	264.6	261.3	258.3	255.8	253.7	252.0	250.6	249.6	248.8	248.4
67	280.0	273.7	268.0	262.8	258.2	254.2	250.6	247.5	244.9	242.6	240.8	239.3	238.2	237.5	237.0
68	271.5	264.8	258.7	253.2	248.4	244.1	240.3	237.0	234.2	231.8	229.9	228.3	227.2	226.3	225.9
69	263.5	256.3	249.9	244.1	238.9	234.3	230.3	226.8	223.8	221.3	219.2	217.6	216.4	215.5	215.0
70	256.0	248.4	241.5	235.4	229.9	225.0	220.7	217.0	213.8	211.1	208.9	207.2	205.9	204.9	204.4
71	249.0	241.0	233.7	227.1	221.3	216.1	211.5	207.5	204.1	201.3	198.9	197.0	195.6	194.7	194.1
72	242.6	234.1	226.3	219.3	213.1	207.5	202.7	198.4	194.8	191.7	189.2	187.2	185.7	184.7	184.1
73	236.8	227.8	219.5	212.1	205.4	199.5	194.2	189.7	185.8	182.5	179.8	177.7	176.1	175.0	174.3
74	231.6	222.0	213.2	205.3	198.2	191.8	186.3	181.4	177.2	173.7	170.8	168.5	166.8	165.6	164.9

Mortality Weighting: Blended Disabled Mortality  
Interest: 0%  
COLA: 1.60%

**Oregon Public Employees Retirement System (Tier One/Tier Two)**  
**Actuarial Reduction Method Adjustment Factors effective January 1, 2024**  
**Table 3b - Certain & Life Annuity - Disabled Members**

Member Age	Years Certain Remaining														
	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1
75	226.9	216.8	207.5	199.1	191.5	184.7	178.7	173.5	169.0	165.3	162.2	159.7	157.8	156.5	155.8
76	222.8	212.1	202.3	193.4	185.3	178.1	171.7	166.1	161.3	157.2	153.9	151.2	149.2	147.8	147.0
77	219.2	208.0	197.7	188.2	179.6	171.9	165.1	159.1	153.9	149.5	145.9	143.0	140.9	139.4	138.5
78	216.0	204.4	193.5	183.6	174.5	166.3	158.9	152.5	147.0	142.2	138.4	135.3	132.9	131.3	130.3
79	213.4	201.3	189.9	179.4	169.8	161.1	153.3	146.4	140.5	135.4	131.2	127.8	125.3	123.5	122.5
80	211.2	198.6	186.8	175.8	165.7	156.5	148.2	140.8	134.4	129.0	124.4	120.8	118.0	116.1	115.0
81	209.4	196.4	184.1	172.7	162.1	152.3	143.6	135.7	128.9	123.0	118.1	114.1	111.1	109.0	107.8
82	207.9	194.5	181.9	170.0	158.9	148.7	139.4	131.1	123.8	117.4	112.2	107.9	104.6	102.3	101.0
83	206.7	193.0	180.0	167.7	156.2	145.5	135.7	126.9	119.1	112.4	106.7	102.0	98.5	96.0	94.5
84	205.8	191.8	178.4	165.8	153.8	142.7	132.5	123.2	114.9	107.7	101.6	96.6	92.8	90.1	88.5
85	205.0	190.8	177.2	164.2	151.9	140.3	129.7	119.9	111.2	103.5	97.0	91.6	87.5	84.5	82.7
86	204.5	190.1	176.2	162.9	150.2	138.3	127.2	117.0	107.8	99.7	92.8	87.0	82.5	79.3	77.4
87	204.1	189.5	175.4	161.8	148.9	136.6	125.1	114.5	104.9	96.3	88.9	82.8	77.9	74.5	72.4
88	203.8	189.1	174.8	161.0	147.8	135.2	123.4	112.4	102.3	93.3	85.5	78.9	73.7	70.0	67.7
89	203.6	188.8	174.3	160.4	146.9	134.0	121.9	110.5	100.0	90.6	82.4	75.4	69.9	65.8	63.3
90	203.4	188.5	174.0	159.9	146.2	133.1	120.6	108.9	98.1	88.3	79.6	72.2	66.3	62.0	59.3
91	203.3	188.4	173.7	159.5	145.7	132.4	119.6	107.6	96.4	86.2	77.1	69.4	63.1	58.4	55.6
92	203.2	188.2	173.6	159.2	145.3	131.8	118.8	106.5	95.0	84.4	75.0	66.8	60.1	55.1	52.1
93	203.2	188.2	173.4	159.0	145.0	131.3	118.2	105.6	93.8	82.9	73.0	64.5	57.4	52.1	48.8
94	203.2	188.1	173.3	158.9	144.7	131.0	117.6	104.9	92.8	81.5	71.3	62.4	55.0	49.3	45.8
95	203.1	188.1	173.3	158.8	144.6	130.7	117.2	104.3	92.0	80.4	69.9	60.5	52.7	46.8	43.0
96	203.1	188.1	173.2	158.7	144.4	130.5	116.9	103.8	91.3	79.5	68.6	58.9	50.7	44.4	40.3
97	203.1	188.0	173.2	158.6	144.3	130.3	116.7	103.5	90.7	78.7	67.5	57.5	48.9	42.2	37.9
98	203.1	188.0	173.2	158.6	144.3	130.2	116.5	103.2	90.3	78.0	66.6	56.2	47.3	40.3	35.7
99	203.1	188.0	173.2	158.6	144.2	130.2	116.4	103.0	90.0	77.5	65.9	55.2	45.9	38.6	33.7
100	203.1	188.0	173.2	158.6	144.2	130.1	116.3	102.8	89.7	77.1	65.2	54.3	44.7	37.0	31.8

Mortality Weighting: Blended Disabled Mortality  
Interest: 0%  
COLA: 1.60%

**Oregon Public Employees Retirement System (Tier One/Tier Two)**  
**Actuarial Reduction Method Adjustment Factors effective January 1, 2024**  
**Table 4 - Certain Only Annuity**

Beneficiary Age	Years Certain Remaining														
	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1
All Ages	204.9	189.6	174.6	159.9	145.4	131.1	117.0	103.2	89.6	76.1	62.9	50.0	37.2	24.6	12.2

Mortality Weighting: None  
Interest: 0%  
COLA: 1.60%

**Oregon Public Employees Retirement System (Tier One/Tier Two)**  
**Actuarial Reduction Method Adjustment Factors effective January 1, 2024**  
**Table 5a - 100% Joint and Survivor Annuity - Healthy Members**

Beneficiary Age Difference	Beneficiary Age	Member Age																			
		40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59
Beneficiary younger	15	1,412.2	1,376.0	1,340.5	1,305.5	1,271.1	1,237.2	1,204.0	1,171.2	1,139.1	1,107.4	1,076.3	1,045.8	1,015.7	986.2	957.1	928.5	900.5	872.9	845.8	819.1
	14	1,380.3	1,344.6	1,309.6	1,275.1	1,241.2	1,207.9	1,175.1	1,142.9	1,111.2	1,080.1	1,049.4	1,019.3	989.7	960.6	932.0	903.9	876.2	849.1	822.4	796.1
	13	1,349.3	1,314.2	1,279.6	1,245.7	1,212.3	1,179.5	1,147.2	1,115.4	1,084.2	1,053.5	1,023.3	993.7	964.5	935.9	907.7	880.0	852.8	826.0	799.7	773.9
	12	1,319.3	1,284.7	1,250.7	1,217.2	1,184.3	1,152.0	1,120.2	1,088.9	1,058.1	1,027.9	998.1	968.9	940.2	911.9	884.2	856.9	830.1	803.7	777.8	752.4
	11	1,290.4	1,256.3	1,222.8	1,189.8	1,157.4	1,125.5	1,094.1	1,063.3	1,033.0	1,003.1	973.8	945.0	916.7	888.9	861.5	834.6	808.2	782.2	756.7	731.6
	10	1,262.6	1,229.0	1,195.9	1,163.4	1,131.4	1,100.0	1,069.0	1,038.6	1,008.7	979.3	950.4	922.0	894.1	866.7	839.7	813.2	787.2	761.6	736.4	711.7
	9	1,235.9	1,202.7	1,170.1	1,138.0	1,106.5	1,075.5	1,045.0	1,015.0	985.5	956.5	928.0	900.0	872.5	845.4	818.8	792.7	767.0	741.8	717.0	692.6
	8	1,210.3	1,177.6	1,145.4	1,113.8	1,082.7	1,052.0	1,022.0	992.4	963.3	934.7	906.5	878.9	851.7	825.1	798.8	773.0	747.7	722.8	698.4	674.5
	7	1,186.0	1,153.7	1,121.9	1,090.7	1,059.9	1,029.7	1,000.0	970.8	942.1	913.8	886.1	858.8	832.0	805.7	779.8	754.3	729.3	704.8	680.8	657.3
	6	1,162.9	1,130.9	1,099.6	1,068.7	1,038.3	1,008.5	979.2	950.3	921.9	894.0	866.6	839.7	813.2	787.2	761.7	736.6	711.9	687.8	664.2	641.0
5	1,141.0	1,109.4	1,078.4	1,047.9	1,017.9	988.4	959.4	930.9	902.9	875.3	848.2	821.6	795.5	769.8	744.5	719.7	695.5	671.7	648.4	625.6	
4	1,120.3	1,089.1	1,058.5	1,028.3	998.6	969.5	940.8	912.6	884.9	857.6	830.9	804.6	778.7	753.3	728.4	704.0	680.1	656.6	633.6	611.0	
3	1,100.9	1,070.1	1,039.7	1,009.9	980.6	951.7	923.3	895.4	868.0	841.1	814.6	788.5	763.0	737.9	713.3	689.3	665.6	642.5	619.7	597.3	
2	1,082.8	1,052.3	1,022.2	992.7	963.6	935.1	907.0	879.4	852.2	825.6	799.3	773.6	748.3	723.5	699.3	675.5	652.1	629.2	606.6	584.5	
1	1,066.0	1,035.7	1,006.0	976.7	947.9	919.6	891.8	864.4	837.6	811.1	785.1	759.6	734.7	710.3	686.3	662.7	639.5	616.8	594.5	572.6	
0	1,050.4	1,020.4	990.9	961.9	933.3	905.3	877.7	850.6	824.0	797.8	772.0	746.8	722.2	697.9	674.1	650.8	627.8	605.3	583.2	561.5	
-1	1,036.0	1,006.2	977.0	948.2	919.9	892.1	864.7	837.8	811.4	785.4	759.9	735.0	710.6	686.6	663.0	639.8	617.1	594.7	572.8	551.3	
-2	1,022.8	993.2	964.2	935.6	907.5	879.9	852.8	826.1	799.9	774.1	748.9	724.2	699.9	676.1	652.7	629.7	607.1	585.0	563.2	541.9	
-3	1,010.7	981.4	952.5	924.1	896.2	868.8	841.9	815.4	789.4	763.9	738.8	714.2	690.2	666.5	643.2	620.4	598.0	576.0	554.5	533.3	
-4	999.7	970.6	941.9	913.7	886.0	858.7	831.9	805.6	779.8	754.5	729.6	705.2	681.2	657.7	634.6	612.0	589.7	567.9	546.5	525.4	
-5	989.8	960.8	932.2	904.2	876.6	849.5	822.9	796.8	771.2	746.0	721.2	696.9	673.2	649.8	626.8	604.3	582.2	560.5	539.2	518.3	
-6	980.8	951.9	923.5	895.6	868.2	841.3	814.8	788.9	763.4	738.3	713.6	689.5	665.8	642.6	619.8	597.3	575.4	553.8	532.6	511.9	
-7	972.7	943.9	915.7	887.9	860.6	833.8	807.5	781.7	756.3	731.3	706.8	682.8	659.2	636.1	613.4	591.1	569.2	547.8	526.7	506.1	
-8	965.4	936.8	908.6	881.0	853.9	827.2	801.0	775.2	749.9	725.1	700.6	676.7	653.3	630.2	607.6	585.4	563.7	542.3	521.4	500.8	
-9	958.9	930.3	902.3	874.8	847.8	821.2	795.1	769.4	744.2	719.4	695.1	671.3	647.9	625.0	602.5	580.4	558.7	537.5	516.6	496.2	
-10	953.0	924.6	896.7	869.3	842.4	815.9	789.8	764.3	739.1	714.4	690.1	666.4	643.1	620.3	597.9	575.8	554.3	533.1	512.4	492.0	
-11	947.9	919.6	891.8	864.4	837.5	811.1	785.1	759.6	734.6	709.9	685.7	662.0	638.9	616.1	593.7	571.8	550.3	529.3	508.6	488.3	
-12	943.3	915.1	887.3	860.0	833.2	806.8	780.9	755.5	730.5	705.9	681.8	658.2	635.0	612.4	590.1	568.2	546.8	525.8	505.2	485.0	
-13	939.2	911.0	883.3	856.1	829.3	803.0	777.2	751.8	726.9	702.3	678.3	654.7	631.7	609.0	586.8	565.0	543.7	522.8	502.3	482.1	
Beneficiary older	-14	935.6	907.5	879.8	852.6	825.9	799.7	773.9	748.5	723.6	699.2	675.1	651.6	628.6	606.1	583.9	562.2	540.9	520.1	499.6	479.6
	-15	932.4	904.3	876.7	849.5	822.9	796.7	770.9	745.6	720.8	696.3	672.4	648.9	626.0	603.5	581.4	559.7	538.5	517.7	497.3	477.3

Beneficiary Age Difference = Member Age minus Beneficiary Age

**Oregon Public Employees Retirement System (Tier One/Tier Two)**  
**Actuarial Reduction Method Adjustment Factors effective January 1, 2024**  
**Table 5a - 100% Joint and Survivor Annuity - Healthy Members**

	Beneficiary Age Difference	Member Age																			
		60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79
Beneficiary younger	15	792.9	767.2	741.9	717.0	692.6	668.6	645.2	622.5	600.1	578.2	556.7	535.6	515.0	494.7	474.8	455.4	436.3	417.6	399.3	381.5
	14	770.3	745.0	720.1	695.6	671.6	648.1	625.3	602.9	580.9	559.4	538.2	517.5	497.1	477.2	457.7	438.5	419.8	401.4	383.5	365.9
	13	748.5	723.5	699.0	674.9	651.4	628.5	606.0	584.0	562.3	541.1	520.3	499.9	479.9	460.3	441.1	422.2	403.8	385.8	368.2	350.9
	12	727.3	702.8	678.6	655.1	632.1	609.5	587.4	565.7	544.4	523.5	503.0	482.9	463.2	443.9	425.0	406.5	388.4	370.7	353.4	336.5
	11	707.0	682.8	659.1	636.1	613.5	591.2	569.4	548.1	527.1	506.5	486.3	466.5	447.2	428.2	409.6	391.4	373.6	356.2	339.2	322.7
	10	687.4	663.7	640.6	617.8	595.5	573.7	552.2	531.1	510.4	490.2	470.3	450.8	431.7	413.0	394.8	376.9	359.4	342.3	325.6	309.4
	9	668.8	645.6	622.7	600.3	578.4	556.8	535.6	514.9	494.5	474.5	454.9	435.7	417.0	398.6	380.6	363.0	345.8	329.0	312.7	296.7
	8	651.1	628.2	605.7	583.6	561.9	540.7	519.8	499.3	479.2	459.5	440.2	421.3	402.8	384.7	367.0	349.7	332.8	316.4	300.3	284.7
	7	634.3	611.7	589.5	567.7	546.3	525.3	504.7	484.5	464.7	445.3	426.2	407.6	389.4	371.6	354.1	337.1	320.5	304.4	288.6	273.3
	6	618.3	595.9	574.0	552.5	531.4	510.7	490.3	470.4	450.9	431.7	413.0	394.6	376.6	359.1	341.9	325.2	308.9	293.0	277.6	262.6
	5	603.1	581.0	559.4	538.1	517.3	496.8	476.8	457.1	437.8	418.9	400.4	382.3	364.6	347.3	330.5	314.0	298.0	282.4	267.2	252.5
	4	588.8	567.0	545.6	524.6	504.0	483.8	464.0	444.5	425.5	406.8	388.6	370.7	353.3	336.3	319.7	303.5	287.7	272.4	257.5	243.1
	3	575.4	553.8	532.6	511.9	491.5	471.5	451.9	432.7	413.9	395.5	377.5	359.9	342.7	325.9	309.6	293.6	278.1	263.1	248.5	234.3
	2	562.8	541.5	520.5	500.0	479.8	460.1	440.7	421.7	403.1	385.0	367.2	349.8	332.8	316.3	300.2	284.5	269.3	254.4	240.1	226.2
	1	551.1	530.0	509.2	488.9	469.0	449.4	430.3	411.5	393.1	375.1	357.6	340.4	323.7	307.4	291.5	276.0	261.0	246.5	232.4	218.7
0	540.2	519.3	498.8	478.6	458.9	439.5	420.6	402.0	383.8	366.1	348.7	331.8	315.2	299.2	283.5	268.3	253.5	239.1	225.3	211.8	
Beneficiary older	-1	530.2	509.4	489.1	469.2	449.6	430.4	411.7	393.3	375.3	357.7	340.6	323.8	307.5	291.6	276.1	261.1	246.6	232.4	218.8	205.6
	-2	520.9	500.4	480.2	460.4	441.1	422.1	403.5	385.3	367.5	350.1	333.1	316.5	300.4	284.7	269.5	254.6	240.3	226.3	212.9	199.9
	-3	512.5	492.1	472.1	452.5	433.3	414.4	396.0	378.0	360.3	343.1	326.3	309.9	294.0	278.5	263.4	248.7	234.6	220.8	207.6	194.8
	-4	504.8	484.5	464.7	445.2	426.2	407.5	389.2	371.3	353.9	336.8	320.2	303.9	288.2	272.8	257.9	243.4	229.4	215.9	202.8	190.2
	-5	497.8	477.7	458.0	438.7	419.7	401.2	383.1	365.3	348.0	331.1	314.6	298.5	282.9	267.7	253.0	238.7	224.8	211.4	198.5	186.1
	-6	491.5	471.5	451.9	432.7	413.9	395.5	377.5	359.9	342.7	326.0	309.6	293.7	278.2	263.2	248.6	234.4	220.7	207.5	194.8	182.5
	-7	485.8	465.9	446.5	427.4	408.7	390.4	372.6	355.1	338.0	321.4	305.2	289.4	274.0	259.1	244.6	230.6	217.1	204.0	191.4	179.3
	-8	480.7	460.9	441.6	422.6	404.1	385.9	368.1	350.8	333.8	317.3	301.2	285.5	270.3	255.5	241.2	227.3	213.9	201.0	188.5	176.6
	-9	476.1	456.5	437.2	418.4	399.9	381.9	364.2	346.9	330.1	313.7	297.7	282.1	267.0	252.3	238.1	224.4	211.1	198.3	186.0	174.2
	-10	472.1	452.5	433.3	414.6	396.2	378.3	360.7	343.5	326.8	310.5	294.6	279.1	264.1	249.6	235.4	221.8	208.6	196.0	183.8	172.1
	-11	468.5	449.0	429.9	411.2	393.0	375.1	357.6	340.6	323.9	307.7	291.9	276.5	261.6	247.1	233.1	219.6	206.5	194.0	181.9	170.3
	-12	465.3	445.9	426.9	408.3	390.1	372.3	354.9	337.9	321.4	305.2	289.5	274.2	259.4	245.0	231.1	217.7	204.7	192.3	180.3	168.8
	-13	462.4	443.1	424.2	405.7	387.6	369.8	352.5	335.6	319.1	303.1	287.4	272.2	257.5	243.2	229.4	216.0	203.2	190.8	178.9	167.5
	-14	459.9	440.7	421.8	403.4	385.3	367.7	350.4	333.6	317.2	301.2	285.6	270.5	255.8	241.6	227.9	214.6	201.9	189.6	177.7	166.4
	-15	457.7	438.6	419.8	401.4	383.4	365.8	348.6	331.8	315.5	299.6	284.1	269.0	254.4	240.3	226.6	213.5	200.7	188.5	176.7	165.4

Beneficiary Age Difference = Member Age minus Beneficiary Age



**Oregon Public Employees Retirement System (Tier One/Tier Two)**  
**Actuarial Reduction Method Adjustment Factors effective January 1, 2024**  
**Table 5a - 100% Joint and Survivor Annuity - Healthy Members**

	Beneficiary Age Difference	Member Age																				
		80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
Beneficiary younger	15	364.0	346.9	330.2	314.0	298.2	282.8	267.9	253.4	239.3	225.8	212.7	200.0	187.9	176.2	165.0	154.2	144.0	134.2	124.9	116.1	107.8
	14	348.8	332.1	315.7	299.8	284.4	269.4	254.8	240.7	227.1	213.9	201.2	189.0	177.2	165.9	155.1	144.8	135.0	125.6	116.8	108.5	100.7
	13	334.1	317.7	301.8	286.2	271.1	256.5	242.3	228.6	215.3	202.5	190.2	178.4	167.1	156.2	145.8	135.9	126.5	117.6	109.3	101.4	94.1
	12	320.0	304.0	288.3	273.2	258.4	244.2	230.3	217.0	204.1	191.7	179.8	168.4	157.4	147.0	137.0	127.5	118.6	110.2	102.3	94.9	88.0
	11	306.5	290.8	275.5	260.7	246.3	232.4	218.9	205.9	193.5	181.4	169.9	158.9	148.3	138.3	128.7	119.7	111.2	103.3	95.8	88.9	82.5
	10	293.6	278.2	263.3	248.8	234.7	221.2	208.1	195.5	183.4	171.7	160.6	149.9	139.8	130.1	121.0	112.5	104.4	96.9	89.9	83.5	77.5
	9	281.2	266.2	251.6	237.4	223.8	210.5	197.8	185.6	173.8	162.5	151.8	141.5	131.8	122.6	113.9	105.8	98.2	91.1	84.6	78.5	73.0
	8	269.5	254.8	240.5	226.7	213.4	200.5	188.1	176.2	164.8	153.9	143.5	133.7	124.3	115.6	107.3	99.6	92.5	85.8	79.7	74.1	68.9
	7	258.5	244.1	230.1	216.6	203.6	191.1	179.0	167.5	156.4	145.9	135.9	126.4	117.5	109.1	101.3	94.0	87.3	81.1	75.3	70.1	65.2
	6	248.0	233.9	220.3	207.1	194.4	182.2	170.5	159.3	148.6	138.4	128.8	119.7	111.2	103.2	95.8	89.0	82.6	76.8	71.4	66.4	61.9
	5	238.3	224.4	211.1	198.2	185.9	174.0	162.6	151.7	141.3	131.5	122.3	113.6	105.5	97.9	90.9	84.4	78.4	72.9	67.9	63.2	59.0
	4	229.1	215.6	202.5	190.0	177.9	166.3	155.2	144.7	134.7	125.2	116.3	108.0	100.3	93.1	86.4	80.3	74.6	69.4	64.7	60.3	56.3
	3	220.6	207.4	194.6	182.3	170.5	159.2	148.5	138.2	128.6	119.5	111.0	103.0	95.6	88.8	82.4	76.6	71.3	66.4	61.9	57.7	54.0
	2	212.8	199.8	187.3	175.3	163.7	152.7	142.3	132.4	123.1	114.3	106.1	98.5	91.4	84.9	78.9	73.3	68.3	63.6	59.4	55.5	51.9
	1	205.5	192.8	180.5	168.8	157.6	146.9	136.7	127.1	118.1	109.6	101.8	94.5	87.7	81.5	75.7	70.4	65.6	61.2	57.1	53.4	50.0
<hr/>																						
	0	198.9	186.4	174.4	162.9	151.9	141.5	131.7	122.4	113.6	105.5	97.9	90.9	84.4	78.4	72.9	67.9	63.2	59.0	55.1	51.6	48.4
<hr/>																						
	-1	192.8	180.6	168.8	157.6	146.9	136.7	127.1	118.1	109.7	101.8	94.5	87.7	81.4	75.7	70.4	65.6	61.1	57.1	53.4	50.0	46.9
	-2	187.4	175.3	163.8	152.8	142.4	132.5	123.1	114.4	106.2	98.5	91.4	84.9	78.9	73.3	68.2	63.6	59.3	55.4	51.8	48.6	45.6
	-3	182.5	170.6	159.3	148.6	138.3	128.7	119.6	111.0	103.1	95.6	88.8	82.4	76.6	71.2	66.3	61.8	57.6	53.9	50.4	47.3	44.4
	-4	178.1	166.5	155.4	144.8	134.8	125.3	116.5	108.1	100.3	93.1	86.4	80.2	74.6	69.3	64.6	60.2	56.2	52.5	49.2	46.2	43.4
	-5	174.2	162.8	151.9	141.5	131.7	122.4	113.7	105.6	98.0	90.9	84.4	78.3	72.8	67.7	63.1	58.8	54.9	51.4	48.2	45.2	42.6
	-6	170.8	159.5	148.8	138.6	129.0	119.9	111.3	103.3	95.9	89.0	82.6	76.7	71.2	66.3	61.7	57.6	53.8	50.4	47.2	44.4	41.8
	-7	167.8	156.7	146.1	136.1	126.6	117.6	109.3	101.4	94.1	87.3	81.0	75.2	69.9	65.0	60.6	56.5	52.8	49.5	46.4	43.7	41.2
	-8	165.1	154.2	143.8	133.9	124.5	115.7	107.4	99.7	92.5	85.8	79.6	73.9	68.7	63.9	59.5	55.6	52.0	48.7	45.7	43.0	40.6
	-9	162.9	152.1	141.8	132.0	122.8	114.1	105.9	98.2	91.1	84.5	78.4	72.8	67.7	62.9	58.7	54.8	51.2	48.0	45.1	42.5	40.2
	-10	160.9	150.2	140.0	130.4	121.2	112.6	104.5	97.0	89.9	83.4	77.4	71.8	66.7	62.1	57.9	54.1	50.6	47.4	44.6	42.1	39.8
	-11	159.2	148.6	138.6	129.0	119.9	111.4	103.4	95.9	88.9	82.4	76.5	71.0	66.0	61.4	57.2	53.5	50.0	47.0	44.2	41.7	
	-12	157.8	147.3	137.3	127.8	118.8	110.3	102.3	94.9	88.0	81.6	75.7	70.2	65.3	60.8	56.7	52.9	49.6	46.6	43.9		
	-13	156.6	146.1	136.2	126.7	117.8	109.4	101.5	94.1	87.2	80.9	75.0	69.6	64.7	60.2	56.2	52.5	49.2	46.3			
Beneficiary older	-14	155.5	145.1	135.2	125.8	116.9	108.6	100.7	93.4	86.5	80.2	74.4	69.1	64.2	59.8	55.8	52.2	48.9				
	-15	154.6	144.3	134.4	125.1	116.2	107.9	100.1	92.8	86.0	79.7	73.9	68.6	63.8	59.4	55.4	51.9					

Beneficiary Age Difference = Member Age minus Beneficiary Age

**Oregon Public Employees Retirement System (Tier One/Tier Two)**  
**Actuarial Reduction Method Adjustment Factors effective January 1, 2024**  
**Table 5b - 100% Joint and Survivor Annuity - Disabled Members**

	Beneficiary Age Difference	Member Age																			
		20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39
Beneficiary younger	15	2,254.8	2,204.6	2,155.2	2,106.7	2,058.9	2,011.9	1,965.6	1,920.2	1,875.5	1,831.5	1,788.3	1,745.8	1,704.0	1,662.9	1,622.6	1,582.9	1,543.9	1,505.6	1,467.8	1,430.7
	14	2,207.5	2,158.1	2,109.5	2,061.6	2,014.6	1,968.3	1,922.8	1,878.1	1,834.1	1,790.8	1,748.3	1,706.4	1,665.3	1,624.9	1,585.2	1,546.2	1,507.8	1,470.0	1,432.9	1,396.3
	13	2,161.3	2,112.6	2,064.7	2,017.7	1,971.3	1,925.8	1,881.0	1,836.9	1,793.6	1,751.0	1,709.2	1,668.0	1,627.6	1,587.8	1,548.8	1,510.3	1,472.5	1,435.3	1,398.7	1,362.8
	12	2,116.1	2,068.2	2,021.1	1,974.7	1,929.1	1,884.3	1,840.2	1,796.8	1,754.2	1,712.3	1,671.1	1,630.6	1,590.8	1,551.6	1,513.2	1,475.3	1,438.1	1,401.4	1,365.4	1,330.0
	11	2,072.1	2,024.9	1,978.5	1,932.9	1,888.0	1,843.8	1,800.4	1,757.7	1,715.7	1,674.5	1,633.9	1,594.1	1,554.9	1,516.3	1,478.4	1,441.1	1,404.5	1,368.4	1,332.9	1,298.0
	10	2,029.3	1,982.8	1,937.1	1,892.1	1,847.9	1,804.4	1,761.7	1,719.6	1,678.3	1,637.7	1,597.8	1,558.5	1,519.9	1,482.0	1,444.6	1,407.9	1,371.7	1,336.2	1,301.3	1,266.9
	9	1,987.6	1,941.8	1,896.8	1,852.5	1,809.0	1,766.1	1,724.0	1,682.6	1,641.9	1,601.9	1,562.6	1,524.0	1,485.9	1,448.5	1,411.7	1,375.5	1,339.9	1,304.9	1,270.5	1,236.7
	8	1,947.2	1,902.1	1,857.7	1,814.1	1,771.1	1,728.9	1,687.5	1,646.7	1,606.6	1,567.2	1,528.5	1,490.4	1,452.9	1,416.0	1,379.7	1,344.1	1,309.0	1,274.5	1,240.6	1,207.3
	7	1,908.0	1,863.5	1,819.8	1,776.8	1,734.5	1,692.9	1,652.1	1,611.9	1,572.4	1,533.6	1,495.4	1,457.8	1,420.8	1,384.5	1,348.7	1,313.6	1,279.0	1,245.0	1,211.7	1,178.8
	6	1,870.0	1,826.2	1,783.1	1,740.7	1,699.0	1,658.1	1,617.8	1,578.2	1,539.3	1,501.0	1,463.3	1,426.2	1,389.8	1,353.9	1,318.7	1,284.1	1,250.0	1,216.5	1,183.6	1,151.3
	5	1,833.4	1,790.2	1,747.7	1,705.9	1,664.8	1,624.4	1,584.7	1,545.6	1,507.2	1,469.4	1,432.3	1,395.7	1,359.8	1,324.4	1,289.7	1,255.5	1,222.0	1,189.0	1,156.5	1,124.6
	4	1,798.1	1,755.5	1,713.6	1,672.4	1,631.8	1,592.0	1,552.8	1,514.2	1,476.3	1,439.0	1,402.4	1,366.3	1,330.8	1,296.0	1,261.7	1,228.0	1,194.9	1,162.4	1,130.4	1,098.9
	3	1,764.1	1,722.1	1,680.8	1,640.1	1,600.1	1,560.8	1,522.1	1,484.0	1,446.6	1,409.8	1,373.6	1,338.0	1,303.0	1,268.6	1,234.8	1,201.6	1,168.9	1,136.8	1,105.2	1,074.2
	2	1,731.6	1,690.1	1,649.3	1,609.1	1,569.6	1,530.8	1,492.5	1,455.0	1,418.0	1,381.6	1,345.9	1,310.8	1,276.2	1,242.3	1,208.9	1,176.1	1,143.9	1,112.2	1,081.0	1,050.4
	1	1,700.4	1,659.4	1,619.1	1,579.4	1,540.4	1,502.0	1,464.2	1,427.1	1,390.6	1,354.7	1,319.4	1,284.7	1,250.6	1,217.1	1,184.1	1,151.7	1,119.9	1,088.6	1,057.9	1,027.7
0	1,670.6	1,630.1	1,590.3	1,551.0	1,512.5	1,474.5	1,437.2	1,400.5	1,364.4	1,328.9	1,294.0	1,259.8	1,226.1	1,192.9	1,160.4	1,128.4	1,096.9	1,066.0	1,035.7	1,005.9	
Beneficiary older	-1	1,642.2	1,602.1	1,562.7	1,524.0	1,485.8	1,448.2	1,411.3	1,375.0	1,339.4	1,304.3	1,269.8	1,235.9	1,202.6	1,169.9	1,137.7	1,106.1	1,075.0	1,044.5	1,014.5	985.0
	-2	1,615.1	1,575.5	1,536.5	1,498.1	1,460.4	1,423.2	1,386.7	1,350.8	1,315.5	1,280.9	1,246.8	1,213.2	1,180.3	1,147.9	1,116.1	1,084.9	1,054.1	1,024.0	994.3	965.2
	-3	1,589.4	1,550.2	1,511.6	1,473.6	1,436.2	1,399.5	1,363.3	1,327.8	1,292.9	1,258.6	1,224.8	1,191.7	1,159.1	1,127.0	1,095.6	1,064.7	1,034.3	1,004.4	975.1	946.3
	-4	1,565.1	1,526.2	1,488.0	1,450.4	1,413.3	1,376.9	1,341.1	1,306.0	1,271.4	1,237.4	1,204.0	1,171.2	1,138.9	1,107.2	1,076.1	1,045.5	1,015.4	985.9	956.9	928.4
	-5	1,542.0	1,503.5	1,465.6	1,428.3	1,391.6	1,355.6	1,320.1	1,285.3	1,251.0	1,217.4	1,184.3	1,151.8	1,119.8	1,088.4	1,057.6	1,027.3	997.5	968.3	939.6	911.4
	-6	1,520.2	1,482.0	1,444.5	1,407.5	1,371.1	1,335.4	1,300.2	1,265.7	1,231.7	1,198.4	1,165.6	1,133.4	1,101.7	1,070.6	1,040.1	1,010.1	980.6	951.6	923.2	895.3
	-7	1,499.6	1,461.7	1,424.5	1,387.8	1,351.8	1,316.3	1,281.4	1,247.2	1,213.5	1,180.4	1,147.9	1,116.0	1,084.6	1,053.8	1,023.5	993.8	964.6	935.9	907.8	880.1
	-8	1,480.1	1,442.6	1,405.6	1,369.3	1,333.5	1,298.3	1,263.7	1,229.7	1,196.3	1,163.5	1,131.3	1,099.6	1,068.5	1,037.9	1,007.9	978.4	949.5	921.1	893.2	865.8
	-9	1,461.8	1,424.6	1,387.9	1,351.8	1,316.2	1,281.3	1,247.0	1,213.3	1,180.1	1,147.5	1,115.6	1,084.1	1,053.3	1,022.9	993.2	963.9	935.2	907.0	879.4	852.2
	-10	1,444.6	1,407.6	1,371.2	1,335.3	1,300.0	1,265.3	1,231.2	1,197.7	1,164.8	1,132.5	1,100.7	1,069.5	1,038.9	1,008.8	979.3	950.3	921.8	893.8	866.4	839.5
	-11	1,428.3	1,391.6	1,355.4	1,319.8	1,284.7	1,250.2	1,216.4	1,183.1	1,150.4	1,118.3	1,086.8	1,055.8	1,025.4	995.5	966.2	937.4	909.1	881.4	854.2	827.5
	-12	1,413.0	1,376.5	1,340.6	1,305.2	1,270.3	1,236.1	1,202.4	1,169.3	1,136.9	1,105.0	1,073.6	1,042.9	1,012.7	983.0	953.9	925.3	897.2	869.7	842.7	816.3
	-13	1,398.6	1,362.3	1,326.6	1,291.4	1,256.7	1,222.7	1,189.2	1,156.4	1,124.1	1,092.4	1,061.3	1,030.7	1,000.7	971.2	942.3	913.9	886.0	858.7	832.0	805.9
	-14	1,385.1	1,349.0	1,313.4	1,278.4	1,244.0	1,210.1	1,176.8	1,144.2	1,112.1	1,080.6	1,049.6	1,019.2	989.4	960.1	931.4	903.2	875.5	848.4	822.0	796.0
	-15	1,372.3	1,336.4	1,301.1	1,266.2	1,232.0	1,198.3	1,165.2	1,132.7	1,100.7	1,069.4	1,038.6	1,008.4	978.8	949.7	921.1	893.1	865.7	838.9	812.6	786.8

Beneficiary Age Difference = Member Age minus Beneficiary Age

**Oregon Public Employees Retirement System (Tier One/Tier Two)**  
**Actuarial Reduction Method Adjustment Factors effective January 1, 2024**  
**Table 5b - 100% Joint and Survivor Annuity - Disabled Members**

Beneficiary Age Difference	Beneficiary Age	Member Age																			
		40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59
Beneficiary younger	15	1,394.2	1,358.3	1,323.0	1,288.3	1,254.2	1,220.6	1,187.6	1,155.2	1,123.4	1,092.1	1,061.3	1,031.1	1,001.3	972.1	943.4	915.2	887.4	860.2	833.4	807.1
	14	1,360.4	1,325.1	1,290.3	1,256.2	1,222.6	1,189.6	1,157.1	1,125.3	1,093.9	1,063.1	1,032.9	1,003.1	973.9	945.1	916.9	889.1	861.9	835.1	808.7	782.8
	13	1,327.4	1,292.6	1,258.4	1,224.8	1,191.7	1,159.3	1,127.3	1,096.0	1,065.1	1,034.8	1,005.1	975.8	947.1	918.8	891.0	863.7	836.9	810.5	784.6	759.2
	12	1,295.2	1,260.9	1,227.3	1,194.2	1,161.7	1,129.7	1,098.3	1,067.4	1,037.1	1,007.3	978.0	949.2	920.9	893.1	865.8	839.0	812.6	786.7	761.2	736.2
	11	1,263.7	1,230.0	1,196.9	1,164.3	1,132.3	1,100.9	1,070.0	1,039.6	1,009.7	980.4	951.6	923.3	895.5	868.1	841.2	814.9	788.9	763.4	738.4	713.8
	10	1,233.2	1,200.0	1,167.4	1,135.3	1,103.8	1,072.8	1,042.4	1,012.5	983.1	954.3	925.9	898.1	870.7	843.8	817.4	791.4	765.9	740.9	716.3	692.1
	9	1,203.4	1,170.8	1,138.6	1,107.1	1,076.0	1,045.6	1,015.6	986.2	957.3	928.9	901.0	873.6	846.6	820.2	794.2	768.7	743.6	719.0	694.8	671.0
	8	1,174.6	1,142.4	1,110.7	1,079.7	1,049.1	1,019.1	989.6	960.6	932.2	904.2	876.8	849.8	823.3	797.3	771.7	746.6	722.0	697.7	673.9	650.8
	7	1,146.6	1,114.9	1,083.7	1,053.1	1,023.0	993.4	964.4	935.9	907.9	880.3	853.3	826.8	800.7	775.1	750.0	725.3	701.0	677.2	654.0	631.4
	6	1,119.5	1,088.2	1,057.5	1,027.4	997.7	968.6	940.0	911.9	884.3	857.2	830.7	804.5	778.9	753.7	729.0	704.7	680.8	657.6	634.9	612.7
	5	1,093.3	1,062.5	1,032.2	1,002.5	973.3	944.6	916.4	888.8	861.6	835.0	808.8	783.1	757.8	733.0	708.7	684.8	661.5	638.8	616.5	594.7
	4	1,068.0	1,037.7	1,007.9	978.5	949.8	921.5	893.7	866.5	839.7	813.5	787.7	762.4	737.5	713.1	689.2	665.8	643.1	620.8	598.8	577.3
	3	1,043.7	1,013.8	984.4	955.5	927.1	899.2	871.9	845.0	818.7	792.8	767.4	742.5	718.0	694.0	670.6	647.8	625.4	603.4	581.9	560.7
	2	1,020.4	990.8	961.8	933.3	905.3	877.9	850.9	824.4	798.5	773.0	748.0	723.4	699.4	675.9	653.0	630.5	608.5	586.9	565.6	544.8
	1	998.0	968.8	940.2	912.1	884.5	857.4	830.8	804.7	779.1	754.0	729.4	705.2	681.6	658.6	636.1	614.0	592.3	571.0	550.1	529.6
0	976.6	947.8	919.5	891.8	864.5	837.8	811.6	785.8	760.6	735.8	711.6	687.9	664.8	642.2	620.0	598.2	576.8	555.9	535.3	515.1	
Beneficiary older	-1	956.1	927.7	899.8	872.4	845.5	819.1	793.2	767.8	742.9	718.5	694.7	671.6	648.8	626.5	604.6	583.2	562.1	541.5	521.2	501.3
	-2	936.6	908.5	880.9	853.9	827.3	801.3	775.7	750.7	726.1	702.2	678.9	656.0	633.6	611.6	590.1	568.9	548.2	527.8	507.9	488.3
	-3	918.0	890.3	863.0	836.3	810.1	784.3	759.1	734.4	710.3	686.8	663.8	641.3	619.2	597.5	576.2	555.4	535.0	514.9	495.2	475.9
	-4	900.4	873.0	846.0	819.6	793.7	768.3	743.4	719.1	695.4	672.2	649.6	627.3	605.5	584.1	563.2	542.6	522.5	502.7	483.3	464.3
	-5	883.7	856.6	829.9	803.8	778.2	753.1	728.6	704.7	681.3	658.5	636.1	614.1	592.6	571.5	550.8	530.6	510.7	491.2	472.1	453.4
	-6	867.9	841.1	814.7	788.8	763.5	738.8	714.7	691.1	668.0	645.4	623.3	601.6	580.4	559.6	539.2	519.2	499.6	480.4	461.6	443.1
	-7	853.0	826.4	800.3	774.7	749.8	725.4	701.6	678.3	655.5	633.1	611.3	589.9	568.9	548.4	528.3	508.5	489.2	470.3	451.7	433.5
	-8	838.9	812.6	786.7	761.5	736.9	712.8	689.3	666.2	643.6	621.6	600.0	578.8	558.1	537.9	518.0	498.6	479.5	460.8	442.5	424.6
	-9	825.6	799.5	774.0	749.2	724.8	701.0	677.6	654.8	632.5	610.7	589.4	568.5	548.0	528.0	508.4	489.2	470.4	452.0	434.0	416.3
	-10	813.1	787.3	762.2	737.5	713.4	689.8	666.7	644.1	622.0	600.5	579.4	558.7	538.5	518.8	499.4	480.5	461.9	443.8	426.0	408.6
	-11	801.4	776.0	751.0	726.6	702.7	679.3	656.4	634.1	612.2	590.9	570.0	549.6	529.7	510.2	491.0	472.4	454.1	436.1	418.6	401.4
	-12	790.5	765.3	740.5	716.3	692.6	669.4	646.8	624.6	603.0	581.9	561.3	541.1	521.4	502.1	483.2	464.8	446.7	429.1	411.8	394.9
	-13	780.3	755.2	730.7	706.6	683.1	660.2	637.7	615.8	594.4	573.5	553.1	533.2	513.7	494.6	476.0	457.8	440.0	422.5	405.5	388.8
	-14	770.6	745.8	721.4	697.6	674.3	651.5	629.2	607.5	586.3	565.6	545.5	525.8	506.5	487.7	469.3	451.3	433.7	416.5	399.7	383.2
	-15	761.6	736.9	712.7	689.0	665.9	643.3	621.3	599.8	578.8	558.3	538.4	518.9	499.8	481.2	463.0	445.3	427.9	411.0	394.4	378.1

Beneficiary Age Difference = Member Age minus Beneficiary Age

**Oregon Public Employees Retirement System (Tier One/Tier Two)**  
**Actuarial Reduction Method Adjustment Factors effective January 1, 2024**  
**Table 5b - 100% Joint and Survivor Annuity - Disabled Members**

	Beneficiary Age Difference	Member Age																			
		60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79
Beneficiary younger	15	781.2	755.8	730.8	706.3	682.2	658.5	635.5	613.1	591.2	569.7	548.6	527.9	507.6	487.8	468.3	449.2	430.4	412.1	394.2	376.6
	14	757.4	732.4	707.9	683.8	660.1	637.0	614.7	592.7	571.2	550.1	529.3	509.0	489.1	469.6	450.4	431.7	413.3	395.3	377.8	360.6
	13	734.2	709.6	685.5	661.8	638.8	616.4	594.4	572.8	551.7	530.9	510.6	490.6	471.0	451.9	433.1	414.7	396.7	379.1	361.8	345.0
	12	711.6	687.5	663.8	640.7	618.3	596.2	574.6	553.5	532.7	512.3	492.3	472.7	453.5	434.7	416.2	398.2	380.5	363.3	346.4	329.9
	11	689.7	665.9	642.8	620.4	598.3	576.7	555.5	534.6	514.2	494.2	474.6	455.3	436.5	418.0	399.9	382.2	364.9	348.0	331.5	315.4
	10	668.3	645.2	622.7	600.6	579.0	557.7	536.8	516.4	496.3	476.7	457.4	438.5	420.0	401.8	384.1	366.7	349.8	333.2	317.1	301.4
	9	647.8	625.3	603.2	581.5	560.2	539.3	518.8	498.7	479.0	459.7	440.7	422.2	404.0	386.2	368.8	351.8	335.2	319.0	303.3	287.9
	8	628.2	606.0	584.3	563.0	542.0	521.5	501.3	481.6	462.2	443.2	424.6	406.4	388.6	371.2	354.1	337.5	321.2	305.4	290.0	275.0
	7	609.2	587.4	566.0	545.1	524.5	504.3	484.5	465.1	446.0	427.4	409.1	391.2	373.8	356.7	340.0	323.7	307.8	292.3	277.3	262.6
	6	590.9	569.4	548.4	527.8	507.6	487.7	468.2	449.2	430.5	412.1	394.2	376.7	359.5	342.8	326.4	310.5	294.9	279.8	265.1	250.9
	5	573.2	552.1	531.5	511.2	491.3	471.8	452.6	433.9	415.5	397.5	379.9	362.7	345.9	329.5	313.4	297.9	282.7	267.9	253.6	239.7
	4	556.2	535.5	515.2	495.2	475.6	456.4	437.6	419.2	401.2	383.5	366.2	349.3	332.9	316.8	301.1	285.9	271.1	256.7	242.7	229.2
	3	539.9	519.5	499.5	479.9	460.6	441.8	423.3	405.2	387.5	370.1	353.2	336.6	320.5	304.7	289.4	274.5	260.0	246.0	232.4	219.2
	2	524.3	504.3	484.6	465.3	446.3	427.8	409.6	391.8	374.4	357.4	340.8	324.5	308.7	293.3	278.3	263.8	249.7	236.0	222.7	209.9
	1	509.5	489.7	470.3	451.3	432.7	414.5	396.6	379.1	362.0	345.3	329.0	313.1	297.6	282.6	267.9	253.7	239.9	226.5	213.6	201.1
0	495.3	475.8	456.8	438.1	419.8	401.8	384.3	367.1	350.3	333.9	317.9	302.4	287.2	272.4	258.1	244.2	230.8	217.7	205.1	193.0	
Beneficiary older	-1	481.8	462.7	443.9	425.5	407.5	389.9	372.6	355.7	339.3	323.2	307.5	292.3	277.4	263.0	249.0	235.4	222.2	209.5	197.3	185.4
	-2	469.1	450.2	431.8	413.7	395.9	378.6	361.6	345.1	328.9	313.1	297.8	282.8	268.3	254.1	240.4	227.2	214.3	201.9	190.0	178.5
	-3	457.0	438.5	420.3	402.5	385.1	368.0	351.3	335.1	319.2	303.7	288.7	274.0	259.8	245.9	232.5	219.6	207.0	194.9	183.3	172.1
	-4	445.7	427.4	409.5	392.0	374.8	358.1	341.7	325.7	310.1	295.0	280.2	265.8	251.9	238.3	225.2	212.6	200.3	188.5	177.2	166.3
	-5	435.0	417.0	399.4	382.2	365.3	348.8	332.7	317.0	301.7	286.8	272.4	258.3	244.6	231.4	218.5	206.1	194.2	182.7	171.6	161.0
	-6	425.0	407.3	390.0	373.0	356.4	340.2	324.4	309.0	294.0	279.3	265.1	251.3	237.9	224.9	212.4	200.3	188.6	177.3	166.6	156.2
	-7	415.7	398.3	381.2	364.5	348.2	332.3	316.7	301.6	286.8	272.4	258.5	244.9	231.8	219.1	206.8	194.9	183.5	172.5	162.0	152.0
	-8	407.1	389.9	373.1	356.6	340.6	324.9	309.6	294.7	280.2	266.1	252.4	239.1	226.2	213.8	201.7	190.1	179.0	168.2	158.0	148.2
	-9	399.0	382.1	365.5	349.3	333.5	318.1	303.1	288.4	274.2	260.3	246.9	233.8	221.2	208.9	197.1	185.8	174.9	164.4	154.4	144.9
	-10	391.5	374.9	358.6	342.6	327.1	311.9	297.1	282.7	268.7	255.1	241.8	229.0	216.6	204.6	193.1	181.9	171.3	161.1	151.3	142.0
	-11	384.7	368.2	352.2	336.5	321.2	306.2	291.6	277.5	263.7	250.3	237.3	224.7	212.5	200.7	189.4	178.5	168.1	158.1	148.5	139.4
	-12	378.3	362.1	346.3	330.8	315.7	301.0	286.7	272.7	259.2	246.0	233.2	220.8	208.9	197.3	186.2	175.5	165.3	155.5	146.1	137.2
	-13	372.5	356.5	340.9	325.7	310.8	296.3	282.2	268.5	255.1	242.1	229.5	217.4	205.6	194.3	183.4	172.9	162.8	153.2	144.0	135.2
	-14	367.1	351.4	336.0	321.0	306.4	292.1	278.1	264.6	251.4	238.7	226.3	214.3	202.8	191.6	180.9	170.6	160.7	151.2	142.2	133.5
	-15	362.3	346.7	331.6	316.8	302.3	288.2	274.5	261.1	248.2	235.6	223.4	211.6	200.3	189.3	178.7	168.6	158.9	149.5	140.6	132.1

Beneficiary Age Difference = Member Age minus Beneficiary Age

**Oregon Public Employees Retirement System (Tier One/Tier Two)**  
**Actuarial Reduction Method Adjustment Factors effective January 1, 2024**  
**Table 5b - 100% Joint and Survivor Annuity - Disabled Members**

	Beneficiary Age Difference	Member Age																				
		80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
Beneficiary younger	15	359.5	342.7	326.3	310.4	294.8	279.7	265.1	250.8	237.1	223.7	210.8	198.4	186.4	174.9	163.8	153.1	142.9	133.2	124.0	115.2	107.0
	14	343.8	327.4	311.4	295.8	280.7	266.0	251.7	237.9	224.5	211.6	199.1	187.1	175.6	164.4	153.8	143.6	133.8	124.6	115.8	107.5	99.8
	13	328.6	312.5	296.9	281.8	267.0	252.7	238.9	225.5	212.5	200.0	188.0	176.4	165.2	154.5	144.3	134.5	125.2	116.4	108.1	100.4	93.1
	12	313.9	298.2	283.0	268.2	253.9	240.0	226.5	213.5	201.0	188.9	177.3	166.1	155.4	145.1	135.3	126.0	117.2	108.9	101.1	93.8	87.0
	11	299.7	284.4	269.6	255.2	241.3	227.8	214.7	202.1	190.0	178.4	167.1	156.4	146.1	136.3	126.9	118.0	109.7	101.8	94.5	87.7	81.4
	10	286.1	271.2	256.7	242.7	229.2	216.1	203.5	191.3	179.6	168.3	157.5	147.2	137.3	127.9	119.0	110.6	102.7	95.4	88.5	82.1	76.3
	9	273.0	258.5	244.4	230.8	217.7	205.0	192.7	181.0	169.6	158.8	148.4	138.5	129.1	120.1	111.7	103.8	96.4	89.4	83.0	77.1	71.6
	8	260.4	246.3	232.6	219.4	206.7	194.4	182.5	171.2	160.3	149.8	139.9	130.4	121.4	112.9	104.9	97.5	90.5	84.0	78.0	72.5	67.5
	7	248.5	234.7	221.4	208.6	196.2	184.3	172.9	161.9	151.4	141.4	131.9	122.8	114.3	106.3	98.7	91.7	85.2	79.1	73.5	68.4	63.7
	6	237.1	223.7	210.8	198.4	186.4	174.9	163.8	153.2	143.1	133.5	124.4	115.8	107.7	100.2	93.1	86.5	80.4	74.7	69.5	64.7	60.3
	5	226.3	213.3	200.8	188.7	177.1	166.0	155.3	145.1	135.4	126.2	117.6	109.4	101.7	94.6	87.9	81.7	76.0	70.7	65.8	61.4	57.3
	4	216.1	203.5	191.3	179.6	168.4	157.6	147.3	137.6	128.3	119.5	111.3	103.5	96.3	89.6	83.3	77.5	72.1	67.1	62.6	58.4	54.6
	3	206.5	194.2	182.4	171.1	160.2	149.9	140.0	130.6	121.7	113.4	105.5	98.2	91.4	85.0	79.1	73.7	68.6	63.9	59.7	55.7	52.1
	2	197.5	185.6	174.1	163.2	152.7	142.7	133.2	124.2	115.7	107.8	100.3	93.4	86.9	80.9	75.4	70.2	65.5	61.1	57.1	53.4	50.0
	1	189.1	177.5	166.4	155.8	145.7	136.0	126.9	118.3	110.3	102.7	95.6	89.1	83.0	77.3	72.0	67.2	62.7	58.6	54.7	51.2	48.0
0	181.3	170.1	159.3	149.0	139.3	130.0	121.3	113.0	105.3	98.1	91.4	85.2	79.4	74.0	69.1	64.5	60.2	56.3	52.7	49.4	46.3	
Beneficiary older	-1	174.1	163.2	152.7	142.8	133.4	124.5	116.2	108.3	100.9	94.1	87.7	81.8	76.3	71.2	66.4	62.1	58.0	54.3	50.8	47.7	44.8
	-2	167.4	156.9	146.8	137.2	128.1	119.6	111.5	104.0	97.0	90.4	84.4	78.7	73.5	68.6	64.1	59.9	56.1	52.5	49.2	46.2	43.4
	-3	161.4	151.1	141.3	132.1	123.4	115.1	107.4	100.2	93.5	87.2	81.4	76.0	71.0	66.3	62.0	58.0	54.3	50.9	47.7	44.9	42.2
	-4	155.8	145.9	136.5	127.5	119.1	111.2	103.8	96.8	90.4	84.4	78.8	73.6	68.8	64.3	60.2	56.3	52.8	49.5	46.5	43.7	41.2
	-5	150.9	141.2	132.1	123.4	115.3	107.7	100.6	93.9	87.7	81.9	76.5	71.5	66.9	62.6	58.6	54.9	51.4	48.3	45.3	42.7	40.3
	-6	146.4	137.0	128.2	119.8	112.0	104.6	97.7	91.2	85.2	79.7	74.5	69.7	65.2	61.0	57.1	53.5	50.2	47.2	44.4	41.8	39.5
	-7	142.4	133.3	124.7	116.6	109.0	101.9	95.2	88.9	83.1	77.7	72.7	68.0	63.7	59.6	55.9	52.4	49.2	46.2	43.5	41.0	38.8
	-8	138.9	130.1	121.7	113.8	106.4	99.5	93.0	86.9	81.3	76.0	71.1	66.6	62.3	58.4	54.8	51.4	48.3	45.4	42.8	40.4	38.2
	-9	135.8	127.2	119.0	111.4	104.2	97.4	91.1	85.2	79.6	74.5	69.7	65.3	61.2	57.4	53.8	50.5	47.5	44.7	42.1	39.8	37.7
	-10	133.1	124.7	116.7	109.2	102.2	95.6	89.4	83.6	78.2	73.2	68.5	64.2	60.2	56.4	53.0	49.8	46.8	44.1	41.6	39.4	37.4
	-11	130.7	122.5	114.7	107.4	100.5	94.0	87.9	82.3	77.0	72.0	67.5	63.2	59.3	55.6	52.2	49.1	46.2	43.6	41.2	39.0	
	-12	128.6	120.6	112.9	105.7	98.9	92.6	86.6	81.1	75.9	71.0	66.6	62.4	58.5	54.9	51.6	48.5	45.7	43.1	40.8		
	-13	126.9	118.9	111.4	104.3	97.6	91.4	85.5	80.0	74.9	70.2	65.8	61.7	57.9	54.3	51.1	48.1	45.3	42.8			
	-14	125.3	117.5	110.1	103.1	96.5	90.3	84.6	79.1	74.1	69.4	65.1	61.0	57.3	53.8	50.6	47.7	45.0				
	-15	124.0	116.2	108.9	102.0	95.5	89.4	83.7	78.4	73.4	68.8	64.5	60.5	56.8	53.4	50.3	47.4					

Beneficiary Age Difference = Member Age minus Beneficiary Age

**Oregon Public Employees Retirement System (Tier One/Tier Two)**  
**Actuarial Reduction Method Adjustment Factors effective January 1, 2024**  
**Table 6a - 50% Joint and Survivor Annuity - Healthy Members**

	Beneficiary Age Difference	Member Age																			
		40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59
Beneficiary younger	15	1,159.6	1,127.7	1,096.3	1,065.5	1,035.2	1,005.4	976.1	947.3	919.1	891.3	863.9	837.2	811.0	785.3	760.1	735.3	711.0	687.1	663.7	640.7
	14	1,143.6	1,112.0	1,080.9	1,050.3	1,020.3	990.7	961.7	933.2	905.1	877.6	850.5	824.0	798.0	772.6	747.5	723.0	698.9	675.2	652.0	629.2
	13	1,128.1	1,096.8	1,065.9	1,035.6	1,005.8	976.5	947.7	919.4	891.6	864.3	837.4	811.2	785.5	760.2	735.4	711.0	687.1	663.7	640.7	618.1
	12	1,113.2	1,082.1	1,051.5	1,021.4	991.8	962.8	934.2	906.2	878.6	851.5	824.8	798.8	773.3	748.2	723.6	699.5	675.8	652.6	629.8	607.4
	11	1,098.7	1,067.8	1,037.5	1,007.7	978.3	949.5	921.2	893.3	866.0	839.1	812.7	786.8	761.5	736.7	712.3	688.3	664.9	641.8	619.2	597.0
	10	1,084.8	1,054.2	1,024.1	994.5	965.4	936.8	908.6	881.0	853.9	827.2	801.0	775.3	750.3	725.6	701.4	677.6	654.4	631.5	609.1	587.0
	9	1,071.4	1,041.1	1,011.2	981.8	952.9	924.5	896.6	869.2	842.3	815.8	789.8	764.3	739.4	715.0	691.0	667.4	644.3	621.6	599.3	577.5
	8	1,058.7	1,028.5	998.8	969.7	941.0	912.8	885.1	857.9	831.1	804.9	779.0	753.8	729.1	704.8	681.0	657.6	634.6	612.1	590.0	568.4
	7	1,046.5	1,016.5	987.1	958.1	929.6	901.6	874.1	847.1	820.5	794.4	768.8	743.7	719.2	695.1	671.4	648.2	625.4	603.1	581.2	559.8
	6	1,034.9	1,005.2	975.9	947.1	918.8	891.0	863.7	836.9	810.5	784.6	759.1	734.2	709.8	685.9	662.4	639.3	616.7	594.6	572.9	551.7
	5	1,024.0	994.4	965.3	936.7	908.6	881.0	853.8	827.2	800.9	775.2	749.9	725.1	700.9	677.2	653.8	630.9	608.5	586.6	565.1	544.0
	4	1,013.7	984.3	955.3	926.9	899.0	871.5	844.5	818.0	792.0	766.4	741.2	716.6	692.6	668.9	645.7	623.0	600.8	579.0	557.7	536.7
	3	1,004.0	974.7	946.0	917.7	889.9	862.6	835.8	809.4	783.5	758.1	733.1	708.6	684.7	661.2	638.2	615.7	593.6	571.9	550.7	529.8
	2	994.9	965.8	937.2	909.1	881.5	854.3	827.6	801.4	775.6	750.3	725.4	701.1	677.3	654.0	631.2	608.8	586.8	565.3	544.2	523.4
	1	986.5	957.5	929.1	901.1	873.6	846.6	820.0	793.9	768.3	743.1	718.3	694.2	670.5	647.4	624.7	602.4	580.5	559.1	538.1	517.5
0	978.7	949.9	921.5	893.7	866.3	839.4	813.0	787.0	761.5	736.4	711.8	687.7	664.3	641.2	618.6	596.4	574.7	553.4	532.5	511.9	
Beneficiary older	-1	971.5	942.8	914.6	886.9	859.6	832.8	806.5	780.6	755.2	730.2	705.7	681.8	658.5	635.5	613.0	590.9	569.3	548.1	527.3	506.8
	-2	964.9	936.3	908.2	880.6	853.4	826.7	800.5	774.8	749.4	724.6	700.2	676.4	653.1	630.3	607.9	585.9	564.3	543.2	522.5	502.1
	-3	958.9	930.4	902.4	874.8	847.8	821.2	795.1	769.4	744.2	719.5	695.2	671.4	648.3	625.5	603.2	581.2	559.8	538.7	518.1	497.8
	-4	953.4	925.0	897.1	869.6	842.6	816.1	790.1	764.5	739.4	714.8	690.6	666.9	643.8	621.1	598.9	577.0	555.6	534.7	514.1	493.9
	-5	948.4	920.1	892.2	864.9	838.0	811.5	785.6	760.1	735.1	710.5	686.4	662.8	639.8	617.2	595.0	573.2	551.9	531.0	510.4	490.3
	-6	943.9	915.6	887.9	860.6	833.8	807.4	781.5	756.1	731.2	706.7	682.6	659.1	636.1	613.6	591.4	569.7	548.5	527.6	507.2	487.1
	-7	939.8	911.7	884.0	856.7	830.0	803.7	777.9	752.6	727.7	703.2	679.2	655.7	632.8	610.3	588.2	566.6	545.4	524.6	504.2	484.2
	-8	936.2	908.1	880.4	853.3	826.6	800.4	774.6	749.3	724.5	700.1	676.1	652.7	629.8	607.4	585.4	563.7	542.6	521.9	501.5	481.6
	-9	932.9	904.9	877.3	850.2	823.6	797.4	771.7	746.4	721.6	697.3	673.3	650.0	627.2	604.8	582.8	561.2	540.1	519.4	499.2	479.3
	-10	930.0	902.0	874.5	847.4	820.8	794.7	769.1	743.8	719.1	694.7	670.8	647.5	624.8	602.4	580.5	559.0	537.9	517.3	497.0	477.2
	-11	927.4	899.5	872.0	845.0	818.4	792.3	766.7	741.5	716.8	692.5	668.6	645.3	622.6	600.3	578.4	556.9	535.9	515.3	495.1	475.3
	-12	925.1	897.2	869.8	842.8	816.3	790.2	764.6	739.5	714.8	690.5	666.7	643.4	620.7	598.4	576.6	555.1	534.2	513.6	493.5	473.7
	-13	923.1	895.2	867.8	840.8	814.3	788.3	762.7	737.6	712.9	688.7	664.9	641.7	619.0	596.8	575.0	553.5	532.6	512.1	492.0	472.2
	-14	921.3	893.4	866.0	839.1	812.6	786.6	761.1	736.0	711.3	687.1	663.3	640.1	617.5	595.3	573.5	552.1	531.2	510.7	490.7	471.0
	-15	919.7	891.8	864.5	837.5	811.1	785.1	759.6	734.5	709.9	685.7	661.9	638.8	616.2	594.0	572.2	550.9	530.0	509.6	489.5	469.8

Beneficiary Age Difference = Member Age minus Beneficiary Age

**Oregon Public Employees Retirement System (Tier One/Tier Two)**  
**Actuarial Reduction Method Adjustment Factors effective January 1, 2024**  
**Table 6a - 50% Joint and Survivor Annuity - Healthy Members**

	Beneficiary Age Difference	Member Age																			
		60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79
Beneficiary younger	15	618.2	596.0	574.3	552.9	532.0	511.5	491.5	472.0	452.9	434.2	415.9	398.1	380.7	363.7	347.1	330.9	315.2	299.9	285.0	270.5
	14	606.9	584.9	563.4	542.2	521.5	501.3	481.5	462.2	443.3	424.8	406.7	389.0	371.7	354.9	338.5	322.5	306.9	291.8	277.0	262.7
	13	595.9	574.2	552.8	531.9	511.4	491.4	471.9	452.7	434.0	415.6	397.7	380.2	363.1	346.4	330.2	314.3	298.9	283.9	269.4	255.2
	12	585.4	563.8	542.6	521.9	501.7	482.0	462.6	443.6	425.0	406.8	389.1	371.7	354.8	338.3	322.2	306.5	291.2	276.4	262.0	248.0
	11	575.2	553.8	532.9	512.5	492.4	472.8	453.6	434.8	416.3	398.3	380.7	363.5	346.8	330.4	314.4	298.9	283.8	269.1	254.9	241.1
	10	565.4	544.3	523.6	503.3	483.5	464.0	445.0	426.3	408.0	390.2	372.7	355.7	339.0	322.8	307.0	291.7	276.7	262.2	248.1	234.5
	9	556.1	535.2	514.7	494.6	474.9	455.6	436.7	418.2	400.0	382.3	365.0	348.1	331.6	315.6	299.9	284.7	269.9	255.5	241.6	228.1
	8	547.3	526.5	506.2	486.2	466.7	447.5	428.8	410.4	392.4	374.8	357.7	340.9	324.6	308.7	293.2	278.1	263.4	249.2	235.5	222.1
	7	538.8	518.2	498.0	478.2	458.8	439.8	421.2	403.0	385.1	367.7	350.7	334.1	317.9	302.1	286.7	271.8	257.3	243.2	229.6	216.4
	6	530.8	510.4	490.3	470.7	451.4	432.5	414.0	395.9	378.2	360.9	344.0	327.6	311.5	295.8	280.6	265.8	251.5	237.6	224.1	211.1
	5	523.2	502.9	483.0	463.5	444.4	425.6	407.2	389.3	371.7	354.5	337.8	321.4	305.5	290.0	274.9	260.2	246.0	232.2	218.9	206.0
	4	516.1	495.9	476.1	456.7	437.7	419.1	400.8	383.0	365.5	348.5	331.9	315.6	299.8	284.4	269.5	255.0	240.9	227.2	214.0	201.3
	3	509.4	489.3	469.6	450.4	431.5	413.0	394.8	377.1	359.8	342.8	326.3	310.2	294.5	279.3	264.4	250.0	236.1	222.6	209.5	196.9
	2	503.1	483.1	463.6	444.4	425.6	407.2	389.2	371.6	354.4	337.6	321.1	305.2	289.6	274.5	259.7	245.5	231.6	218.3	205.3	192.9
	1	497.2	477.4	457.9	438.9	420.2	401.9	384.0	366.5	349.4	332.7	316.4	300.5	285.0	270.0	255.4	241.2	227.5	214.3	201.5	189.1
0	491.8	472.1	452.7	433.7	415.2	397.0	379.2	361.7	344.7	328.1	311.9	296.1	280.8	265.9	251.4	237.3	223.8	210.6	197.9	185.7	
Beneficiary older	-1	486.8	467.1	447.9	429.0	410.5	392.4	374.7	357.4	340.5	323.9	307.8	292.2	276.9	262.1	247.7	233.8	220.3	207.3	194.7	182.5
	-2	482.2	462.6	443.4	424.6	406.2	388.2	370.6	353.4	336.5	320.1	304.1	288.5	273.4	258.7	244.4	230.5	217.1	204.2	191.7	179.7
	-3	477.9	458.5	439.4	420.7	402.3	384.4	366.9	349.7	333.0	316.6	300.7	285.2	270.2	255.5	241.3	227.6	214.3	201.5	189.1	177.1
	-4	474.1	454.7	435.7	417.0	398.8	380.9	363.5	346.4	329.7	313.5	297.6	282.2	267.2	252.7	238.6	224.9	211.7	199.0	186.7	174.9
	-5	470.6	451.3	432.3	413.7	395.6	377.8	360.4	343.4	326.8	310.6	294.9	279.5	264.6	250.2	236.1	222.5	209.4	196.8	184.6	172.8
	-6	467.4	448.2	429.3	410.8	392.7	375.0	357.6	340.7	324.2	308.1	292.4	277.1	262.3	247.9	233.9	220.4	207.4	194.8	182.7	171.0
	-7	464.6	445.4	426.6	408.1	390.1	372.4	355.1	338.3	321.8	305.8	290.1	274.9	260.2	245.9	232.0	218.5	205.6	193.0	181.0	169.4
	-8	462.0	442.9	424.1	405.7	387.7	370.1	352.9	336.1	319.7	303.7	288.2	273.0	258.3	244.1	230.2	216.9	204.0	191.5	179.5	168.0
	-9	459.8	440.7	421.9	403.6	385.7	368.1	351.0	334.2	317.9	301.9	286.4	271.3	256.7	242.5	228.7	215.4	202.6	190.2	178.3	166.8
	-10	457.7	438.7	420.0	401.7	383.8	366.3	349.2	332.5	316.2	300.3	284.9	269.8	255.2	241.1	227.4	214.1	201.3	189.0	177.2	165.8
	-11	455.9	436.9	418.3	400.0	382.2	364.7	347.7	331.0	314.8	298.9	283.5	268.5	254.0	239.9	226.2	213.0	200.3	188.0	176.2	164.9
	-12	454.3	435.3	416.8	398.6	380.7	363.3	346.3	329.7	313.5	297.7	282.3	267.4	252.9	238.8	225.2	212.1	199.4	187.2	175.4	164.2
	-13	452.9	434.0	415.4	397.3	379.5	362.1	345.1	328.5	312.4	296.6	281.3	266.4	251.9	237.9	224.3	211.2	198.6	186.4	174.7	163.5
	-14	451.7	432.8	414.2	396.1	378.4	361.0	344.1	327.5	311.4	295.7	280.4	265.5	251.1	237.1	223.6	210.5	197.9	185.8	174.2	163.0
	-15	450.6	431.7	413.2	395.1	377.4	360.1	343.2	326.7	310.5	294.9	279.6	264.8	250.4	236.5	223.0	209.9	197.4	185.3	173.7	162.5

Beneficiary Age Difference = Member Age minus Beneficiary Age

**Oregon Public Employees Retirement System (Tier One/Tier Two)**  
**Actuarial Reduction Method Adjustment Factors effective January 1, 2024**  
**Table 6a - 50% Joint and Survivor Annuity - Healthy Members**

	Beneficiary Age Difference	Member Age																				
		80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
Beneficiary younger	15	256.4	242.8	229.6	216.9	204.6	192.8	181.5	170.6	160.2	150.3	140.9	131.9	123.4	115.3	107.7	100.5	93.7	87.3	81.3	75.7	70.4
	14	248.8	235.4	222.4	209.8	197.7	186.1	174.9	164.3	154.1	144.4	135.1	126.4	118.1	110.2	102.8	95.8	89.2	83.1	77.3	71.9	66.8
	13	241.5	228.2	215.4	203.0	191.1	179.6	168.7	158.2	148.2	138.7	129.6	121.1	113.0	105.3	98.1	91.4	85.0	79.1	73.5	68.3	63.5
	12	234.5	221.4	208.7	196.5	184.7	173.5	162.7	152.4	142.6	133.3	124.4	116.1	108.2	100.7	93.7	87.2	81.0	75.3	70.0	65.1	60.5
	11	227.7	214.8	202.3	190.2	178.7	167.6	157.0	146.9	137.3	128.1	119.5	111.3	103.6	96.4	89.6	83.3	77.4	71.9	66.8	62.1	57.8
	10	221.2	208.5	196.1	184.3	172.9	162.0	151.6	141.6	132.2	123.3	114.8	106.8	99.3	92.3	85.7	79.6	74.0	68.7	63.8	59.4	55.3
	9	215.1	202.5	190.3	178.6	167.4	156.7	146.4	136.7	127.4	118.7	110.4	102.6	95.3	88.5	82.2	76.3	70.8	65.8	61.2	56.9	53.0
	8	209.2	196.8	184.8	173.3	162.2	151.7	141.6	132.0	122.9	114.4	106.3	98.7	91.6	85.0	78.9	73.2	68.0	63.2	58.7	54.7	50.9
	7	203.7	191.4	179.6	168.2	157.3	146.9	137.0	127.6	118.7	110.3	102.5	95.1	88.2	81.8	75.9	70.4	65.4	60.8	56.5	52.7	49.1
	6	198.5	186.3	174.7	163.5	152.7	142.5	132.8	123.5	114.8	106.6	98.9	91.7	85.1	78.9	73.1	67.9	63.1	58.6	54.6	50.9	47.5
	5	193.6	181.6	170.1	159.0	148.5	138.4	128.8	119.7	111.2	103.2	95.7	88.7	82.2	76.2	70.7	65.6	61.0	56.7	52.8	49.2	46.0
	4	189.0	177.2	165.8	154.9	144.5	134.5	125.1	116.2	107.9	100.0	92.7	85.9	79.6	73.8	68.4	63.5	59.1	55.0	51.2	47.8	44.7
	3	184.8	173.1	161.8	151.1	140.8	131.0	121.8	113.0	104.8	97.2	90.0	83.4	77.3	71.6	66.4	61.7	57.4	53.4	49.8	46.5	43.5
	2	180.8	169.3	158.1	147.5	137.4	127.8	118.7	110.1	102.1	94.6	87.6	81.1	75.2	69.7	64.7	60.1	55.9	52.1	48.6	45.4	42.4
	1	177.2	165.8	154.8	144.3	134.3	124.8	115.9	107.5	99.6	92.2	85.4	79.1	73.3	68.0	63.1	58.6	54.5	50.8	47.4	44.3	41.5
	0	173.9	162.6	151.7	141.3	131.5	122.2	113.4	105.1	97.4	90.2	83.5	77.3	71.6	66.4	61.7	57.3	53.4	49.7	46.4	43.4	40.7
	-1	170.9	159.7	148.9	138.7	129.0	119.8	111.1	103.0	95.4	88.3	81.8	75.7	70.2	65.1	60.4	56.2	52.3	48.8	45.6	42.6	39.9
	-2	168.1	157.0	146.4	136.3	126.7	117.6	109.1	101.1	93.6	86.7	80.2	74.3	68.9	63.9	59.3	55.2	51.4	47.9	44.8	41.9	39.3
	-3	165.7	154.7	144.2	134.2	124.7	115.7	107.3	99.4	92.1	85.2	78.9	73.1	67.7	62.8	58.4	54.3	50.6	47.2	44.1	41.3	38.7
	-4	163.5	152.6	142.2	132.3	122.9	114.1	105.8	98.0	90.7	84.0	77.7	72.0	66.7	61.9	57.5	53.5	49.8	46.5	43.5	40.7	38.2
	-5	161.5	150.7	140.4	130.6	121.4	112.6	104.4	96.7	89.5	82.9	76.7	71.0	65.9	61.1	56.8	52.8	49.2	45.9	43.0	40.2	37.8
	-6	159.8	149.1	138.9	129.2	120.0	111.3	103.2	95.6	88.5	81.9	75.8	70.2	65.1	60.4	56.1	52.2	48.6	45.4	42.5	39.8	37.4
	-7	158.3	147.7	137.6	127.9	118.8	110.2	102.2	94.6	87.6	81.0	75.0	69.5	64.4	59.8	55.5	51.7	48.2	45.0	42.1	39.5	37.1
	-8	157.0	146.5	136.4	126.8	117.8	109.3	101.2	93.8	86.8	80.3	74.3	68.8	63.8	59.2	55.0	51.2	47.7	44.6	41.7	39.1	36.8
	-9	155.9	145.4	135.4	125.9	116.9	108.4	100.5	93.0	86.1	79.7	73.7	68.3	63.3	58.7	54.6	50.8	47.4	44.3	41.4	38.9	36.6
	-10	154.9	144.5	134.5	125.1	116.1	107.7	99.8	92.4	85.5	79.1	73.2	67.8	62.8	58.3	54.2	50.4	47.0	44.0	41.2	38.7	36.4
	-11	154.1	143.7	133.8	124.4	115.5	107.1	99.2	91.8	85.0	78.6	72.8	67.4	62.4	57.9	53.8	50.1	46.8	43.7	41.0	38.5	
	-12	153.4	143.0	133.2	123.8	114.9	106.5	98.7	91.4	84.5	78.2	72.4	67.0	62.1	57.6	53.6	49.9	46.5	43.5	40.8		
	-13	152.7	142.4	132.6	123.3	114.4	106.1	98.3	90.9	84.1	77.8	72.0	66.7	61.8	57.4	53.3	49.7	46.4	43.4			
Beneficiary older	-14	152.2	141.9	132.1	122.8	114.0	105.7	97.9	90.6	83.8	77.5	71.7	66.4	61.6	57.1	53.1	49.5	46.2				
	-15	151.8	141.5	131.7	122.4	113.6	105.3	97.6	90.3	83.5	77.3	71.5	66.2	61.3	56.9	53.0	49.4					

Beneficiary Age Difference = Member Age minus Beneficiary Age



**Oregon Public Employees Retirement System (Tier One/Tier Two)**  
**Actuarial Reduction Method Adjustment Factors effective January 1, 2024**  
**Table 6b - 50% Joint and Survivor Annuity - Disabled Members**

Beneficiary Age Difference	Beneficiary Age	Member Age																			
		20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39
Beneficiary younger	15	1,719.8	1,678.9	1,638.5	1,598.7	1,559.5	1,520.9	1,483.0	1,445.8	1,409.3	1,373.4	1,338.2	1,303.6	1,269.7	1,236.4	1,203.7	1,171.7	1,140.2	1,109.4	1,079.1	1,049.4
	14	1,696.1	1,655.6	1,615.6	1,576.2	1,537.4	1,499.2	1,461.6	1,424.8	1,388.6	1,353.1	1,318.2	1,284.0	1,250.4	1,217.4	1,185.1	1,153.3	1,122.2	1,091.6	1,061.6	1,032.2
	13	1,673.0	1,632.9	1,593.3	1,554.2	1,515.7	1,477.9	1,440.7	1,404.2	1,368.4	1,333.2	1,298.7	1,264.8	1,231.5	1,198.9	1,166.8	1,135.4	1,104.5	1,074.2	1,044.5	1,015.4
	12	1,650.4	1,610.7	1,571.5	1,532.8	1,494.6	1,457.1	1,420.3	1,384.2	1,348.7	1,313.8	1,279.6	1,246.0	1,213.1	1,180.8	1,149.0	1,117.9	1,087.3	1,057.3	1,027.9	999.0
	11	1,628.4	1,589.1	1,550.2	1,511.8	1,474.1	1,436.9	1,400.4	1,364.6	1,329.4	1,294.9	1,261.0	1,227.8	1,195.1	1,163.1	1,131.7	1,100.8	1,070.5	1,040.8	1,011.6	983.0
	10	1,607.0	1,568.0	1,529.5	1,491.5	1,454.0	1,417.2	1,381.1	1,345.6	1,310.7	1,276.5	1,243.0	1,210.0	1,177.7	1,145.9	1,114.7	1,084.2	1,054.1	1,024.7	995.8	967.5
	9	1,586.2	1,547.5	1,509.3	1,471.7	1,434.5	1,398.1	1,362.2	1,327.1	1,292.5	1,258.7	1,225.4	1,192.7	1,160.7	1,129.2	1,098.3	1,068.0	1,038.2	1,009.0	980.4	952.4
	8	1,566.0	1,527.6	1,489.8	1,452.4	1,415.6	1,379.5	1,344.0	1,309.1	1,274.9	1,241.3	1,208.3	1,175.9	1,144.1	1,112.9	1,082.3	1,052.2	1,022.8	993.8	965.5	937.7
	7	1,546.4	1,508.3	1,470.8	1,433.8	1,397.3	1,361.5	1,326.3	1,291.7	1,257.8	1,224.5	1,191.8	1,159.6	1,128.1	1,097.2	1,066.8	1,037.0	1,007.8	979.1	951.0	923.4
	6	1,527.4	1,489.7	1,452.5	1,415.8	1,379.6	1,344.0	1,309.1	1,274.8	1,241.2	1,208.2	1,175.7	1,143.9	1,112.6	1,081.9	1,051.8	1,022.2	993.3	964.8	937.0	909.7
	5	1,509.1	1,471.7	1,434.8	1,398.4	1,362.5	1,327.2	1,292.6	1,258.6	1,225.2	1,192.4	1,160.2	1,128.6	1,097.6	1,067.2	1,037.3	1,008.0	979.2	951.1	923.4	896.3
	4	1,491.4	1,454.3	1,417.7	1,381.6	1,346.0	1,311.0	1,276.6	1,242.9	1,209.7	1,177.2	1,145.3	1,113.9	1,083.1	1,052.9	1,023.3	994.2	965.7	937.8	910.4	883.5
	3	1,474.4	1,437.6	1,401.3	1,365.4	1,330.1	1,295.4	1,261.3	1,227.7	1,194.9	1,162.6	1,130.9	1,099.7	1,069.2	1,039.2	1,009.8	981.0	952.7	925.0	897.8	871.1
	2	1,458.2	1,421.6	1,385.6	1,350.0	1,314.9	1,280.4	1,246.5	1,213.2	1,180.6	1,148.5	1,117.0	1,086.1	1,055.8	1,026.1	996.9	968.3	940.2	912.7	885.7	859.3
	1	1,442.6	1,406.3	1,370.5	1,335.1	1,300.3	1,266.0	1,232.3	1,199.3	1,166.9	1,135.0	1,103.8	1,073.1	1,043.0	1,013.5	984.5	956.1	928.2	900.9	874.1	847.9
0	1,427.7	1,391.6	1,356.0	1,320.9	1,286.3	1,252.2	1,218.8	1,186.0	1,153.8	1,122.1	1,091.1	1,060.6	1,030.7	1,001.4	972.6	944.4	916.7	889.6	863.0	837.0	
Beneficiary older	-1	1,413.5	1,377.7	1,342.3	1,307.4	1,273.0	1,239.1	1,205.9	1,173.3	1,141.2	1,109.8	1,079.0	1,048.7	1,019.0	989.9	961.3	933.3	905.8	878.8	852.4	826.5
	-2	1,399.9	1,364.3	1,329.2	1,294.5	1,260.3	1,226.6	1,193.6	1,161.2	1,129.3	1,098.1	1,067.5	1,037.4	1,007.9	978.9	950.5	922.6	895.3	868.6	842.3	816.6
	-3	1,387.1	1,351.7	1,316.7	1,282.2	1,248.2	1,214.7	1,181.9	1,149.6	1,118.0	1,087.0	1,056.5	1,026.6	997.2	968.5	940.2	912.5	885.4	858.8	832.7	807.2
	-4	1,374.9	1,339.7	1,304.9	1,270.6	1,236.7	1,203.5	1,170.8	1,138.7	1,107.3	1,076.4	1,046.1	1,016.3	987.2	958.5	930.5	903.0	876.0	849.5	823.6	798.2
	-5	1,363.4	1,328.3	1,293.7	1,259.6	1,225.9	1,192.8	1,160.3	1,128.4	1,097.1	1,066.4	1,036.2	1,006.6	977.6	949.1	921.2	893.9	867.0	840.7	815.0	789.7
	-6	1,352.5	1,317.6	1,283.1	1,249.1	1,215.6	1,182.7	1,150.3	1,118.6	1,087.4	1,056.9	1,026.9	997.4	968.6	940.2	912.5	885.3	858.6	832.4	806.8	781.7
	-7	1,342.1	1,307.4	1,273.2	1,239.3	1,205.9	1,173.1	1,140.9	1,109.3	1,078.3	1,047.9	1,018.0	988.8	960.0	931.8	904.2	877.1	850.6	824.5	799.0	774.1
	-8	1,332.4	1,297.9	1,263.7	1,230.0	1,196.8	1,164.1	1,132.1	1,100.6	1,069.7	1,039.4	1,009.7	980.6	952.0	923.9	896.4	869.4	843.0	817.1	791.7	766.9
	-9	1,323.3	1,288.9	1,254.9	1,221.3	1,188.2	1,155.7	1,123.7	1,092.4	1,061.6	1,031.5	1,001.9	972.8	944.3	916.4	889.0	862.2	835.9	810.1	784.9	760.2
	-10	1,314.7	1,280.4	1,246.5	1,213.0	1,180.1	1,147.7	1,115.8	1,084.6	1,054.0	1,023.9	994.4	965.5	937.2	909.3	882.1	855.4	829.2	803.5	778.4	753.8
	-11	1,306.5	1,272.4	1,238.6	1,205.3	1,172.4	1,140.1	1,108.4	1,077.3	1,046.8	1,016.8	987.5	958.7	930.4	902.7	875.5	848.9	822.8	797.3	772.3	747.8
	-12	1,298.9	1,264.8	1,231.2	1,198.0	1,165.2	1,133.0	1,101.4	1,070.4	1,040.0	1,010.2	980.9	952.2	924.0	896.4	869.4	842.9	816.9	791.4	766.5	742.2
	-13	1,291.7	1,257.8	1,224.2	1,191.1	1,158.4	1,126.3	1,094.8	1,063.9	1,033.6	1,003.9	974.7	946.1	918.0	890.5	863.6	837.2	811.3	785.9	761.2	737.0
	-14	1,284.9	1,251.1	1,217.6	1,184.6	1,152.1	1,120.1	1,088.6	1,057.8	1,027.6	998.0	968.9	940.4	912.4	885.0	858.1	831.8	806.0	780.8	756.2	732.1
	-15	1,278.5	1,244.8	1,211.4	1,178.5	1,146.0	1,114.1	1,082.8	1,052.1	1,021.9	992.4	963.4	935.0	907.1	879.8	853.0	826.8	801.1	776.0	751.5	727.4

Beneficiary Age Difference = Member Age minus Beneficiary Age

**Oregon Public Employees Retirement System (Tier One/Tier Two)**  
**Actuarial Reduction Method Adjustment Factors effective January 1, 2024**  
**Table 6b - 50% Joint and Survivor Annuity - Disabled Members**

Beneficiary Age Difference	Beneficiary Age	Member Age																			
		40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59
Beneficiary younger	15	1,020.3	991.7	963.8	936.4	909.7	883.5	857.9	832.9	808.5	784.7	761.4	738.5	716.2	694.2	672.7	651.6	630.8	610.5	590.4	570.7
	14	1,003.4	975.1	947.4	920.4	893.9	868.0	842.7	817.9	793.8	770.2	747.1	724.6	702.4	680.7	659.4	638.6	618.0	597.9	578.1	558.6
	13	986.9	958.9	931.5	904.7	878.5	852.8	827.8	803.3	779.4	756.1	733.3	710.9	689.0	667.5	646.5	625.8	605.6	585.6	566.0	546.8
	12	970.7	943.0	915.9	889.4	863.4	838.0	813.2	789.0	765.4	742.3	719.7	697.6	675.9	654.7	633.9	613.5	593.4	573.7	554.3	535.3
	11	955.0	927.6	900.7	874.5	848.8	823.6	799.1	775.1	751.7	728.8	706.5	684.6	663.2	642.2	621.6	601.4	581.6	562.1	542.9	524.1
	10	939.8	912.6	886.0	859.9	834.5	809.6	785.3	761.6	738.4	715.8	693.7	672.0	650.8	630.1	609.7	589.7	570.1	550.8	531.8	513.2
	9	924.9	898.0	871.6	845.8	820.6	796.0	771.9	748.4	725.4	703.1	681.2	659.8	638.8	618.2	598.1	578.3	558.9	539.8	521.1	502.7
	8	910.5	883.8	857.7	832.1	807.1	782.7	758.9	735.6	712.9	690.7	669.1	647.9	627.1	606.8	586.9	567.3	548.1	529.2	510.7	492.5
	7	896.5	870.0	844.1	818.8	794.1	769.9	746.3	723.2	700.7	678.8	657.4	636.4	615.8	595.7	576.0	556.6	537.6	519.0	500.7	482.9
	6	882.9	856.7	831.1	806.0	781.4	757.5	734.1	711.3	689.0	667.3	646.0	625.3	604.9	585.0	565.5	546.3	527.5	509.1	491.2	473.5
	5	869.8	843.8	818.4	793.5	769.2	745.5	722.3	699.7	677.6	656.1	635.1	614.5	594.4	574.7	555.3	536.4	517.9	499.8	482.0	464.5
	4	857.2	831.4	806.2	781.6	757.5	733.9	711.0	688.5	666.7	645.4	624.6	604.2	584.3	564.7	545.6	526.9	508.7	490.7	473.1	455.8
	3	845.0	819.5	794.5	770.0	746.1	722.8	700.0	677.8	656.1	635.0	614.4	594.3	574.5	555.2	536.3	517.9	499.8	482.1	464.7	447.5
	2	833.4	808.0	783.2	758.9	735.3	712.1	689.5	667.5	646.0	625.1	604.7	584.7	565.2	546.1	527.5	509.2	491.4	473.8	456.5	439.6
	1	822.2	797.0	772.4	748.3	724.8	701.9	679.5	657.6	636.4	615.6	595.4	575.6	556.3	537.5	519.0	501.0	483.3	465.9	448.8	432.0
0	811.4	786.5	762.0	738.2	714.8	692.1	669.9	648.2	627.1	606.5	586.5	567.0	547.9	529.3	511.0	493.1	475.5	458.3	441.4	424.7	
Beneficiary older	-1	801.2	776.4	752.2	728.5	705.3	682.7	660.7	639.2	618.3	597.9	578.1	558.8	539.9	521.4	503.3	485.6	468.2	451.1	434.3	417.8
	-2	791.5	766.8	742.8	719.2	696.2	673.8	652.0	630.6	609.9	589.7	570.2	551.0	532.3	514.0	496.0	478.5	461.2	444.3	427.7	411.3
	-3	782.2	757.7	733.8	710.4	687.6	665.4	643.6	622.5	602.0	582.0	562.6	543.6	525.1	506.9	489.1	471.7	454.6	437.8	421.3	405.1
	-4	773.4	749.1	725.3	702.1	679.4	657.3	635.8	614.8	594.5	574.8	555.5	536.7	518.2	500.2	482.6	465.3	448.4	431.7	415.4	399.3
	-5	765.0	740.9	717.3	694.2	671.7	649.7	628.4	607.6	587.5	567.9	548.7	530.1	511.8	493.9	476.4	459.3	442.5	426.0	409.8	393.9
	-6	757.1	733.1	709.6	686.7	664.3	642.6	621.4	600.9	580.8	561.3	542.4	523.8	505.7	487.9	470.6	453.6	436.9	420.6	404.5	388.7
	-7	749.7	725.8	702.4	679.6	657.5	635.9	614.9	594.4	574.5	555.2	536.4	518.0	500.0	482.3	465.1	448.3	431.7	415.5	399.6	383.9
	-8	742.6	718.9	695.7	673.0	651.0	629.6	608.7	588.4	568.6	549.4	530.7	512.4	494.6	477.1	460.0	443.3	426.9	410.8	395.0	379.5
	-9	736.0	712.3	689.3	666.9	645.0	623.7	602.9	582.7	563.1	544.0	525.4	507.2	489.5	472.2	455.2	438.6	422.3	406.4	390.7	375.3
	-10	729.7	706.3	683.4	661.0	639.3	618.1	597.4	577.4	557.8	538.9	520.4	502.4	484.8	467.5	450.7	434.2	418.1	402.3	386.7	371.5
	-11	723.9	700.6	677.8	655.6	633.9	612.8	592.3	572.3	552.9	534.1	515.7	497.8	480.3	463.2	446.5	430.2	414.1	398.4	383.0	367.9
	-12	718.4	695.2	672.6	650.4	628.9	607.9	587.5	567.6	548.3	529.6	511.4	493.6	476.2	459.2	442.6	426.4	410.5	394.9	379.6	364.6
	-13	713.3	690.2	667.6	645.6	624.2	603.3	582.9	563.2	544.0	525.4	507.3	489.6	472.3	455.5	439.0	422.9	407.1	391.6	376.5	361.6
	-14	708.5	685.5	663.0	641.1	619.7	598.9	578.7	559.1	540.0	521.4	503.5	485.9	468.7	452.0	435.6	419.6	404.0	388.6	373.6	358.8
	-15	704.0	681.0	658.6	636.8	615.5	594.9	574.7	555.2	536.2	517.8	499.9	482.4	465.4	448.8	432.5	416.6	401.1	385.8	370.9	356.2

Beneficiary Age Difference = Member Age minus Beneficiary Age

**Oregon Public Employees Retirement System (Tier One/Tier Two)**  
**Actuarial Reduction Method Adjustment Factors effective January 1, 2024**  
**Table 6b - 50% Joint and Survivor Annuity - Disabled Members**

	Beneficiary Age Difference	Member Age																			
		60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79
Beneficiary younger	15	551.3	532.2	513.5	495.1	477.0	459.2	441.9	425.0	408.5	392.3	376.4	360.9	345.8	330.9	316.5	302.4	288.6	275.2	262.1	249.4
	14	539.4	520.6	502.0	483.8	465.9	448.5	431.5	414.8	398.5	382.5	366.8	351.5	336.5	321.9	307.6	293.6	280.0	266.8	253.9	241.4
	13	527.8	509.2	490.9	472.9	455.3	438.1	421.3	404.8	388.7	372.9	357.4	342.3	327.5	313.0	298.9	285.1	271.7	258.6	245.9	233.6
	12	516.5	498.1	480.0	462.3	445.0	428.1	411.5	395.2	379.2	363.6	348.3	333.3	318.7	304.4	290.5	276.9	263.6	250.8	238.2	226.1
	11	505.5	487.3	469.5	452.1	435.1	418.3	401.9	385.8	370.0	354.5	339.4	324.6	310.2	296.1	282.3	268.9	255.8	243.1	230.8	218.8
	10	494.9	477.0	459.5	442.3	425.4	408.8	392.6	376.6	361.0	345.8	330.8	316.2	301.9	288.0	274.4	261.1	248.3	235.7	223.6	211.8
	9	484.6	467.0	449.7	432.7	416.0	399.6	383.5	367.8	352.4	337.3	322.5	308.0	293.9	280.2	266.8	253.7	241.0	228.6	216.6	205.0
	8	474.8	457.4	440.3	423.4	406.9	390.7	374.8	359.2	344.0	329.0	314.4	300.2	286.2	272.6	259.4	246.5	234.0	221.8	210.0	198.6
	7	465.3	448.1	431.1	414.5	398.1	382.1	366.4	351.0	335.9	321.1	306.7	292.6	278.8	265.4	252.3	239.6	227.3	215.3	203.6	192.4
	6	456.1	439.1	422.3	405.8	389.7	373.8	358.3	343.0	328.1	313.5	299.2	285.3	271.7	258.4	245.5	233.0	220.8	209.0	197.6	186.5
	5	447.3	430.4	413.8	397.5	381.5	365.8	350.4	335.4	320.6	306.2	292.1	278.3	264.9	251.8	239.1	226.7	214.7	203.1	191.8	181.0
	4	438.8	422.1	405.7	389.6	373.7	358.2	343.0	328.0	313.4	299.2	285.2	271.6	258.4	245.5	232.9	220.7	208.9	197.4	186.4	175.7
	3	430.7	414.1	397.9	381.9	366.2	350.8	335.8	321.0	306.6	292.5	278.7	265.3	252.2	239.4	227.0	215.0	203.4	192.1	181.2	170.7
	2	422.9	406.5	390.4	374.6	359.1	343.9	328.9	314.3	300.1	286.1	272.5	259.2	246.3	233.7	221.5	209.7	198.2	187.1	176.4	166.0
	1	415.4	399.2	383.3	367.6	352.3	337.2	322.4	308.0	293.9	280.1	266.6	253.5	240.8	228.3	216.3	204.6	193.3	182.4	171.8	161.7
	0	408.4	392.3	376.5	361.0	345.8	330.9	316.3	302.0	288.0	274.4	261.1	248.1	235.5	223.3	211.4	199.9	188.7	178.0	167.6	157.6
	-1	401.6	385.7	370.1	354.7	339.7	324.9	310.4	296.3	282.5	269.0	255.9	243.1	230.6	218.6	206.8	195.5	184.5	173.9	163.7	153.8
	-2	395.3	379.5	364.0	348.8	333.9	319.3	305.0	291.0	277.3	264.0	251.0	238.4	226.1	214.1	202.6	191.4	180.5	170.1	160.0	150.3
	-3	389.2	373.6	358.3	343.2	328.4	314.0	299.8	286.0	272.5	259.3	246.5	234.0	221.8	210.0	198.6	187.6	176.9	166.6	156.7	147.1
	-4	383.6	368.1	352.9	337.9	323.3	309.0	295.0	281.3	267.9	254.9	242.2	229.9	217.9	206.2	195.0	184.1	173.5	163.4	153.6	144.2
	-5	378.2	362.9	347.8	333.0	318.6	304.4	290.5	277.0	263.7	250.9	238.3	226.1	214.2	202.7	191.6	180.8	170.5	160.4	150.8	141.6
	-6	373.2	358.0	343.1	328.5	314.1	300.1	286.3	272.9	259.8	247.1	234.7	222.6	210.9	199.5	188.5	177.9	167.7	157.8	148.3	139.2
	-7	368.6	353.5	338.7	324.2	310.0	296.1	282.5	269.2	256.3	243.6	231.4	219.4	207.8	196.6	185.7	175.2	165.1	155.4	146.0	137.1
	-8	364.2	349.3	334.6	320.3	306.2	292.4	278.9	265.8	253.0	240.5	228.3	216.5	205.1	193.9	183.2	172.8	162.8	153.2	144.0	135.2
	-9	360.2	345.4	330.9	316.6	302.7	289.0	275.7	262.7	250.0	237.6	225.6	213.9	202.5	191.5	180.9	170.7	160.8	151.3	142.2	133.5
	-10	356.5	341.8	327.4	313.3	299.4	285.9	272.7	259.8	247.2	235.0	223.0	211.5	200.2	189.4	178.9	168.7	159.0	149.6	140.7	132.1
	-11	353.0	338.5	324.2	310.2	296.5	283.1	270.0	257.2	244.7	232.6	220.8	209.3	198.2	187.4	177.0	167.0	157.4	148.2	139.3	130.8
	-12	349.9	335.4	321.3	307.4	293.8	280.5	267.5	254.8	242.5	230.4	218.7	207.4	196.4	185.7	175.4	165.5	156.0	146.9	138.1	129.7
	-13	347.0	332.6	318.6	304.8	291.3	278.1	265.2	252.7	240.4	228.5	216.9	205.7	194.8	184.2	174.0	164.2	154.8	145.7	137.0	128.7
Beneficiary older	-14	344.3	330.1	316.1	302.5	289.1	276.0	263.2	250.7	238.6	226.8	215.3	204.1	193.3	182.9	172.8	163.1	153.7	144.7	136.1	127.8
	-15	341.8	327.7	313.9	300.3	287.1	274.1	261.4	249.0	237.0	225.2	213.8	202.8	192.1	181.7	171.7	162.1	152.8	143.9	135.3	127.1

Beneficiary Age Difference = Member Age minus Beneficiary Age

**Oregon Public Employees Retirement System (Tier One/Tier Two)**  
**Actuarial Reduction Method Adjustment Factors effective January 1, 2024**  
**Table 6b - 50% Joint and Survivor Annuity - Disabled Members**

	Beneficiary Age Difference	Member Age																				
		80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
Beneficiary younger	15	237.0	225.0	213.4	202.2	191.4	181.0	170.9	161.3	152.0	143.1	134.6	126.5	118.7	111.3	104.2	97.4	91.0	84.9	79.1	73.6	68.5
	14	229.2	217.4	206.0	194.9	184.3	174.1	164.3	154.8	145.8	137.1	128.8	120.9	113.3	106.1	99.2	92.6	86.4	80.5	75.0	69.8	64.9
	13	221.6	210.0	198.8	187.9	177.5	167.5	157.8	148.6	139.7	131.3	123.2	115.5	108.2	101.1	94.5	88.1	82.1	76.5	71.2	66.2	61.6
	12	214.2	202.8	191.8	181.2	170.9	161.1	151.7	142.6	134.0	125.7	117.9	110.4	103.2	96.4	90.0	83.9	78.1	72.7	67.6	62.9	58.5
	11	207.2	195.9	185.1	174.6	164.6	155.0	145.8	136.9	128.5	120.5	112.8	105.5	98.6	92.0	85.8	79.9	74.4	69.2	64.3	59.9	55.7
	10	200.3	189.3	178.6	168.4	158.6	149.2	140.1	131.5	123.3	115.4	108.0	100.9	94.2	87.8	81.8	76.2	70.9	65.9	61.3	57.1	53.2
	9	193.8	182.9	172.5	162.4	152.8	143.6	134.8	126.3	118.3	110.7	103.4	96.6	90.1	83.9	78.2	72.7	67.7	63.0	58.6	54.6	50.9
	8	187.5	176.9	166.6	156.8	147.3	138.3	129.7	121.4	113.6	106.2	99.2	92.5	86.2	80.3	74.8	69.6	64.8	60.3	56.1	52.3	48.8
	7	181.5	171.1	161.0	151.3	142.1	133.3	124.9	116.8	109.2	102.0	95.2	88.7	82.7	77.0	71.7	66.7	62.1	57.8	53.9	50.2	46.9
	6	175.9	165.6	155.7	146.2	137.2	128.5	120.3	112.5	105.1	98.1	91.4	85.2	79.4	73.9	68.8	64.1	59.7	55.6	51.8	48.4	45.2
	5	170.5	160.4	150.7	141.4	132.5	124.1	116.0	108.4	101.2	94.4	88.0	82.0	76.4	71.2	66.3	61.7	57.5	53.6	50.0	46.7	43.7
	4	165.4	155.4	145.9	136.8	128.2	119.9	112.1	104.6	97.6	91.0	84.9	79.1	73.7	68.6	64.0	59.6	55.6	51.8	48.4	45.2	42.3
	3	160.6	150.8	141.5	132.6	124.1	116.0	108.4	101.1	94.3	88.0	82.0	76.4	71.2	66.4	61.9	57.7	53.8	50.2	46.9	43.9	41.1
	2	156.1	146.5	137.4	128.6	120.3	112.4	105.0	97.9	91.3	85.2	79.4	74.0	69.0	64.3	60.0	56.0	52.2	48.8	45.6	42.7	40.0
	1	151.9	142.5	133.5	124.9	116.8	109.1	101.9	95.0	88.6	82.6	77.1	71.9	67.0	62.5	58.3	54.5	50.9	47.5	44.5	41.6	39.1
0	148.0	138.7	129.9	121.6	113.6	106.1	99.0	92.4	86.2	80.4	75.0	69.9	65.2	60.9	56.9	53.1	49.6	46.4	43.4	40.7	38.2	
Beneficiary older	-1	144.3	135.3	126.7	118.4	110.7	103.4	96.5	90.0	84.0	78.3	73.1	68.2	63.7	59.5	55.5	51.9	48.5	45.4	42.5	39.8	37.4
	-2	141.0	132.1	123.7	115.6	108.0	100.9	94.2	87.9	82.0	76.5	71.4	66.7	62.3	58.2	54.4	50.8	47.5	44.5	41.7	39.1	36.8
	-3	138.0	129.3	121.0	113.1	105.7	98.7	92.1	86.0	80.2	74.9	69.9	65.3	61.0	57.0	53.3	49.9	46.7	43.7	41.0	38.4	36.2
	-4	135.2	126.7	118.5	110.8	103.5	96.7	90.3	84.3	78.7	73.5	68.6	64.1	59.9	56.0	52.4	49.0	45.9	43.0	40.3	37.9	35.6
	-5	132.7	124.3	116.3	108.8	101.6	94.9	88.7	82.8	77.3	72.2	67.5	63.1	59.0	55.2	51.6	48.3	45.2	42.4	39.8	37.4	35.2
	-6	130.5	122.2	114.4	107.0	100.0	93.4	87.3	81.5	76.1	71.1	66.5	62.1	58.1	54.4	50.9	47.6	44.6	41.8	39.3	36.9	34.8
	-7	128.5	120.4	112.7	105.4	98.5	92.0	86.0	80.3	75.1	70.1	65.6	61.3	57.4	53.7	50.3	47.1	44.1	41.4	38.8	36.5	34.4
	-8	126.8	118.7	111.1	104.0	97.2	90.8	84.9	79.3	74.1	69.3	64.8	60.6	56.7	53.1	49.7	46.6	43.6	40.9	38.5	36.2	34.1
	-9	125.2	117.3	109.8	102.7	96.1	89.8	83.9	78.4	73.3	68.5	64.1	60.0	56.1	52.5	49.2	46.1	43.2	40.6	38.2	35.9	33.9
	-10	123.9	116.0	108.6	101.6	95.1	88.9	83.1	77.7	72.6	67.9	63.5	59.4	55.6	52.1	48.8	45.7	42.9	40.3	37.9	35.7	33.7
	-11	122.7	114.9	107.6	100.7	94.2	88.1	82.4	77.0	72.0	67.3	63.0	58.9	55.2	51.7	48.4	45.4	42.6	40.0	37.7	35.5	
	-12	121.6	114.0	106.7	99.9	93.5	87.4	81.7	76.4	71.4	66.8	62.5	58.5	54.8	51.3	48.1	45.1	42.4	39.8	37.5		
	-13	120.7	113.2	106.0	99.2	92.8	86.8	81.2	75.9	71.0	66.4	62.1	58.2	54.5	51.0	47.9	44.9	42.2	39.7			
	-14	120.0	112.4	105.3	98.6	92.2	86.3	80.7	75.4	70.5	66.0	61.8	57.8	54.2	50.8	47.6	44.7	42.0				
	-15	119.3	111.8	104.7	98.0	91.7	85.8	80.3	75.0	70.2	65.7	61.5	57.6	53.9	50.6	47.4	44.6					

Beneficiary Age Difference = Member Age minus Beneficiary Age